



Government of Kerala

INFRASTRUCTURE STATISTICS OF KERALA 2013-14



Department of Economics and Statistics



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Department of Economics & Statistics, Kerala

P R E F A C E

In Kerala, the God's own country, the periodicity of generation of data relating to infrastructure as per the suggested indicator is either annual or it depends on the frequency of related survey/records. Since the data corresponding to the year are not available, the latest figures of year under reference have been collected and consolidated to prepare this report. This report provides a single comprehensive source of infrastructure statistics for measure of transport, energy, communications and water infrastructure, Comprehensive and reliable statistics on the infrastructure sectors would play a prime role for the policy makers to determine infrastructure priorities, track progress on infrastructure development, benchmark performance against peers, and evaluate the impact of past investments. This report presents an overview of infrastructure statistics requirement of the State of Kerala.

This publication will help readers gain interesting insight in respect of the infrastructure statistics development for the State of Kerala.

I express my deep gratitude to all the data source agencies for their active co-operation, contribution and willing support extended without which it would have not been possible to this department to bring out the publication in time and in its present form.

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Suggestions, if any, to improve the quality, contents and presentation of this publication are most welcome.

Thiruvananthapuram
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V. RAMACHANDRAN
DIRECTOR GENERAL

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INTRODUCTION

Infrastructure sector plays a major role in the overall development of the Indian economy. The National and State Government has initiating various policies and programs that would ensure time-bound creation of world class infrastructure in the country to make investor friendly environment and better living standard of the people. This report aimed to bring all statistical information pertaining to creation of infrastructure in the State during 2013-14 with special focuses on power, bridges, dams, roads and urban infrastructure development projects. The data presented in this report is collected from the implementing departments and other official agencies.

The term infrastructure encompasses the physical facilities and systems that serve the public at large. These include structures that facilitate speedy movement of goods and passengers through rail and roads, air connectivity both domestic and international destinations, telecommunication facilities like fixed and mobile connections, internet connectivity, power generation, water supply and irrigation schemes. The most visible and important infrastructure system is in transport sector, since most of these infrastructure systems are directly influence the day to day life of the public. The various forms of road connectivity developed through central, state and local administration according to the utility, powers and financial position of the respective administrative setups. National Highway Authority of India and State Public Works Department are responsible for construction and maintenance of NH and major state and districts roads in the State. The rural roads are primarily with the responsibility of LSGIs. The vehicular and passenger traffic is increasing manifold during the last couple of years which demand for more and more rail and road networks in the state. Compare to the volume of vehicles in the roads and intensity of passenger and goods trains in the existing rail infrastructure in the State shows the inadequacy of infrastructure in transport sector.

Utility and communication systems are another area of infrastructure to be developed in the State. Utility systems include the wiring and piping systems that facilitate transmission of electricity, water and gas from the generation point to the end user level. Reducing power transmission loss and establishing new lines to connect national grid to bring electricity from central pool particularly during the summer season where hydroelectric power generation below the required level demanding more investment in power sector. Communication sector also having a good infrastructure system in the State by connecting through land and mobile

networking. Internet connectivity also available in the state without any urban rural divide and most parts of the state are connected through high speed fibre cabling. The State is also blessed with forty four rivers and about hundred and sixty plus rainy days. But experiencing draught and consequent crop loss necessitate investment in irrigation and drinking water supply schemes. Kerala water Authority, the agency which cater the need of urban water supply demands in the State and LSGIs are responsible for implementing rural water supply schemes of Jalanidhi. Irrigation department also played a crucial role in creating infrastructure in minor and major irrigation projects in the state.

Investment in infrastructure projects have a positive impact on the development of the economy by creating employment in infrastructure sector, increase the demand of industrial products and enlarge service sector and also facilitate more productivity in crop sector through the investment in infrastructure projects in agriculture sector. Moreover data relating to infrastructure creation is needed for decision making purposes at various levels of the government; assess the availability and improve the capacity of existing infrastructure.

1. Transport Sector

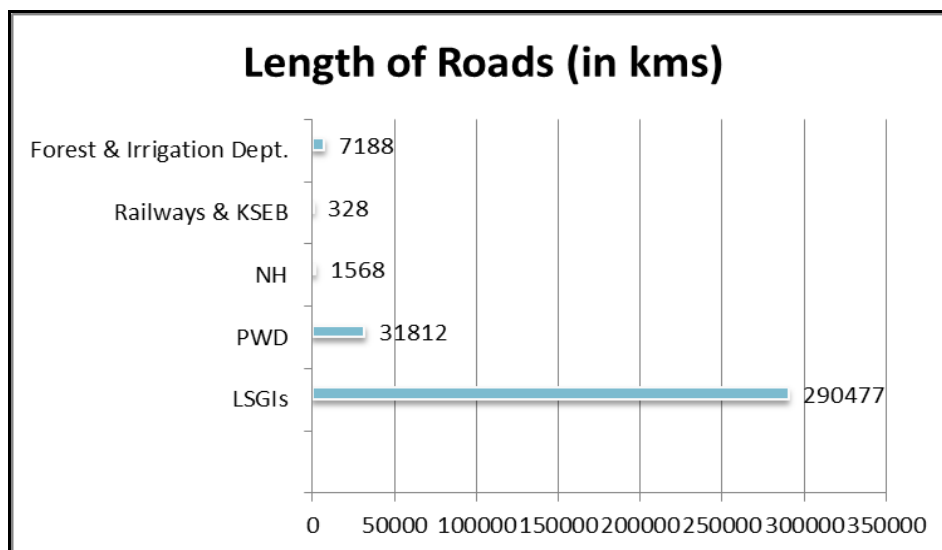
1) Road Transport

Kerala is having a developed connectivity of road, rail, water and air transport network compared to rest of the States in India. Transportation infrastructure of Kerala consists of 3.31 lakh km. of road network, 1148 km. of railway lines, 1087 km. of inland waterways, 111 statute miles of airways and 17 ports. Even though it is comparatively better placed than most other States as regards road length, the quality of many of these roads are to be improved. Agencies involved in the maintenance and construction of roads in the State are the Public Work Department, (PWD), Grama Panchayaths, Municipalities, Corporations, Forests and Irrigation Departments, Railways, the Kerala State Electricity Board and National Highway Authority. Agency wise distribution of the State Roads in Kerala during 2013-14 is given below:

Agency wise distribution of State Roads in Kerala during 2013-14

Sl. No	Name of Department	Length (Km)	Percentage
1	Panchayats	265421.120	80.00
2	PWD (R&B)	31811.601	9.6
3	Municipalities	18411.870	5.6
4	Corporations	6644.000	2.00
5	Forests	4575.770	1.5
6	Irrigation	2611.900	0.79
7	National Highway	1568.000	0.47
8	Others (Railways, KSEB)	328.000	0.09
	Total	331372.261	100.00

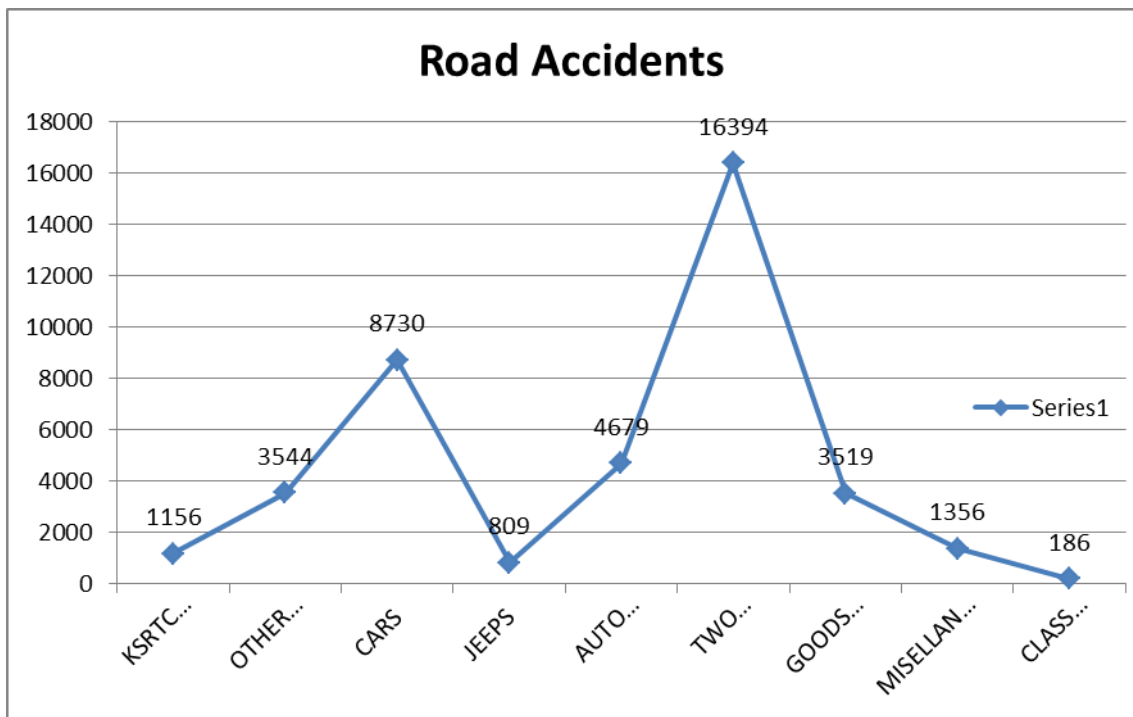
Out of total road network, Grama panchayats owned 80 per cent of roads in the State with the road length of 265421 KMs. PWD roads constitute 9.6 per cent of the total road network and carry 80% of the total road traffic. Out of the total roads maintained by PWD 31811.601Kms, Kottayam district has the major share with 3449.301 Km (10.8%) and Wayanad district share of only 1029.305 (3%). Traffic has been growing at a rate of 10 to 11% every year, resulting in excessive pressure on the roads of the state. The bridges and culverts constructed along the PWD roads are 2253 bridges and 51400 culverts. There are 9 National Highways passing through the State of Kerala with a total length of 1534.451Km. Total vehicle population in the State during 2013-14 were 8547966 and more than half of the vehicles from two wheeler category.



Road length and condition of roads in the State is not adequate to cope with the population of registered vehicles which resulted high rate of accidents and casualties in road. Two wheelers constitutes 62 per cent of the total vehicle population of the State. Upgradation of existing roads and construction of new roads with safety norms is needed to reduce road accidents and enable easy movement of vehicular traffic.

Vehicle Population

According to the accident statistics available from the crime record bureau 40378 vehicles involved in accident during 2013 and Ernakulum district stood top in the list with 8297 accidents. The category of vehicles which involved more in accident was two wheelers with 16394 numbers which consist of 40.60 per cent of the total accidents registered in the State, 0.46 per cent accident cases the type of vehicle involved in accident not identified during 2013.



2) Water Transport

Water Transport sector is another area of importance in low lying areas where navigable water bodies available in the state. Total passengers carried during 2013 were reported as 142.86 lakhs through Kerala Water transport Department boat services and volume of cargo movement through Kerala Shipping and Inland Navigation Corporation was 208253 Tonnes. Inland waterways including Navigable Rivers are 1687 Kms in the State. Along with the State Coastline of 585 Kms Kerala have one Major Port at Kochi and 17 minor Ports (3 Inter mediate and 14 Minor ports). Cochin Port is the only Major Port in Kerala and one of the Largest in India. Cochin Port spread over 827 Ha. It has a Water frontage of 7.5 KM. The Port is governed by Cochin Port Trust under Government of India.

Inter mediate and Minor Ports are under the administration of the Government of Kerala. The Ports are under the administrative control of the Director of Ports Thiruvananthapuram and Regional Offices located at Neendakara, Alappuzha and Kozhikode. Kerala State Water Transport Department provides inland water transport facilities in the districts of Alappuzha, Kottayam, Kollam, Ernakulum, Kannur and Kasaragode.

3) Railway

Railways plays significant role in the passenger and goods transport system in the State. Total Railway route in the State is having the length of 1257 Kms and covers 13 Railway routes. Thiruvananthapuram Division is the largest Coaching division in the Southern Railway. The State has an extensive line of Railway network and boast of around 81 Main Railway Stations.

4) Air Transport

Air connectivity between major cities within the country and international destinations are operated from the Thiruvananthapuram, Kochi and Kozhikkode Airports. Kochi International Airport is operated by a Company setup by Government of Kerala with Public Private Participation. Air Transport sector plays a major role in the development of tourism in the State both Domestic and International tourism promotion. During 2013-14, 74533 flights were operated from Thiruvananthapuram, Kochi and Kozhikkode Airports and total number of passengers carried during the period was 10767493. Cochin International Airport is one of the leading International Cargo handling center in South India. It is the foremost Cargo handling center in India having in single service provide concept. 15 Air Craft parking bays and exclusive parking facilities for general aviation and helicopters provided in the Cochin International Airport. Cargo handling facilities also provided in Calicut International Airport.

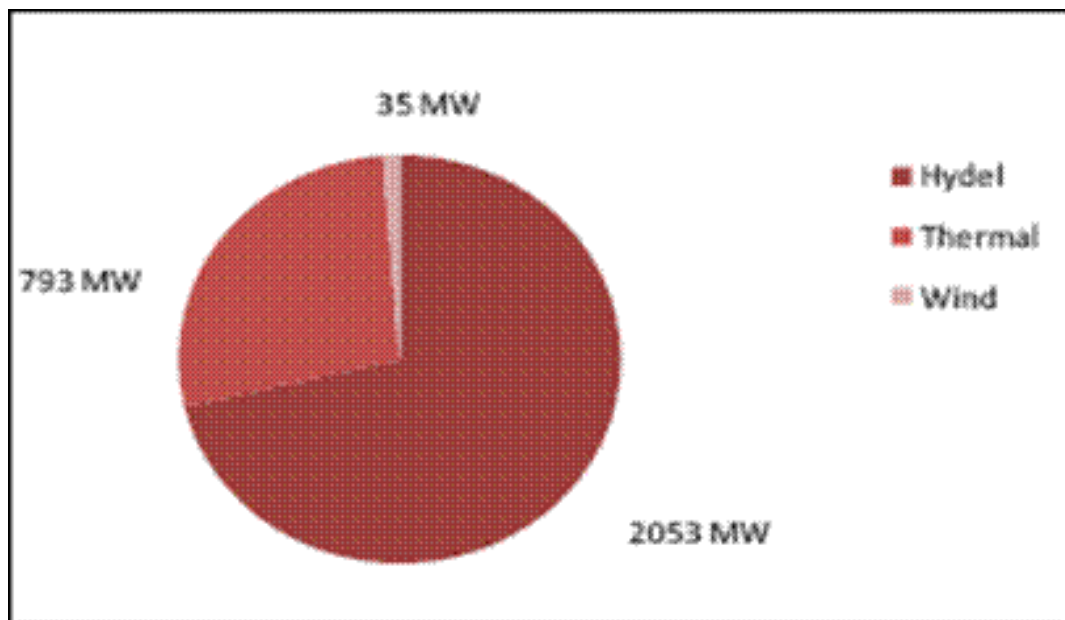
2. Power Sector

The main sources of power generation in the State are Hydel, Wind and Thermal. About 2053 mw of Electricity is produced from Hydro Electric Power Projects in Kerala. The State is bestowed with Hydel potential and Hydro electric power plants generally range in size from hundred Kilo Watts to several hundred Mega Watts. In 1957 Kerala State Electricity Board was established under the authority of Department of power in Kerala Government. The Board has taken seasonal initiatives to improve the physical and financial improvement of the sector. KSEB is responsible for the production, transmission and supply of electrical energy from the hydroelectric power projects. Major share of the energy produced in Kerala is from Hydel Power projects i.e. 2053mw. Thermal Power plants in NTPC at Kayamkulam produced 793 mw of energy, Brahmaputra and Nallalam only 35mw of Energy is produced by wind form power project at Kanjikode and Ramakkalamedu. Major

share of revenue earnings are from the domestic connections (27 %), HT & EHT connections (25.83%) and commercial connection from LT & HT (21.08%). The number of connections during 2013-14 was domestic 8788916, commercial 1782286 and HT & EHT connections 4256. Idukki and Sabarigiri projects are the major Hydro Electric Power Stations in the State and power generation from these stations during 2013-14 was 2738.72 (MU) and 1635.44 MU respectively.

Fig 1 highlights total installed capacity in Kerala from Hydel, thermal and wind sources.

Fig Total Installed Capacity



3. Mining Sector

Kerala is endowed with a number of occurrences/ deposits of good quality minerals such as Heavy Mineral Sands (Ilmenite, Rutile, Zircon, Monazite, Sillimanite), Gold, Iron ore, Bauxite, Graphite, China Clay, Fire Clay, Tile and Brick Clay, Silica Sand, Lignite, Limestone, Lime shell, Dimension Stone (Granite), Gemstones, Magnesite, Steatite etc. However, mining activities on large scale are confined mainly to a few minerals - Heavy Mineral Sands, China Clay and to a lesser extent Limestone/Lime shell, Silica Sand and Granite. The state owns mineral deposits like limestone, lime shell, silica sand, bauxite, graphite, iron ore, granite etc. These minerals are found in various districts providing base for forming various mineral based industries in the State. Kerala possess one of the world's largest deposits of minerals and sands and in the coastal tracts between Neendakara and Kayamkulam. Heavy Mineral Sand and China Clay contribute more than 90% of the total value of major mineral production in the State. However, 75% of the mineral revenue comes from the minor minerals. The minerals deposited are found in various districts providing base for forming various mineral based industries in the State. Estimated available mineral reserves with occurrence and use are given below.

Sl. No	Minerals	Reserves (Million Tones)	Occurrences
1	Gold	0.55	Wayanad, Marudp, Nilambur, Malappuram
2	Iron	83.4	Kozhikkode (Eleyettimala, Naduvallur Nanminda, Cheruppa, Alampara) Malappuram (Korattimala)
3	China clay	172	Thiruvananthapuram, Kollam, Kannur, Kasaragode
4	Ball Clay	1.67	Thiruvananthapuram (Nadayara), Kollam (Kumbalam, Kanjirotusser, Mulana), Kannur (Pattuvam, Karivalloor, Earipuram, Pazhayangadi)
5	Fire Clay	11.55	Kollam (Kundamon, Pallikkal) Alappuzha (Thamarakkulam) Ernakulam (Amballoor, Kanjiramattom, Keezhumadu) Thrissur (Poomangalam) Kannur (Pattuvam)
6	Silica	28.4	Coastal area of Alappuzha
7	Bauxite	12.5	Thiruvananthapuram (Mangalapuram, Chilambil, Sasthavattom) Kollam (Poruvazhy, Aadichanalloor) Kannur, Kasaragode
8	Lime shell	4.05	Alappuzha, Ernakulam (Vembanad lake), Kottayam, Thrissur (Vadanappally) Kannur (Payyannur,Thrikkaripur)
9	Lime Stone	24	Palakkad (Walayar)
10	Graphite	2.81	Thiruvananthapuram (Veli, Kuttichal) Ernakulam (Vadakode) Kottayam (Chirakkadavu)
11	Lignite	9.65	Kannur (Madai) Kasaragode (Neeleswaram, Palayi)
12	Magnesite	0.037	Palakkad (Attapadi)

4. Communication

Communication network in the State is much better than that of most of other Indian States. About 5067 offices are functioning under Postal department such as Head post offices, Sub post offices and Branch offices. Under the Tele communication side BSNL is the major player in the State with 1005 exchanges. BSNL has the customer base of 2773148 landline connections, 266875 WLL connections and 6284889 mobile connections.

5. Irrigation

Agricultural production relies primarily on climatic conditions. Our State receives about 90% of the annual rainfall during the monsoon months from June to August and from October to November. The remaining period from December to May is practically dry. Most of the rain water received during monsoon period flows to sea within 48 hours due to the character of the geographic terrain of the state. There are various methods for providing irrigation water. The best and the most reliable method which can be used for Kerala is the construction of storage reservoirs for impounding water during the monsoon and utilizing the water in the reservoir for critical periods of the crops when there is insufficiency. Hence, major and medium projects were taken up and a major portion of the cultivable land could be made ayacut under these projects. First significant attempt to supply water on controlled basis was through a Lift Irrigation scheme constructed in 1942. The scheme consisted of lifting water from Periyar River by electric pumping and feeding through channels for paddy cultivation. Malampuzha Irrigation Project in Palakkad district is the 1st large-scale irrigation system in Kerala. The project consists of a dam constructed across the river Malampuzha, a tributary of Bharathapuzha and a net work of canal system to irrigate an area of 21245 ha. The dam is straight gravity type masonry structure with an earthen saddle, completed in 1966. Malampuzha Reservoir provides drinking water for Palakkad Municipality and 6 adjacent panchayaths.

Ground Water

Kerala has blessed with 41 west-flowing and 3 east-flowing rivers originating from the Western Ghats. The peculiarity of the rivers flowing across Kerala is short length of the rivers and the distance between the high and low land leading to quick flow of water collected from the river basin and quickly discharged into the Lakshadweep Sea. The state has not been able to utilise the river water sources to a major extent as lack of proper water management system to control the runoff through the rivers takes place during the monsoon seasons. There are about 3000 watersheds in the state, the management of which through land use patterns, conservation practices adapted to the topography and soil conditions can reduces the extend of runoff retention and infiltration. Local community based micro watershed management couple with broader integrated river basin support and control management an overall and integrated approach in water resource management in the State is yet to emerge. On a rough estimate, the source wise dependence by rural households for domestic water supply dependent on traditional ground water systems is 80%, 10-15% use piped water supply systems, and 5% use traditional-surface and other systems.

6. Drinking Water supply and sanitation

Safe drinking water, its supply and proper sanitation are basic requirements of a society. Government of India as well as State Government are committed to provide safe water to the people. Safe drinking water not only reduces the risk due to water born diseases but also enhance the quality of life. Piped water coverage in State is only 51%, urban coverage 77.66%. Most of the families depend on Private water sources, which are usually open wells. Most of these wells dry up by early March and remain so till the monsoon, which are begin in the end of May. Studies shows that spread of bacteriological contamination in open wells, bore wells and surface sources. Sanitation coverage is only 51.36% in urban areas and 44% in Rural areas. Kerala Water Authority is an autonomous agency established for the development and regulation of water supply and waste water collection and disposal in the state. The coverage of drinking water supply in Kerala was 43.52% to total population. In Urban and Rural areas of the State 59.39% and 26.13% of Population were covered. The total number of urban and Rural people covered by water supply schemes in Kerala was 1.03 crores and 41.6 lakhs respectively.

7. Storage Facilities

The storage function assumes paramount importance in organization such as Food Corporation of India because of its requirement to hold huge inventory of food grains over a significant period of time. Adequate scientific storage is pre-requisite to fulfill the policy objectives assigned to the Food Corporation of India for which FCI has a network of strategically located storage depots including silos all over India. Besides having own storage capacity, FCI has hired storage capacities from Central Warehousing Corporation, State Warehousing Corporations, State Agencies and Private Parties for short term as well as for guaranteed period under Private Entrepreneurs Guarantee Scheme.

1. TRANSPORT

1.Road Transport

Table 1 .1.1 District wise and Category wise Length of Roads Maintained by PWD (R&B) during 2013-14 (in Kms)

Sl. No.	Name of District	State Highway	Major District Roads	Total
1	2	3	4	5
1	Thiruvananthapuram	180.360	2420.430	2600.790
2	Kollam	123.790	2055.570	2179.360
3	Alappuzha	170.841	1303.120	1473.961
4	Pathanamthitta	249.194	1790.570	2039.764
5	Kottayam	406.531	3042.770	3449.301
6	Idukki	998.372	1853.390	2851.762
7	Ernakulam	325.206	2815.550	3140.756
8	Thrissur	374.033	1681.73	2055.763
9	Palakkad	245.987	1926.800	2172.787
10	Malappuram	374.764	2301.130	2675.894
11	Kozhikkode	377.173	2063.930	2441.103
12	Wayanad	128.955	900.350	1029.305
13	Kannur	244.665	2013.230	2257.895
14	Kasaragode	141.780	1301.380	1443.160
	Total Length	4341.651	27469.95	31811.601

Source: Economic Review 2014

Table 1.1.2 The outlay and Expenditure in Transport Sector during 2013-14 (Rs.in Lakhs)

Sl. No.	Sub Sectors	Outlay	Expenditure	% of Outlay	% of GDP
1	Port Department	7869.00	4533.08	57.6	0.002
2	Roads and Bridges	85515.00	124583.64	145.69	0.05
3	Road Transport	7485.00	6965.76	93.06	0.003
4	Inland Waterways	13643.00	3451.72	25.3	0.001

Table 1. 1.3 Major Development Indicators of Transport & Communication sector 2009 to 2014

Sl. No	Item	Unit	2009	2010	2011	2012	2013	2014
1	2	3	4	5	6	7	8	9
1	Road Length (PWD)	KM	28203	21578	23241.709	23241.709	31811.601	31811.601
2	Motor Vehicle	No.	4442387	4880059	6072019	6865539	8048673	8547966
3	Buses owned by KSRTC	No.	4893	5115	5402	5741	5803	5860
4	Railway Route Length	KM	1148	1148	1198.9	1257	1257	1257
5	Flight Operated (Domestic & International	No.	78464	82313	73208	73208	82010	74533
6	Boat / Junkers operated by SWTD	No.	81	81	81	92	95	97
7	Route Distance by SWTD	KM	608	6730	6730	6890	6890	6890
8	Post offices	No.	5070	5068	5070	5067	5068	5067
9	Telephone Exchanges	No.	1240	1240	1246	1245	1245	1245
10	Public Call Offices	No.	127369	118841	95193	95193	46775	467755067

Source: Economic Review 2014

Table 1.1 .4 Type of Roads (in Kms) maintained by P.W.D.2013-14**(in Kms)**

Sl. No.	Name of District	Cement Concrete	Black Topped	Water Bound Mecadam	Others	Total
1	Thiruvananthapuram	000	2557.572	12.978	30.24	2600.790
2	Kollam	000	2172.463	6.897	0.000	2179.360
3	Alappuzha	000	1398.883	39.785	35.293	1473.961
4	Pathanamthitta	000	1990.601	29.650	19.513	2039.764
5	Kottayam	000	3346.194	25.640	77.467	3449.301
6	Idukki	000	2611.505	22.407	217.85	2851.762
7	Ernakulam	0.464	2970.932	60.715	108.645	3140.756
8	Thrissur	3.391	2037.372	15.00	0.00	2055.763
9	Palakkad	000	2097.347	41.940	33.5	2172.787
10	Malappuram	000	2522.754	122.650	30.49	2675.894
11	Kozhikkode	000	2426.663	14.440	0.00	2441.103
12	Wayanad	000	983.523	25.600	20.182	1029.305
13	Kannur	2.800	2210.576	4.386	40.133	2257.895
14	Kasaragode	000	1418.01	25.150	0	1443.160
	Total	6.655	30744.395	447.238	613.313	31811.601

Source: Economic Review-2014

Table 1.1 .5 Category wise length of Roads maintained by P.W.D. 2013-14

(in Kms)

Sl. No.	District	State Highway				Major District Roads				Total Roads
		C.C	B.T	WBM	Others	C.C	B.T	WBM	Others	
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	0.000	180.360	0.000	0.000	0.000	2377.212	12.978	30.240	2600.790
2	Kollam	0.000	123.790	0.000	0.000	0.000	2048.673	6.897	0.000	2179.360
3	Alappuzha	0.000	170.841	0.000	0.000	0.000	1228.042	39.785	35.293	1473.961
4	Pathanamthitta	0.000	249.194	0.000	0.000	0.000	1741.407	29.650	19.513	2039.764
5	Kottayam	0.000	406.531	0.000	0.000	0.000	2939.663	25.640	77.467	3449.301
6	Idukki	0.000	978.372	0.000	20.00	0.000	1633.133	22.407	197.850	2851.762
7	Ernakulam	0.000	325.206	0.000	0.000	0.464	2645.726	60.715	108.645	3140.7556
8	Thrissur	3.391	370.642	0.000	0.000	0.000	1666.730	15.000	0.000	2055.763
9	Palakkad	0.000	230.237	1250	14.500	0.000	1867.110	40.690	19.000	2172.787
10	Malappuram	0.000	374.764	0.000	0.000	0.000	2147.990	122.650	30.490	2675.894
11	Kozhikkode	0.000	377.173	0.000	0.000	0.000	2049.490	14.440	0.000	2441.103
12	Wayanad	0.000	126.955	2000	0.000	0.000	856.568	23.600	20.182	1029.305
13	Kannur	2.800	241.865	0.000	0.000	0.000	1968.711	4.386	40.133	2257.895
14	Kasaragode	0.000	141.780	0.000	0.000	0.000	1276.230	25.150	0.000	1443.160
	Total	6.191	4297.710	3.250	34.500	0.464	26446.685	443.988	578.813	31811.601

Source: Economic Review

C.C: cement Concrete , B.T: Black topped, W.B.M: Water bound macadam

Table 1.1.6 No. of Bridges and Culverts in PWD Roads as on 31.3.2014

Sl. No.	Item	State Highways	Major District Roads	TOTAL
1	2	3	4	5
1	Total No. of Bridges	648	1605	2253
2	No. of Unsafe Bridges	45	46	91
3	Total No. of Culverts	11520	39880	51400
4	No. of Unsafe Culverts	378	887	1265

Source: Economic Review

Table 1.1.7 National Highways in Kerala

Sl. No	Name of National Highway	Length in Kerala (Km)
1	NH-66- from Panavel-Kanyakumari	669.437
2	NH-85 from Kochi to Tondipoint	167.61
3	NH-183 from Dindigal-Kottarakkara	190.3
4	NH -966A-from Vallarpadam to Kalamassery	17
5	NH- 744 from Kollam to Thirumangalam	81.28
6	NH-766 from Kozhikode to Mysore – (Kozhikode-Muthanga)	117.6
7	NH-966 from Ferokeh to Palakkad	125.304
8	NH 544 from Salem to Ernakulam	160
9	NH 47A from Wellington Island to Kundanoor	5.92
	Total	1534.451

Table 1.1.8 Pradhan Manthri Gram Sadak Yojana (PMGSY) Physical and Financial Status as on 31st March 2014 (In Lakhs)

Sl. No.	PMGSY Status	Phase-I (2000-01)	Phase-II (2001-02)	Phase-III (2003-04)	Phase-IV (2004-05)	Phase-V (2005-06)	Phase-VI (2006-07)	Phase-VII (2008-09)	Phase-VIII (2013-14)	Total
Physical Status										
1.	Project Cost	1990.00	5647.56	2156.30	5058.38	4574.38	27064.69	35908.45	68990.20	151389.96
2.	Total No. Of Roads	33	178	52	91	74	295	2925	415	1430
3.	Roads completed	33	173	44	66	47	264	182	0	809
4.	In Progress	0	1	2	5	7	17	106	124	292
5.	Roads to be tendered	0	0	0	0	0	0	0	291	291
6.	Roads to be revived from the Dropping list	0	4	6	20	20	14	4	0	68
7.	Total	33	178	52	91	74	295	292	415	1430
8.	Length of roads taken up (km)	106.610	282.225	97.955	172.612	152.782	678.142	849.020	1011.715	3351.061
9.	Length of roads completed in (km)	106.610	273.780	84.030	124.580	94.498	592.690	512.913	0.000	1789.101
10.	Length of road in progress (in km)	0.000	2.205	1.995	12.8222	17.394	61.102	324.477	339.515	759.510
11.	Length of roads	0.000	0.000	0.000	0.000	0.000	0.000	0.000	672.200	672.200

	to be tendered									
12.	Length of roads to be dropped (in Km)	0.000	6.240	11.930	35.210	40.890	24.350	11.630	0.000	130.250
13.	Percentage of Physical	100.00	97.19	84.62	72.53	63.51	89.49	62.33	0.000	53.39

Financial Status										
14.	Funds received GOI	1990.00	5630.00	2077.00	5276.00	4656.69	29201.31	20000.00	0.00	68830.00
15.	Interest converted as programme fund		91.56	0.00	0.00	0.00	0.00	0.00	0.00	91.56
16.	Total funds received from GOI	1990.00	5721.56	2077.00	5276.00	4655.69	29201.31	20000.00	0.00	68921.56
17.	Funds received state Govt.						2500.00	2506.00	0.00	5005.00
18.	Interest Earned									914.00
19.	TOTAL	1990.00	5721.56	2077.00	5276.00	4655.69	31701.31	22505.00	0.00	74840.56
20.	Retention recovered for contractor's bill									1083.76
21.	Expenditure (Up to 31.3.2014)	2339.94	5452.52	1770.11	4002.12	3592.65	25419.99	31789.31	251.02	74617.66
22.	Percentage of Expenditure	117.58	95.30	85.22	75.86	77.17	80.19	141.25	0.00	99.70

Source: Commissionerate of Rural Development

Table 1.1.9 Age wise number of Buses owned by KSRTC

Sl. No.	Buses	2013-14
1	10 Years and above	1464
2	Above 7 years and below 10 years	674
3	Above 5 years and below 7 years	1345
4	Below 5 years	2377
	Total	5860

*Source: K.S.R.T.C***Table 1.1.10 Number of buses owned by KSRTC during 2008 – 2014 March**

Sl. No.	Year	Total No. of Buses	No. of New Buses
1.	2008	4893	517
2.	2009	5115	697
3.	2010	5402	629
4.	2011	5741	703
5.	2012	5803	209
6.	2013	5812	485
7.	2014	5860	332

Source: KSRTC

Table 1. 1.11 Category-wise Growth of Motor vehicles in Kerala 2013-14

Sl. No.	Type of Vehicles	2012-13	2013-14	% out of total	% change over the previous year
I	Goods Vehicles				
1	Four wheeler and above	354296	373218	4	105
2	Three wheelers including Tempos	206901	140278	2	68
II	Buses				
1	Stage carriages	34161	28356	0	83
2	Contract Carriages/Omni/Buses	137731	132144	2	96
III	Cars and Station Wagons				
1	Cars and Station Wagons	1358728	1538246	18	113
2	Taxi Cars	128250	194358	2	152
3	Jeeps	74167	73700	1	99
IV	Three wheelers				
1	Auto Rickshaws	602547	663241	8	110
2	Motorised Cycle Rickshaws	0	0		
V	Two Wheelers				
1	Motorised Cycles	0	0		
2	Scooter / Motor Cycles	5041495	5288529	62	105
VI	Tractors	14183	15030	0	106
VII	Tillers	5399	5414	0	100
VIII	Trailers	2744	2411	0	88
IX	Others	88071	93011	1	106
	Total	8048673	8547936	100	106

Source: Transport commissionerate

Table 1.1.12 District wise strength of KSRTC Buses 2013-14

Sl. No.	District	2013-14	
		Volvo	Others
1	Thiruvananthapuram	3	1440
2	Kollam	-	624
3	Alappuzha	-	459
4	Pathanamthitta	-	316
5	Kottayam	-	452
6	Idukki	-	235
7	Ernakulam	-	564
8	Thrissur	-	384
9	Palakkad	-	213
10	Malappuram	-	223
11	Kozhikkode	-	247
12	Wayanad	-	261
13	Kannur	-	278
14	Kasaragode	-	161
	Total	3	5857

Source: K.S.R.T.C

Table 1.1 .13 Major indicators showing operational efficiency of KSRTC

Sl. No.	Items	2013-14	Increase/ Decrease
1	Fleet strength (as on 31 st march)	5860	-231
2	Gross revenue earnings (in crores)	1863.56	165.49
3	Gross revenue expenditure (in crores)	2433.66	216.67
4	Gross operating loss (in crores)	-570.10	51.18
5	No.of schedules operated as on March 31 st	4754	-152
6	Average earning per vehicle on road per day (Rs.)	9812	1116
7	Average earning per km of buses operated (paise)	2989	279
8	Average earning per passenger (paise)	1426	210
9	Average route length (km)	52.01	
10	Average km run per bus per day	323.38	5.78
11	Average no. of buses operated daily (Nos)	5830	-139
12	Passengers carried (lakhs)	11634	-575

Source : K.S.R.T.C

Table 1.1.14 District-wise Details of K.S.R.TC. During 2013-14

Sl. No.	District	No. of Employees	No. of Workshop Guarage	No of Depot (main/ sub)	Operational income
1	Thiruvananthapuram	12598	22	21	3919556306
2	Kollam	4430	9	9	1837520083
3	Alappuzha	1499	8	8	864949630
2	Pathanamthitta	3536	9	8	1369168722
5	Kottayam	3022	7	7	1333399781
6	Idukki	1430	5	5	667441770
7	Ernakulam	4958	10	9	1450781139
8	Thrissur	2429	7	7	1133200493
9	Palakkad	1552	4	4	750717748
10	Malappuram	1905	5	4	671389444
11	Kozhikkode	1981	6	5	670736437
12	Wayanad	1730	3	3	7171238659
13	Kannur	1777	3	3	745778480
14	Kasaragode	908	2	2	463608602

Source : K.S.R.T.C

Table 1.1.15 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2014

Sl. No	District	Fault of Driver of Motor vehicles	Fault of Driver of other than Motor vehicles	Fault of Cyclist	Fault of Pedestrian	Fault of Passenger	Defect of Motor vehicles	Defect of Road surface	Bad Weather Condition	Other Causes	Causes not known	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Thiruvananthapuram Urban	1929	0	0	0	0	0	0	0	120	0	2049
2	Thiruvananthapuram Rural	2481	0	0	0	0	0	2	0	183	0	2666
3	Kollam Urban	1468	0	0	0	0	0	0	0	74	0	1542
4	Kollam Rural	1156	0	0	0	0	0	0	0	69	0	1225
5	Pathanamthitta	1302	0	0	0	0	0	0	0	66	0	1368
6	Alappuzha	2768	0	0	0	0	82	0	0	0	0	2850
7	Kottayam	2501	0	0	0	0	14	14	5	84	2	2620
8	Idukki	855	0	0	0	0	23	0	0	0	0	878
9	Ernakulam City	2215	0	0	0	0	0	0	0	0	0	2215
10	Ernakulam Rural	1986	331	0	0	0	0	0	0	662	0	3310
11	Thrissur Urban	1291	0	0	0	0	331	0	0	8	0	1299

12	Thrissur Rural	2569	0	0	0	0	0	0	0	0	0	2569
13	Palakkad	2017	0	0	0	0	0	0	0	44	0	2061
14	Malappuram	2630	0	0	0	0	0	0	0	0	0	2651
15	Kozhikkode Urban	1108	0	0	0	0	21	0	0	0	0	1110
16	Kozhikkode Rural	1521	0	0	0	0	2	0	0	0	1	1522
17	Wayanad	580	0	0	0	0	0	0	0	0	0	586
18	Kannur	1873	0	0	0	00	6	0	0	10	0	1883
19	Kasaragode	794	0	0	0	0	0	0	0	0	01320	794
	Total	33044	331	0	0	0	479	16	5	1320	3	35198
	Total Percentage	93.88	0.94	0	0	0	1.36	0.05	0.01	3.75	0.01	100

Source : Crime Records Bureau

Table 1.1.16 Category of Motor Vehicles involved in Road Accidents for the year 2013-14

(in Nos.)

Sl. No.	District	KSRTC Buses	Other Buses	Goods Vehicles	Motor cars	Jeeps	Auto Rickshaw	Two Wheelers	Miscellaneous Vehicle	Class not known	Total
1	2	3	4	5	6	7	8	9	10	11	12
1	Thiruvananthapuram Urban	113	63	66	541	11	232	1141	77	0	2244
2	Thiruvananthapuram Rural	139	128	110	586	46	341	1433	98	7	2888
3	Kollam Urban	73	115	88	353	4	192	623	76	18	1542
4	Kollam Rural	56	64	175	234	54	166	400	24	2	1225
5	Pathanamthitta	47	87	141	286	53	212	530	75	0	1431
6	Alappuzha	106	190	362	710	14	304	1085	63	16	2850
7	Kottayam	63	331	172	656	71	397	855	57	18	2620
8	Idukki	37	55	57	164	101	192	219	52	1	878
9	Ernakulam City	97	302	241	828	14	179	1604	111	7	3383
10	Ernakulam Rural	84	363	358	864	40	384	2580	218	23	4914
11	Thrissur Urban	48	171	143	434	22	217	955	55	7	2052
12	Thrissur Rural	30	263	330	610	21	287	909	64	30	2544
13	Palakkad	28	200	302	415	33	313	737	14	19	2061

14	Malappuram	63	343	306	600	87	395	720	123	14	2651
15	Kozhikkode Urban	42	242	156	332	19	114	758	25	10	1698
16	Kozhikkode Rural	37	225	195	333	68	219	984	72	1	2134
17	Wayanad	32	59	22	126	52	107	159	29	0	586
18	Kannur	32	278	248	410	61	290	515	40	9	1883
19	Kasaragode	29	70	47	198	38	138	187	83	4	794
	Total	1156	3549	3519	8730	809	4679	16394	1356	186	40378
	Total Percentage	2.86	8.79	8.72	21.62	22.00	11.59	40.60	3.36	0.46	100

Source: Crime Records Bureau

Table 1.1.17. Total Registered Motor Vehicles in Kerala during 2013-14

Transport

Sl. No.	Class of Vehicle	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikkode	Wayanad	Kannur	Kasaragode	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Lmv - 3 Wheeled Vehicle For Transport- Passenger (A/R)	5427	3909	1765	1930	2086	1243	2961	2957	2160	4783	3064	1046	2530	1157	37018
2	Lmv - 3 Wheeled Vehicle For Transport- Goods	638	709	383	530	428	189	489	585	745	1164	925	245	651	137	7818
3	Lmv - Goods Carrier Truck	1516	1353	787	1546	1500	554	2755	1700	1155	2134	1418	361	1516	633	18928
4	Mgv - Goods Carrier Truck	97	105	34	49	72	34	224	112	85	65	70	16	160	32	1155
5	Hgv - Goods Truck	75	60	22	51	76	37	225	80	65	59	86	14	52	30	932
6	Multi Axled Vehicle	0	5	0	10	1	0	25	2	34	2	0	0	0	0	79
7	Articulated Vehicle	19	9	4	8	10	8	23	7	24	28	5	5	7	4	161
8	Private Service Vehicle	70	12	7	14	16	4	68	13	8	10	19	1	10	5	257
9	Contract Carriage (Eib)	256	113	87	107	96	54	282	146	120	173	137	25	134	73	1803
10	Stage Carriage	344	18	17	13	88	36	53	55	52	53	70	8	108	18	933
11	Contract Carriage	279	207	120	257	351	77	472	354	153	108	133	31	202	35	2779
12	LMV Contract Carriage Imported Vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

13	All India Tourist Taxi	54	2	0	1	1	15	15	5	42	17	20	44	217	142	575
14	Excavator	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
15	Goods Carrier Tanker	9	6	2	4	3	3	30	9	6	1	4	1	6	0	84
16	Water Tanker	17	1	3	0	2	1	18	2	4	5	5	0	0	0	58
17	Oil Tanker	3	3	0	0	0	0	1	0	0	3	0	0	0	0	10
18	Gas Tanker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Hazardous Goods Tanker	4	2	1	0	2	0	14	28	4	8	3	0	3	0	69
20	Three Wheeler Passenger - 7 Seater	1039	945	905	1673	1344	548	2901	2061	1299	956	1263	319	1101	427	16781
21	Tractor Trailer	2	0	2	1	2	3	1	2	0	2	0	11	0	2	28
22	Trailer	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23	Tipper	340	299	166	159	195	63	599	236	245	381	321	84	356	138	3582
24	Ambulance	56	40	26	20	41	16	59	31	23	37	49	17	21	5	441
25	Road Roller	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26	Zonal Tourist Taxi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	All Other Types Of Vehicles	75	69	39	75	59	38	196	132	72	166	100	30	80	28	1159
	TOTAL	10322	7867	4370	6449	6373	2923	11412	8517	6296	10155	7692	2258	7154	2866	94654

Non Transport																
Sl. No.	Class Of Vehicle	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikkode	Wayanad	Kannur	Kasargod	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Motor Cycle – Below 95cc	1199	673	327	814	337	73	923	1828	4278	681	281	183	529	220	12346
2	Motor Cycle - Above 95cc	71465	55056	25612	45826	32257	12927	77794	59910	43978	64835	70349	8495	38217	17926	624647
3	Motor Car Below 1500 Cc	19822	13734	8789	10032	13349	3998	23731	15694	9573	16668	14613	2585	13344	7094	173026
4	Motor Car 1500 Cc and above	2152	1281	926	781	1237	420	3268	1685	720	1020	1170	228	1005	475	16368
5	PSV For Personal Use Below 1500 CC	253	221	88	113	181	43	164	152	125	230	137	50	197	192	2146
6	Tractor	15	25	22	24	24	6	54	69	86	67	12	10	41	16	471
7	Vehicle Mounted with Generator	0	0	1	0	0	0	7	0	0	1	0	0	0	0	9
8	Vehicle Mounted with Compressor	0	1	1	0	1	2	0	0	0	0	1	1	0	0	7

9	Vehicle Mounted with Rig	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10	Vehicle Mounted with Crane	11	8	2	7	8	5	44	11	8	6	9	0	8	4	131
11	Invalid Carriage - Motor Cycle	306	19	6	52	31	1	32	11	7	18	20	15	16	19	553
12	Earth Moving Equipment	60	47	16	25	64	23	112	39	28	83	70	10	80	60	717
13	Road Roller	21	10	7	13	8	9	63	17	8	17	17	0	18	5	213
14	Bulldozer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	Imported Psv Personal Use	317	230	126	97	188	46	342	309	204	267	293	37	198	104	4758
16	All other types of Vehicles	90	48	21	20	47	29	64	47	64	125	29	8	57	19	668
	TOTAL	95715	71353	35944	57804	47732	17582	106598	79772	59079	84018	87001	11622	53710	26134	834064

Table 1.1.18 Newly Registered Motor Vehicles in Kerala 2013-14

Sl. No.	Classification of Vehicles	Thiruvananthapuram	Kollam	Pathanamthitta	Alappuzha	Kottayam	Idukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikkode	Wayanad	Kannur	Kasaragode	NS	TOTAL
1.	Multi-axiled Articulated Vehicles	2	3	0	3	8	4	47	0	12	0	0	0	1	0	0	80
2.	Trucks& Lorries	228	156	16	154	165	126	235	146	745	0	36	6	63	56	0	2132
3.	Four Wheelers	1326	856	656	946	2158	966	3369	2565	1385	2572	3756	665	5914	2569	0	29703
4.	Three Wheelers	1418	746	1316	1126	728	256	1856	569	1123	3565	1256	125	5645	956	0	20685
5.	Stage Carriage	196	417	386	224	336	218	568	464	416	785	1614	236	1325	426	464	8075
6.	Contract Carriage	614	198	465	236	359	96	756	236	456	610	112	11	125	28	0	4392
7.	Private Service Vehicles	1426	36	126	6	16	14	39	10	0	223	14	1	10	5	0	1926
8.	Other Buses	0	42	0	46	31	18	21	55	65	754	36	12	36	19	0	1126
9.	Motor Cabs	1346	698	864	836	1356	426	1523	1222	565	556	369	74	426	226	0	10577
10.	Maxi Cabs/Taxi	146	26	7	0	14	12	0	44	0	0	0	0	0	0	0	249
11.	Other Taxi	0	0	16	46	0	8	123	8	60	116	15	56	55	460	0	549
12.	LMV 3 Seater	4794	1247	1920	1956	3956	1654	4226	3169	3000	4456	5312	1588	2236	3956	0	43770

13.	LMV 4 to 6 Seater	4225	2654	1126	2985	526	123	3746	0	0	0	0	0	2659	2265	0	20309
14.	Motor Cycle Hire	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
15.	Other Transport Vehicles	0	122	0	0	184	41	184	221	0	0	120	0	956	109	0	1937
16.	Scooters	2106	0	0	456	0	0	0	0	0	0	2113	33	166	0	0	1874
17.	Mopeds	2356	1113	300	1256	474	22	112	422	1123	0	2369	146	642	0	0	10335
18.	Motor Cycle including above & below 95cc	72156	54866	26518	40263	32523	10236	97653	49666	42565	63265	47365	7896	42561	13256	0	600789
19.	Cars	18565	9456	4316	8659	12126	3606	21036	13233	9564	13564	15456	2169	12256	8456	0	149462
20.	Jeeps	25	40	16	125	80	16	44	66	42	164	56	3	125	118	0	920
21.	Omni Buses	0	86	24	15	182	21	78	78	78	3	78	42	246	116	0	1047
22.	Tractors	6	6	2	16	43	10	18	47	26	60	13	15	26	16	0	304
23.	Trailors	2	11	24	2	12	12	0	0	0	213	0	0	0	0	0	276
24.	Others	534	421	612	502	1435	866	1023	794	669	0	1123	0	241	693	0	8913
	GRAND TOTAL	111561	73200	38710	59858	56712	18751	136657	70105	62194	90397	81213	13078	75714	33318	464	922432

Source : Kerala State Transport Commissionerate

2. Water Transport

Table No.1. 2.1 Steamers and sailing vessels in Intermediate and Minor Ports of 2013-14(No. and Tonnage)

Name of Port	Coastal /Foreign	Steamers		Sailing Vessels		Total No. of Vessels	Total Tonnage
		No.	Tonnage	No.	Tonnage		
Kasargod	Coastal	-					
	Foreign						
Azhikkal	Coastal						
	Foreign	3	6387.31	0	0	5	1405.26
Kannur	Coastal						
	Foreign						
Thalassery	Coastal						
	Foreign						
Kozhikkode	Coastal	129	93184	301	64264	471	165205.6
	Foreign						
Ponnani	Coastal						
	Foreign						
Kodanallur	Coastal						
	Foreign						
Alappuzha	Coastal						
	Foreign						
Neendakara	Coastal						
	Foreign						
Trivandrum	Coastal						
	Foreign						
Vizhinjam	Coastal	11	10209	1	142	4	628
	Foreign	38	41021	2	284	45	12923
Kollam	Coastal	0	0	14	14476	14	14476
	Foreign	0	0	2	10610	2	10610
Total		181	150801	320	89776	541	205247.8

Table 1.2.2 Commodity Wise Cargo Handled in Minor Ports of Kerala During 2013 -14

(in Tonnes)

Sl. No	Name of Port	Commodity	Exports			Imports			Grand total
			Coastal	Foreign	Total	Coastal	Foreign	Total	
1	Kasargod								
2	Azhikkal	Scrap vessel	312.26	1093	1405.3				1405.3
		Miscellaneous							
		Building Materials							
3	Kannur								
4	Thalassery								
5	Kozhikkode	Soda ash	326		326				326
		Machinery	375.6		375.6	223		223	598.6
		Coconut	40		40				40
		Wheat	4236		4236				4236
		Rice	750		750	1095		1095	1845
		Cattle feed			310			310	310
		Scrap	450		450				450
		Cement				19952		19952	19952
		POL				6724		6724	6724
		LPG				842		842	842
		Metal				9983		9983	9983
		Tiles & BRicks				1305		1305	1305
		Vegetables & Fruits				1253.6		1253.6	1253.6
		Granite & Marbles				758		758	758
		Others	2940.7		2940.7	174.20		174.19.9	20360.6
		Timber				321		321	321
		Empty Baral/Cylinders	1080		1080				1080
		Copra	50		50				50
		Mas				34		34	34

		Edible Oil				252		252	252
		Furniture	38		38	104		104	142
		Medicine				15		15	15
		Ele -Goods	5.5		5.5	74.4		74.4	79.9
		Tubacco				21		21	21
		Furnace Oil				292		292	292
		Bakery				138		138	138
		Bamboo				203		2003	203
		Chilk Powder	20		20				20
		Vehicle	50.5		50.5	438		438	438
		Ply wood				215		215	215
		Oxygen Cylinder	10.4		10.4	97		97	107.4
		HSD				4126		4126	4126
		Food Grains	980		980	3103		3103	4083
		Stationary				2537		2537	2537
		Cattle				2302		2302	2302
		Hardwares				3105		3105	3105
6	Ponnani								
7	Kodungallur								
8	Alappuzha								
		Common Cargo	6		6				6
9	Kollam	Building Materials				1918		1918	1918
		Container	3602		3602	545		545	4148
10	Thiruvananthapuram								
11		Vegitables& Fruits				7814		7814	7814
		Spices				157		157	157
		Salt				5		5	5
		Packing				361		361	361
		Other Materials				153		153	153
	Total		15462.96	1093	16556	79707	9490	89196.9	105752.9

Source : Port Department

Table 1.2.3 Cargo handled at Non Major Ports 2013-14

Sl. No.	Port	Costal			Foreign			Grand Total
		Unloaded	Loaded	Total	Unloaded	Loaded	Total	
1.	Vizhinjam	0	0	0	9490	0	9490	9490
2.	Kollam	3608	2464	6072	0	0	0	6072
3.	Beypore	11542	79665	91207.7	0	0	0	91207.7
4.	Azhikkal	312.6	0	312.6	1093	0	1093	1405.6
	Total	15462.6	82129	97592.3	10583	0	10583	108175.3

Table 1.2.4 Infrastructure Facilities at Cochin Port Trust

Sl.No	Navigation Channels	Length	Width	Depth
1.	Outer Channel	16 Km	260 mtrs	15.95 mtrs
2.	Inner Channel			
	a) Ernakulam Channel	5.032 Km	Turning Basin of 500m	13.2 m (Up to RGCT & COT)
				11.25 m (at Q 10)
				10.5m (at Q5 to Q7 berths)
				9.75m (at STB & NTB)
	b) Mattancherry Channel	2.60 Km	183 m	10.75 m (up to south end of BTP)
				9.75 (beyond BTP)
	c) ICTT, Vallarpadam	605 m	Turning basin of 670 meter	14.5 m

Location of Fair Way Buoy

Latitude – 09⁰ -57' – 6N

Longitude – 76⁰ – 05' -5E

Table 1.2.5 Berthing Facilities

Sl. No.	Berth	Type	Draft (in Metres)	Maximum Length of Vessel (Metres)
1	Mattanchery Wharf (Q1 to Q4)	General Cargo	9.14	180
2	Ernakulam Wharf (Q5 to Q6)	General Cargo	10.00	250
3	Ernakulam Wharf (Q7)	General Cargo	10.50	250
4	Ernakulam Wharf (Q8 & Q9)	General Cargo	11.00	250
5	Fertilizer Berth (Q10)	Fertilizer/Raw Material	10.70	207
6	COT	POL	12.50	250
7	BTP	Dry/Liquid Bulk	10.00	190
8	NTB	POL Products	9.14	213
9	STB	POL Products	9.14	170
10	SCB	Ammonia	9.14	170
11	NCB	Dry/Liquid Bulk	9.14	170
12	SPM	Crude	22.50	370
13	ICTT, Vallarpadam (V2 & V3)	Containers	14.50	335
14	LNG	LNG	12.50	320
15	UTL	Passenger	5.30	300

Source : Port Department

Table 1.2.6 Storage Facilities

Sl. No.	Wharf	No. in Commission	Area M ²
I	Mattancherry		
a)	Ware Houses	4	11755
b)	Overflow Sheds	3	6060
c)	Transit Sheds	3	13110
	Total	10	30925
II	Ernakulam		
a)	Ware Houses	1	2980
b)	Overflow Sheds	3	6000
c)	Transit Sheds	2	7200
	Total	6	16180
	Grand Total	16	47105

Source : Port Department

Table 1.2.7 Outlay and Expenditure at Non Major Ports 2013-14

Year	Non Major Ports (in Lakhs)	
	Non Plan	Plan
2011	106596000	2143590550
2012	313323000	2628417165
2013	106522000	1409675194
2014	124333000	286758982

Source : Port Department

Table 1.2.8 Operational Statistics of Inland Water Transport Agencies in Kerala

Sl. No.	Particulars	State Water Transport Department		Kerala Shipping and Inland Navigation Corporation Ltd.	
		2012-13	2013-14	2012-13	2013-14
1.	No. of Jhankars	0	0	2	2
2.	No. of Jhankars in operation	0	0	2	2
3.	No. of Boats	95	97	0	0
4.	No. of Boats in operation	51	52	0	0
5.	No. of Trips on Schedule	270100	275210	0	0
6.	No. of Passengers Carried (in lakhs)	163.94	142.86	0	0
7.	No. of Barges	0	0	8	6
8.	No. of Tourist Boat5s	4	4	4	2
9.	Total Distance Cargo (in KM approximate)	0	0	28646	28344
10.	Volume of Cargo carried (Tonnes)	0	0	356411	20825 3
11.	Total Revenue Receipts on Inland Transports in lakhs (Collection from Tourists Boats+ Barges+Jhankars)	444.46	659.73	1048.44	569.01
12.	Total Revenue Receipts on Inland Transport (in lakhs)	23.17	32.82	538.21	312.67
13.	Total Revenue Expenditure on other business (in lakhs)	0	00	828.41	611.11
	No. of Employees (TOTAL)	919	927	162	143

Source: Economic Review 2014

3.Rail Transport

Table 1.3.1 Length of Rail under Thiruvananthapuram Division 2013-14

Year	Route Km			Total Track Km
	Broad Gauge	Meter Gauge	Total	
2013-14	622	Nil	622	942

Table 1.3.2 No. of Level Crossing under Thiruvananthapuram Division 2013-14

Year	Manned Level Crossing	Unmanned Level Crossing	Total
2013-14	365	14	379

Table 1.3.3 Reservation System in Thiruvananthapuram Division 2013-14

Sl. No.	Systems	2013-14
1.	No. Passenger reservation system	57 (Inclusive of 30 Non Railhead Reservation System)
2.	No Of Unreserved ticketing system	71
3.	No of Integrated unreserved ticketing system cum passenger Reservation system	20

Table 1.3.4 Average no. of Trains & Passengers running under Thiruvananthapuram Division 2013-14

Thiruvananthapuram Division		2013-14
No of Stations		107
No of Junction		4
Average No of Trains running/week	Mail/ Exp: Train	595
	Passenger Trains	497

Table 1.3.5 Length of Rail under Palakkad Division 2013-14

Year	Route Km			Total Track Km
	Broad Gauge	Meter Gauge	Total	
2013-14	1033.46	87.38	1120.84	1120.84

Table 1.3.6 No. of Level Crossing under Palakkad Division 2013-14

Year	Manned Level Crossing	Unmanned Level Crossing	Total
2013-14	138	Nil	138

Table 1.3.7 Reservation System in Palakkad Division 2013-14

Systems	2013-14
No. Passenger reservation system	32
No of Unreserved ticketing system	60
No of Integrated unreserved ticketing System cum passenger Reservation system	20

Table 1.3.8 Average no. of Trains & Passengers running under Palakkad Division 2013-14

		2013-14
Number of Stations		89
Number of Junctions		2
Average No of Trains running/week	Mail/ Express Train	604
	Passenger Trains	340

4 Air Transport

Table 1.4.1 .Details of flights operated by various agencies from International Airports in Kerala during 2013-14

Sl. No.	Airlines	Cochin				Thiruvananthapuram				Calicut			
		2013-14				2013-14				2013-14			
		No. of Flights		Passengers		No. of Flights		Passengers		No. of Flights movements		Passengers	
		DOM	INT	DOM	INT	DOM	INT	DOM	INT	DOM	INT	DOM	INT
1	Air India	0	1993	0	161719	0	120	0	32440	252	852	6198	285342
2	Air India Express	0	3680	0	426098	0	1479	0	196268	1308	4136	52246	614793
3	Indian Airlines	2839	721	239588	76320	1730	856	146071	68236	740	1459	15557	208753
4	Oman Air	0	730	0	98892	0	428	0	59078	0	730	0	103051
5	Silk Air	0	914	0	92944	0	214	0	20787	0	0	0	0
6	Kuwait Airways	0	728	0	127609	0	244	0	0	0	0	0	0
7	Emirates Airlines	0	1460	0	429674	0	728	0	177355	0	1146	0	323616
8	Qatar Airways	0	1152	0	257159	0	428	0	69668	0	729	0	120736
9	Saudi Arabian Airlines	0	462	0	127503	0	0	0	0	0	846	0	237117
10	Rak Airways	0	0	0	0	0	0	0	0	0	546	0	71689
11	Gulf Air	0	730	0	105665	0	0	0	0	0	846	0	237117

12	Air Arabia	0	1462	0	223632	0	856	0	129010	0	730	0	118469
13	Etihad Airways	0	731	0	99976	0	428	0	54190	0	796	0	95606
14	Bahrain Air	0	0	0	0	0	496	0	19866	0	0	0	0
15	Jet Airways	5884	2973	479822	428808	864	856	99721	122437	70		8925	0
16	Air Asia	0	760	0	107929	0	0	0	0	0	0	0	0
17	Tiger	0	428	0	50476	0	186	0	22344	0	0	0	0
18	Sreelankan Airlines 72	0	1456	0	158663	0	428	0	55046	0	0	0	0
19	Inter Globe Aviation	0	728	0	107937	0	0	0	0	0	0	0	0
20	Spice Jet	5563	1454	556100	139790	0	0	0	0	1198	0	68342	0
21	Malaysian Airlines	0	422	0	47579	0	0	0	0	0	0	0	0
22	Non Scheduled Flight	0	150	0	3882	0	0	0	0	0	0	0	0
23	Alliance Air	1490	0	46414	0	0	0	0	0	0	0	0	0
24	Jet Flight	0	0	0	0	0	0	0	0	660	0	94370	0
25	King Fisher Airlines	0	0	0	0	0	0	0	0	0	0	0	0
26	Go Air	1036	0	123157	0	0	0	0	0	0	0	0	0
27	Paramount Airways	0	0	0	0	0	0	0	0	0	0	0	0
28	Inter Globe Aviation	5854	0	664514	0	0	0	0	0	0	0	0	0
29	Pawan Hans Kavarathy	564	0	2463	0	0	0	0	0	0	0	0	0
30	PH2 ON GC	0	0	0	0	0	0	0	0	0	0	0	0

31	Jyothi Aviation	152	0	313	0	0	0	0	0	0	0	0	0
32	Shobha Puravankara	23	0	40	0	0	0	0	0	0	0	0	0
33	Kalyan Jewellers	210	0	468	0	0	0	0	0	0	0	0	0
34	Chipson Kalyan	50	0	111	0	0	0	0	0	0	0	0	0
35	Heligo Charters	0	0	0	0	0	0	0	0	0	0	0	0
36	Heligo to ONGC	0	0	0	0	0	0	0	0	0	0	0	0
37	Deccan Cargo	0	0	0	0	0	0	0	0	0	0	0	0
38	United Heli Charter	0	0	0	0	0	0	0	0	0	0	0	0
39	Defence Movement	42	0	82	0	0	0	0	0	0	0	0	0
40	Non Scheduled Flights	375	0	1636	0	0	0	0	0	0	0	0	0
41	Maldiviaa Airways	0	0	0	0	0	496	0	19866	0	0	0	0
	Total	24082	23134	2114708	3271755	2594	8243	245792	1046591	4228	12816	245638	2416289

Source: Airport Authority of India, Kerala.

**Table 1.4.2. Passenger Movements, Aircraft Movements & Cargo tonnage
Cochin International Airport Limited 2013-14**

Sl. No.	Description	2013-14
1	Passenger traffic handled - International	3271755
2	Passenger traffic handled - Domestic	2114708
3	No. of flights handled - International	23134
4	No. of flights handled - Domestic	24082
5	Average no. of pax handled per day -International	9000
6	Average no. of pax handled per day - Domestic	6000
7	Average tonnage of cargo handled per day –International	127.30MT
8	Average tonnage of cargo handled per day – Domestic	21.80MT

Source: Cochin International Airport Limited

Table 1.4.3. International Cargo Handled 2013-14

Period	Export in MT	Import in MT	Total in MT	% increase over last year
2013Apr-2014 Mar	33276.90	13188.80	46465.70	18.62

Source: Cochin International Airport Limited

Table 1.4.4. Domestic Cargo Handled 2013-14

Period	Export in MT	Import in MT	Total in MT	% increase over last year
2013Apr-2014 Mar	2149.50	5825.20	7974.70	8.38

Source: Cochin International Airport Limited

Table 1.4.5. Cochin International Airport Limited

Year	International Terminal					
	A/C Movements			PAX Movements		
	ARR	DEP	Total	ARR	DEP	Total
2013-14	11375	11759	23134	1610109	1661646	3271755

Year	Domestic Terminal					
	A/C Movements			PAX Movements		
	ARR	DEP	Total	ARR	DEP	Total
2013-14	12234	11848	24082	1066531	1048177	2114708

Year	Total Movements (IT+DT)		% increase over last year	
	A/C Movements	PAX Movements	A/C Movements	PAX Movements
2013-14	47216	5386463	13.67	9.93

Source: Cochin International Airport Limited

Table 1.4.6. Calicut International Airport details as per financial year 2013-14

Sl. No.	Particulars	2013-14
1	Passenger traffic handled International	2179200
2	Passenger traffic handled Domestic	285906
3	No. of flights handled international	11980
4	No. of flights handled Domestic	4337
5	Average No. of passenger handled per day international	5970
6	Average No. of passenger handled per day Domestic	783
7	Average No. of Cargo handled per day international	*
8	Average No. of Cargo handled per day Domestic	*

* Cargo handled by M/S KSIE Govt. of Kerala undertaking

Source: Calicut International Airport

Table 1.4.7. Port wise report (export) for 2013 - 2014

Sl. No.	Name of Port	No. of Consignments	No. of Packages	Weight
1.	Abudhabi	21	1256	8920
2.	Amsterdam	5	344	1975
3.	Bahrain	1560	378813	2012260
4.	Basel	1	46	435
5.	Brisbane	2	13	370
6.	Dammam	1045	136812	1071440
7.	Delhi	2	288	2650
8.	Doha	2886	304905	2860988
9.	Dubai	1991	269595	1763387
10.	Dublin	57	9645	63800
11.	Hongkong	1	147	1755
12.	Jeddah	1521	587327	4318329
13.	Karachi	191	11935	105470
14.	Kuwait	1080	425645	2172324
15.	Lahore	746	30093	253889
16.	London	16	1170	10367
17.	Manchester	2	7	105
18.	Mumbai	6	264	4310
19.	Muscat	1486	174122	1389938
20.	Ras Al Khaima	40	7634	45085
21.	Riyad	1783	340265	2906123
22.	Salala	3	18	595
23.	Sharjah	3058	394388	2260964
24.	Sydney	1	7	55
	Total	17504	3074739	21255534

Source : Calicut Air Cargo Complex

Table 1.4.8. Port wise report (import) for the period from 01-04-2013 to 31-03-2014

Sl. No.	Name of Port	No. of Consignments	Pieces	Weight
1	Sharjah	185	1042	36676
2	Chennai	20	178	6619
3	Kuwait	26	205	7325
4	Muscat	357	1603	46954.43
5	Doha	157	1341	22190.1
6	Abudhabi	216	985	27744.4
7	Riyad	477	2360	71433.5
8	Dammam	223	861	29841
9	Mumbai	111	524	14372.55
10	Bahrain	1	5	132
11	Jeddah	679	2803	108416
12	Cochin	4	54	2464
13	Dubai	2158	13739	455408.7
14	Ras Al Khaima	59	609	17790
15	Delhi	4	39	522.4
	Total	4677	26348	847889.08

Source : Calicut Air Cargo Complex

Table 1.4.9. Export of Consignments from 01-04-2013 to 31-03-2014

Sl. No.	Item Code	Name	No. of Consignments	No. of Packages	Weight
1.	BKS	Books	23	400	9241
2.	BTL	Betel Leaves	932	41849	357509
3.	EGG	Eggs	44	12250	304610
4.	ELEC	Electronic Item	7	133	2425
5.	FISH	Fish	1099	72010	1587848
6.	FLWR	Flower	349	15661	108234
7.	FRU	Fruits	219	44926	276580
8.	FS	Food Stuffs	119	7784	97627
9.	GAR	Readymade Garments	3	10	330
10.	GEC	General Cargo	105	786	16624
11.	GMT	Garments	96	909	25355
12.	MAG	Magazines	59	1005	21260
13.	MCN	Machineries	11	28	1575
14.	MED	Medicines	11	201	2695
15.	NP	News Paper	8	48	910
16.	PEF	Personal Effect	24	49	1444
17.	PRC	Perishable Car	13	1600	15390
18.	PRM	Printed Matter	21	198	5030
19.	SPI	Spices	4	237	3670
20.	UB	Unaccompanied	32	89	2246
21.	VEG	Vegetables	14188	2873335	1.83
22.	WEE	Weekly	137	1231	31202
	TOTAL		17504	3074739	2871806.83

Source : Calicut Air Cargo Complex

2. ENERGY

Table 2.1 Outlay and Expenditure

Sl. No.	Department	Annual Plan 2011-12		% of Expenditure	Annual Plan 2012-13		% of Expenditure	Annual Plan 2013-14	
		Outlay	Expt.		Outlay	Expt.		Outlay	Expt.as on 30.11.2013
1.	KSEB	103600	105677.00	102	111875	52129.09	46.60	117612	70119.21
2.	ANERT	5950	2000.00	33.6	4226	1366.08	32.33	3980	132.22
3.	MTSL	130	130.00	100	320	196.37	60.37	340	5.15
4.	EMC	2620	1600.00	61	120	120.01	100.00	338	40.31
	Total	104700	109407.00	104.5	116541	53811.55	46.17	122270	70296.89

Table 2.2 Generation Installed Capacity (Mw) 2013-14

Sl. No.	Source of Energy	Capacity (MW)*	Firm Annual Generation Capability (MU)**
1	Hydel-KSEB	2008.65	7073.94
2	Thermal-KSEB	234.6	1502
3	Wind-KSEB	2.025	4
4	Hydel-Pvt.	22.11	92.06
5	Hydel-Captive	33	115
6	Thermal-Pvt (including cogenerator)	198.9	1376.71
7	Wind-Pvt	32.85	69.93
8	NTPC	359.58	2158
	Total	2891.72	12391.64
9	Hydro-renewable		
	(1) KSEBL	103.9	372.94
	(2) Pvt.	22.11	89.2
10	RESMNRE (Wind + Cogeneration)	54.875	211.64

* Mega Watt ** Million Unit

Source : KSEB

Table 2.3. Total Installed Capacity in Kerala from 2010-2014

Sl. No.	Sector	Installed Capacity (MW)*			
		2010-11	2011-12	2012-13	2013-14
1	State Sector	2234.43	2245.40	2244.30	2245.23
2	Central Sector	359.60	359.60	359.60	359.60
3	Private Sector	263.58	274.78	274.78	286.89
	Total	2857.6	2879.8	2878.7	2891.72

* Mega Watt

Source : Economic Review 2014

Table 2.4. Transmission facilities in Kerala 2013-14

Sl. No.	Capacity	Substations (Nos.)	Lines (CT KMs.)
1	400 KV	1	Nil
2	220 KV	19	2765
3	110 KV	142	4260
4	66 KV	82	2202
5	33 KV	133	1719
	Total	377	10946

Source: KSEB

Table 2.5. Generation of Power at Different Stations in (MU)* 2013-14

Sl.No.	Station	2013-14
1	Brahmapuram, Kochi	29.04
2	BSES (Thermal-IPP)	337.92
3	Chembukadavu	12.42
4	Idamalayar	386.07
5	Idukki	2738.72
6	Kakkad	247.65
7	Kallada	67.55
8	Kanjikode (Wind farm)	1.8
9	Kayamkulam	947.15
10	KPCL (IPP) - Kasaragode	0
11	Kozhikkode (KDPP)	191.83
12	Kuttiyadi	842.42
13	Kuthunkal (Hydro Captive) - Idukki	42.48
14	Lower Periyar	601
15	Lower Meenmutty	5.62
16	Maniyar (PVT)	39.72
17	Mattupetty-Idukki	5.75
18	Malankara	30.38
19	Neriyamangalam	365.76
20	Pallivasal	215.53
21	Panniyar	170.32
22	Peppara	7.6
23	Poringalkuthu	122.69
24	Poringal LBE	114.03
25	Sabarigiri	1635.44
26	Sengulam	141.9
27	Sholayar	233.63
28	Urumi 1&2-Kozhikkode	13.67

* Million Unit

Source : KSEB

Table 2.6 Power Consumption (in MU) and Revenue Collected in Kerala 2013-14
(Rs. in Lakhs)

Sl. No.	Category	No. of Consumers	Energy sold (MU)	% sales	Connected load (MW)	Revenue (Rs.)	% Revenue
1	Domestic	8788916	8739.51	46.32	12428.24	269919	27.06
2	Commercial (LT+HT)	1782286	2229.33	11.81	2905.34	210214.52	21.08
3	Public lighting	3789	319.06	1.69	110.99	11899.26	1.19
4	Agriculture	463006	310.24	1.64	952.77	5657.05	0.57
5	Industrial LT	137744	1096.57	5.81	1620.52	68251.91	6.84
6	HT & EHT	4256	4035.49	21.39	1316.68	257637.17	25.83
7	Railway Traction	8	200.69	1.06	66.25	10776.85	1.08
8	Licensees	11	523.15	2.77	79.13	29363.89	2.94
9	Export	0	1414.6	7.5	0	133697.58	13.4

Source : KSEB

Table 2.7 Category wise sales of energy in Kerala 2013-14 (in MU)

Sl. No.	Category	2012-13	2013-14
1	Domestic	8313.36	8739.51
2	Commercial	2224.06	2229.33
3	Industrial LT	1101.96	1096.57
4	Industrial HT & EHT	3905.15	4035.49
5	Public lighting	313.2	319.06
6	Agriculture	306.08	310.24
7	Railways	173.67	200.69
8	Licence	500.76	523.15
9	Export	0.97	1414.6
	Total	16839.21	18868.64

Source : KSEB

Table 2.8 Consumers and Connected Load at 2012 to 2013-14

Sl. No.	Year	No. of consumers at the end of the year	Connected load in MW at the end of the year
1.	2011-12	10457637	17518.42
2.	2012-13	10806890	18523.51
3.	2013-14	11192890	19684.51

*Source : KSEB***Table 2.9 Generating Capacity, Maximum Demand and Load Factor 2013-14**

Sl. No.	Year	Installed Capacity (MW)	Total Energy (MU) Generation Purchase - Export	Maximum Demand (MW)	Load Factor (%)
1	2011-12	2878.36	18938.81	3348	64.57
2	2012-13	2881.22	19877.16	3268	69.43
3	2013-14	2891.72	20525.16	3588	65.3

*Source : KSEB***Table 2.10 Transmission Infrastructure 2013-14**

Sl. No.	Item	Target	Unit	Achievement	Unit	% of Achievement
1	400 KV Substation	Nil	Nos.	Nil	Nos.	-
2	220 KV Substation	2	Nos.	Nil	Nos.	-
3	110 KV Substation	11	Nos.	5	Nos.	45.45
4	66 KV Substation	3	Nos.	1	Nos.	33.33
5	33 KV Substation	10	Nos.	4	Nos.	40

Source: KSEB

Table 2.11 Growth of Power system in Kerala 2013-14

Sl. No.	Particulars	March 2013	March 2014
1	2	3	4
1	Installed capacity (MW)	2881.22	2891.72
2	Maximum demand (system) MW	3268	3588
3	Generation per annum (MU)	5389.6	8218
4	Purchase per annum (MU)	14908.8	14070
5	Export per annum (MU)	0.97	1415
6	Energy sale per annum (MU)	16838.24	17454
7	% of Energy losses to energy available for sale	15.3	14.96
8	Per capita consumption (KWH)	501	516
9	220 KV Line-KMs	2761.57	2765
10	110 KV Line - KMs	4178	4260.27
11	66 KV Line - KMs	2166	2202.81
12	33 KV Line - KMs	1599	1719.28
13	22 KV Line - KMs	160.59	16059
14	11 KV Line - KMs	52907	53579
15	LT Line - KMs	263620	26417
16	Step Up Transformer capacity (MVA)	2612	2815
17	No EHT Substation	240	244
	A - 400 KV	1	1
	B - 220KV	19	19
	C - 110 KV	137	142
	D - 66 KV	83	82
	E - 33 KV	129	133
18	Step down transformer capacity (MVA)	17408	17913
19	A - Distribution Transformer (Nos.)	64972	67546
	B - Capacity (MVA)	7940.37	8329.11
20	No. of Villages electrified	7325	7325
21	No. of Consumers in lakhs	108.09	111.92
22	Connected load (MW)	18523	19684.15
23	No. of Street Light	1227285	1297480
24	No. of Irrigation Pumps	466289	478449
25	Total Revenue per annum (Rs.in Lakhs)	722339	997418

Source: KSEB

Table 2.12 Targets and Achievements of distribution Infrastructure 2013-14

Sl.No.	Item	Target	Unit	Achievement	Unit	% of achievement
1	11 KV Lines	3430	KMs	1884	KMs	54.93
2	Distribution Transformer	4400	Nos.	3200	Nos.	72.73
3	LT Lines	6900	KMs	3735	KMs	54.13
4	Service Connections	458130	Nos.	415216	Nos.	90.63

*Source : KSEB***Table 2.13 Transmission & Distribution Lines 2013-14**

Sl. No.	Year	Transmission and Distribution Lines (KM)						LT
		220 KV	110 KV	66 KV	33 KV	22 KV	11 KV	
1	2013-14	52765	4260	2202	1719	160.59	53579	264117

*Source: KSEB***Table 2.14 Pump Sets energized and Street lights installed**

Year	No. of Pump sets energized	No. of Street lights installed	No. of distribution transformers installed
2013-14	478449	1297480	67546

Source: KSEB

3. MINING & GEOLOGY

Table 3.1 Heavy Mineral Deposits

Sl. No.	Locality	Total Heavy Minerals	Ilmenite	Rutile	Zircon	Monazite	Sillimanite
1	Chavara Major Deposit	127.09	79.45	5.38	4.82	0.82	28.72
2	Northern contiguity of Chavara deposit	16.93	9.03	0.64	0.40	0.17	5.66
3	Southern Kerala	1.83	1.15	0.11	0.12	0.05	0.27
4	Northern Kerala	3.35	0.53	0.01	0.05	0.003	0.80

Source : Mining & Geology

Table 3.2 The reserves and the percent of Fe content

Sl. No.	Locality	Oxidised (million tonne)	% of Fe	Unoxidised (million tonne)	% of Fe	Total (million tonne)
1.	Eleyettimala	14.7	39.4	4.5	31.5	19.2
2.	Naduvallur	6.1	39.8	3.7	33.7	9.8
3.	Nanminda	4.3	41.2	-	-	4.3
4.	Cheruppa	3.2	35.5	7.5	31.7	10.7
5.	Alampara	9.0	35.6	26.2	35.2	35.2
6.	Korattimala	1.9	37.7	2.5	33.6	4.4

Source : Mining & Geology

Table 3.3. The Flaky Graphite deposits of Ernakulam and Kottayam districts

Sl. No.	Item	Nagapuzha	Vadakode	Chirakkadavu	Total
1.	Ore reserve (tonnes)	1059352	5050938	700000	6810920
2.	Grade (% carbon)	7.3	5.0	3.0	
3.	Recoverable graphite (tonnes)	43000	24000	16000	83800
4.	Concentrate grade (% carbon)	89	91	88	
5.	Recovery	79	80	80	

Source : Mining & Geology

**Table 3.4. The sand deposit comprises of flat to gently dipping sandy stretches
(5m above Mean Sea Level)**

Vertical sequence	
0-0.75 m below ground level	White sand mixed with soil
0.75-2.50 m below ground level	White sand
2.50-10.00 m below ground level	Brown sand

Source : Mining & Geology

Table 3.5. Reserve of Silica sand

Village	Approximate area in hectares	Reserve in million tones
Pallipuram	300	18.40
Thycauttuserry	120	6.50
Panavally	50	3.50
Total	470	28.40

Source : Mining & Geology

Table 3.6. Lime shell Reserves in Kerala

Sl. No.	Locality	Reserve in million tones
1.	Vembanad Lake	2.50
2.	Kulasekharamangalam	0.18
3.	Pallipuram	0.10
4.	Vechoorpadam	0.26
5.	Thannirmukkom	0.25

Source : Mining & Geology

Table 3.7. Lime shell in Thrissur, Malappuram and Kannur districts

Sl. No.	Area	Reserve in million tones
1	Thrissur District : Naduvullikara, Chettuva, Vadanapalli and Kappad	0.33
2	Kannur District: Payyannur, Cheruvathur, and Thrikkarippur	0.29
3	Malappuram District: Kanhiramukku	0.14
4	Iswaramangalam and Edappal	--

Source : Mining & Geology

Table 3.8. Total Area covered by Mining leases 2013-14

Sl. No.	Minerals	Area in Hectares
1	Clay	03.1078
2	Silica Sand	24.5063
3	Bauxite	-
4	Lime shell	-
5	Limestone	-
6	Mineral Sand	184.8
7	Quartz	-
8	Laterite	07.5704
	Total	219.9845

Source : Mining & Geology

Table 3.9. Number of Mining Leases in the State of Kerala 2013-14
(Mineral wise)

Sl. No.	District	Graphite	China Clay	Laterite	Iron Ore	Quartz	Lime shell	Mineral sand	Lime stone	Silica sand	Quartzite	Bauxite
1	Thiruvananthapuram	-	26	-	-	-	-	-	-	-	-	-
2	Kollam	-	2	-	-	-	-	43	-	-	-	2
3	Pathanamthitta	-	-	-	-	-	-	-	-	-	-	-
4	Alappuzha	-	-	-	-	-	2	-	-	23	-	-
5	Kottayam	-	-	-	-	-	3	-	-	-	-	-
6	Idukki	-	-	-	-	1	-	-	-	-	-	-
7	Ernakulam	1	-	-	-	-	-	-	-	-	-	-
8	Thrissur	-	-	-	-	-	-	-	-	-	-	-
9	Palakkad	-	-	-	-	-	-	-	1	-	-	-
10	Malappuram	-	-	-	-	-	-	-	-	-	-	-
11	Kozhikkode	-	-	-	1	-	-	-	-	-	1	-
12	Wayanad	-	-	-	-	-	-	-	-	-	-	-
13	Kannur	-	-	5	-	-	-	-	-	-	-	-
14	Kasaragode	-	-	2	-	-	-	-	-	-	-	-
	Total	7	28	7	1	1	5	43	1	23	1	2

Source : Mining & Geology

Table 3.10. Production of Minor Minerals in Kerala during 2012-13 & 2013-14

Sl. No.	Minor Minerals	Production in Tonnes		Royalty (Rs.)	
		2012-13	2013-14	2012-13	2013-14
1	Granite (Building stone)	15227650.75	13973155	243642412	223570485
2	River sand	2629390.8	1893766	26293908	18937663
3	Ordinary sand	3187035.7	1914116	31870357	19141156
4	Laterite	2070631.5	2578368	33130104	412538889
5	Brick Clay	1515292.5	1243116	15152925	12431163
6	Lime shell	4804.66	7450	240233	469375
7	Granite (dimension stone (In cubic meters))	1245.11	1219	4980445	4877084
8	Ordinary earth	880443	4827325	17608862	96546499

Source : Mining & Geology

Table 3.11. Production of Major Minerals in Kerala 2012-13 & 2013-14

Sl. No.	Major Minerals	Production in Tonnes		Royalty (Rs.)	
		2012-13	2013-14	2012-13	2013-14
1	China Clay	434121.88	904663	10853047	15379264
2	Lime Stone	560828.95	455781	35332224	28714206
3	Ilmanite	128348.9	84247	26568222	25611098
4	Silica Sand	88081.64	76890	12597104	12917482
5	Lime shell	43470.97	37333	2738671	2351981
6	Laterite	107683.96	190591	10445344	21917944
7	Zircon	7919.35	3861	14832938	8340801
8	Sillimanite	5161	8905	1424332	1896705
9	Rutile	5236	2830	7707021	6632488
10	Graphite	696	628	45240	36400
11	Quartz	3488.37	1570	150000	67500
12	Bauxite Ilmanite	483	49	584000	65574

Source : Mining & Geology

Table 3.12. Details of Mineral concessions pertaining to Minor Mineral 2014

Sl. No.	Name of mineral	Total
1	Quarrying permits	4164
2	Dimension Stone	554
3	Dealer's License	1514
4	License for registered metal crusher unit	199

Source : Mining & Geology

Table 3.13. Revenue Collection details for the year 2012-13 to 2013-14

Year	Amount collected for Major Minerals (Rs)	Amount collected for Minor Minerals (Rs)	Total
2012-13	123278143	373676894	496955037
2013-14	123931443	417793208	541724651

Source : Mining & Geology

Table 3.14. District wise Revenue Collection for 2013-14

Sl. No.	District	Major Minerals	Minor Minerals	Total
1	Thiruvananthapuram	13920767	37323298	51244065
2	Kollam	35443094	19676459	55119553
3	Pathanamthitta	-	25715499	25715499
4	Alappuzha	11616006	4098149	15714155
5	Kottayam	974925	32076441	33051366
6	Idukki	-	13337673	13337673
7	Ernakulam	-	86839179	86943079
8	Thrissur	103900	43791128	43791128
9	Palakkad	-	28069823	56822877
10	Malappuram	-	38852597	38852597
11	Kozhikkode	28753054	26216633	26216633
12	Wayanad	-	13625134	13625134
13	Kannur	2948160	25036945	27985105
14	Kasaragode	17652940	10761097	28414037
15	Cherthala	-	-	-
16	KMS (NR)	32600	5016794	5049394
17	KMS (SR)	-	2015000	2015000
18	KMS (CR)	-	3166700	3166700
19	DRT	12485997	2174659	14660656
	TOTAL	123931443	417793208	541724651

Source : Mining & Geology

Table 3.15. Number of Quarrying permits issued during 2013-14
(District wise and Mineral wise)

Sl. No.	District	Granite building Stone	Laterite Stone	Brick Clay	Ordinary Sand	Ordinary Earth	Lime Shell	Total
1	Thiruvananthapuram	152	6	7	20	13	--	198
2	Kollam	27	57	4	6	664	--	758
3	Pathanamthitta	59	9	-	2	522	--	592
4	Alappuzha	-	28	5	11	68	--	112
5	Kottayam	116	13	7	49	486	--	671
6	Idukki	90	-	-	-	19	--	109
7	Ernakulam	221	112	1	6	654	--	994
8	Thrissur	149	68	37	-	17	--	271
9	Palakkad	149	36	-	5	48	--	213
10	Malappuram	209	583	6	-	64	--	862
11	Kozhikkode	199	162	22	13	4	--	400
12	Wayanad	189	-	6	44	101	--	340
13	Kannur	163	745	-	-	3	--	911
14	Kasaragode	74	335	-	26	24	--	461
	TOTAL	1772	2154	95	184	2687	--	6892

Source : Mining & Geology

Table 3.16. Value of Major Minerals 2013-14

Sl. No.	Minerals	2013-14
1	China Clay	189074567
2	Ilmanite	1280554400
3	Rutile	331676000
4	Zircon	417018888
5	Sillimanite	76030890
6	Silica Sand	161238330
7	Lime shell/Sea shell	101247096
8	Limestone	113945250
9	Bauxite/Laterite	87674860
10	Quartz	450590
11	Graphite	301440
12	Brown Ilmanite	3274817

Source : Mining & Geology

Table 3.17. Value of Minor Minerals 2013-14

Sl. No.	Minerals	2013-14
1	Granite Building Stone	62879919750
2	Granite Dimension Stone	30475000
3	Laterite	773510400
4	Lime Shell/Sea Shell	8195000
5	Ordinary Earth	1689563750
6	Brick Clay	466168500
7	Ordinary Sand	2871174000
8	River Sand	2840649000

Source : Mining & Geology

4. Communication Infrastructure

Table 4.1. Division-wise and other Postal Services under Kerala Circle 2014

Category-wise Offices in Postal and other Postal Services in Kerala	Nos. as on 31.3.2014
(a). Postal Services	
1. Head Post Offices	51
2. i) Sub Post Offices	1457
ii) Extra Departmental Sub Post Offices	0
3. Branch Offices	3559
TOTAL (a)	5067
(b) Speed Post Centres	
National	14
State	29
Extension Counters	0*
TOTAL (b)	43
(c) Other Postal Services	
i. Head Record Office	3
ii. Sorting Mail Offices	22
iii. Sub Record Offices	18
iv. Transit Mail Offices	8
v. RMS Sections	19
vi. Press Sorting Office	0
vii. Packet Sorting Office	2
viii. Pathrika Channel Office	0
ix. Mail Motor Service Division Unit	3
x. Circle Stamp Depot	1
xi. Postal store Depot	3
TOTAL (C)	79

All Post Offices (including BOs) are having speed post booking facility

Source: Department of Post

Table 4.2. Division-wise and Category-wise Post Offices under Kerala Circle 2014

Sl. No.	Name of Division	Head Offices	Sub Offices			TOTAL
			SO	EDSO	EDBO	
1	Thiruvananthapuram (South)	2	68	0	148	218
2	Thiruvananthapuram (North)	2	75	0	119	196
3	Kollam	3	91	0	151	245
4	Pathanamthitta	3	77	0	233	313
5	Thiruvalla	2	64	0	93	159
6	Alappuzha	2	48	0	74	124
7	Mavelikkara	2	52	0	73	127
8	Changanassery	2	46	0	117	165
9	Kottayam	3	79	0	176	258
10	Idukki	2	52	0	238	292
11	Ernakulam	2	71	0	63	136
12	Lakshadweep	0	9	0	1	10
13	Aluva	3	71	0	181	255
14	Irinjalakuda	2	63	0	127	192
15	Thrissur	3	105	0	185	293
16	Palakkad	3	83	0	150	236
17	Ottappalam	1	55	0	163	219
18	Manjeri	2	46	0	212	260
19	Tirur	2	52	0	119	173
20	Kozhikkode	3	71	0	230	304
21	Vadakara	2	40	0	183	225
22	Thalassery	1	44	0	163	208
23	Kannur	2	66	0	162	230
24	Kasaragode	2	29	0	198	229
	GRAND TOTAL	51	1457	0	3559	5067

Source: Department of Post

Table 4.3. Region wise Post Offices 2014

Name of Division	Head Office		DSO		EDSO		EDBO		Grand Total		TOTAL
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	
Thiruvananthapuram (South)	2	0	27	41	0	0	5	143	34	184	218
Thiruvananthapuram (North)	2	0	32	43	0	0	17	102	51	145	196
Kollam	1	2	24	67	0	0	6	145	31	214	245
Pathanamthitta	3	0	8	69	0	0	8	225	19	294	313
Thiruvalla	2	0	11	53	0	0	6	87	19	140	59
Totalsouthern Region	10	2	102	273	0	0	42	702	154	977	1131
Alappuzha	2	0	25	23	0	0	18	56	45	79	124
Mavelikkara	2	0	7	45	0	0	3	70	12	115	127
Changanassery	1	1	4	42	0	0	2	115	7	158	165
Kottayam	3	0	21	58	0	0	10	166	34	224	258
Idukki	1	1	6	46	0	0	2	236	9	283	192
Ernakulam	2	0	52	19	0	0	19	44	73	63	136
Lakshadweep	0	0	0	9	0	0	0	1	0	10	10
Aluva	3	0	29	42	0	0	11	170	43	212	25
Irinjalakuda	2	0	23	40	0	0	16	111	41	151	192
Thrissur	2	1	36	69	0	0	29	156	67	226	293
TotalCentral Region	18	3	203	393	0	0	110	1125	331	1521	1852
Palakkad	2	1	17	66	0	0	6	144	25	211	236
Ottappalam	1	0	7	48	0	0	10	153	18	201	219
Manjeri	2	0	8	38	0	0	13	199	23	237	260
Tirur	2	0	7	45	0	0	7	112	16	157	173
Kozhikkode	3	0	48	23	0	0	42	188	93	211	304
Vadakara	2	0	6	34	0	0	11	172	19	206	225
Thalassery	1	0	28	16	0	0	36	127	65	143	208
Kannur	2	0	40	26	0	0	52	110	94	136	230
Kasaragode	2	0	9	20	0	0	8	190	19	210	229
Total Northern Region	17	1	170	316	0	0	185	1395	372	1712	2084
Grand Total	45	6	475	982	0	0	337	3222	857	4210	5067

Source: Department of Post

Table 4.4. Telephone Exchanges 2013-14

Sl. No.	District	2013-14		
		Category	No.	Total
1	Alappuzha	Rural	52	72
		Urban	20	
2	* Kozhikkode	Rural	90	124
		Urban	34	
3	* Ernakulam	Rural	155	214
		Urban	59	
4	* Kannur	Rural	142	181
		Urban	39	
5	Kollam	Rural	79	87
		Urban	8	
6	Kottayam	Rural	83	90
		Urban	17	
7	Malappuram	Rural	90	96
		Urban	6	
8	Palakkadu	Rural	105	123
		Urban	18	
9	Pathanamthitta	Rural	77	84
		Urban	7	
10	Thiruvnanthapuram	Rural	71	98
		Urban	27	
11	Thrissur	Rural	62	86
		Urban	24	
Grand Total		Rural	1005	1005
		Urban	260	

Source:- BSNL

* Kozhikkode SSA includes- Calicut and Wayanad .

*Ernakulam SSA includes - Ernakulam, Idukki Dist. And Lakhadweep

*Kannur SSA includes – Kannur, Kasaragod Dist. and Mahe

Table 4.5. District wise estimated No. of Landline, WLL, Mobile 2013 -14

Sl. No	District	Landline	WLL	Mobile
		2013-14	2013-14	2013-14
1	Alappuzha	193168	17446	339077
2	Kozhikkode*	246430	29532	602937
3	Ernakulam *	407260	37568	990352
4	Kannur *	355467	23810	1123321
5	Kollam	238165	27664	405677
6	Kottayam	208435	16246	554625
7	Malappuram	237452	23850	382811
8	Palakkad	144239	24065	375369
9	Pathanamthitta	147007	15361	312156
10	Thrissur	316989	33115	466786
11	Thiruvananthapuram	278536	18218	731778
	TOTAL	2773148	266875	6284889

Source : BSNL

* Kozhikkode SSA includes- Calicut and Wayanad .

*Ernakulam SSA includes - Ernakulam, Idukki Dist. And Lakhadweep

*Kannur SSA includes – Kannur, Kasaragod Dist. and Mahe

Table 4.6. District wise estimated No. of Fixed TelePhones 2013 -14

Sl. No.	District	2013-14
1	Alappuzha	193168
2	Kozhikkode *	246430
3	Ernakulam *	407260
4	Kannur *	355467
5	Kollam	238165
6	Kottayam	208435
7	Malappuram	237452
8	Palakkad	144239
9	Pathanamthitta	147007
10	Thrissur	316989
11	Thiruvananthapuram	278536
	TOTAL	2773148

Source : BSNL

** Kozhikkode SSA includes- Calicut and Wayanad .*

**Ernakulam SSA includes - Ernakulam, Idukki Dist. And Lakhadweep*

**Kannur SSA includes – Kannur, Kasaragod Dist. and Mahe*

5. IRRIGATION

Table 5.1. Storage capacity in reservoirs of completed projects in Kerala 2013-14

Sl. No.	Item	2012	2013	2014
1.	Storage at the beginning of the Monsoon	403.66	280.56	415.16
2.	Storage at the end of the Monsoon	743.98	1290.25	1316.46
3.	Increase due to monsoon	340.32	1009.69	901.3
	Average for 10 years			
4.	Storage at the beginning of the Monsoon	430.8	395.63	360.5
5.	Storage at the end of the Monsoon	1116.76	1186.48	1087.27
6.	Increase due to monsoon	685.96	790.85	726.77

Source: Water Authority

Table 5.2. Irrigation Projects in Kerala 2013-14

Sl. No.	Name of Project	Classification	District	Ayacut Achieved Ha.
1	Chalakkudy River Diversion Scheme	Major	Ernakulam, Thrissur	11774
2	Chimoni Irrigation Project	Major	Thrissur	11796
3	Chitturpuzha Irrigation Project	Major	Palakkad	14975
4	Kallada Irrigation Project	Major	Kollam	46884
5	Kanjirapuzha Irrigation Project	Major	Palakkad	8467
6	Kuttiyadi Irrigation Project	Major	Kozhikode	10232

7	Malampuzha Irrigation Project	Major	Palakkad	22554
8	Neyyar Irrigation Project	Major	Thiruvananthapuram	15380
9	Pamba Irrigation Project	Major	Pathanamthitta	21135
10	Pazhassi Irrigation Project	Major	Kannur	11525
11	Peechi Irrigation Project	Major	Thrissur	18615
12	Periyar Valley Irrigation Project	Major	Ernakulam, Idukki	30567
13	Cheerakkuzhy Irrigation Project	Major	Thrissur	987
14	Gayathri Irrigation Project I	Major	Palakkad	3035
15	Gayathri Irrigation Project II	Major	Palakkad	2430
16	Mangalam Irrigation Project	Major	Palakkad	3308
17	Pothundy Irrigation Project	Major	Palakkad	4786
18	Vazhani Irrigation project	Major	Thrissur	4313
19	Walayar Irrigation Project	Major	Palakkad	3752

Source: IDRB

Table 5.3. Net Area Irrigated in Kerala-District wise & Source Wise 2013-14 (area in hectare)

Sl. No.	District	Small Stream		Pond		Well		Bore well / Tube well	Lift & Minor Irrigation	From River & Lake				Other Source	Grand Total
		Govt.	Private	Govt.	Private	Govt.	Private			Pump	Wheel	Other Methods	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	2911	170	554	18	0	2736	84	888	0	0	0	0	297	7658
2	Kollam	1166	1	40	85	15	1854	11	0	0	0	1	1	738	3911
3	Pathanamthitta	2795	11	160	44	0	2118	2	0	0	0	1	1	0	4987
4	Alappuzha	1855	0	0	282	1	887	6420	0	2972	0	23388	26360	2258	38063
5	Kottayam	6	105	4	182	0	1561	15	0	35	0	10491	10526	0	12395
6	Idukki	1231	10	434	14936	4	5376	2784	3	36	0	10258	10294	2799	37441
7	Ernakulam	8647	11	165	1748	0	78131	532	4276	1051	0	568	1619	354	24752
8	Thrissur	15313	0	764	3272	60	35060	41090	816	1177	0	20	1197	6607	63580
9	Palakkad	41674	95	243	4596	118	12757	10316	674	10534	0	1277	11811	7516	90021
10	Malappuram	2426	552	1	4275	151	16733	942	1279	1164	0	2453	3617	403	30621
11	Kozhikkode	1004	15	0	453	3	2372	47	2	160	0	97	257	777	4931
12	Wayanad	48	0	25	24	0	182	0	75	137	0	19	156	12771	13256
13	Kannur	364	109	180	1331	16	9894	383	12	160	0	581	741	3105	15980
14	Kasaragode	867	369	2426	11611	0	25821	7377	0	2907	0	115	3022	333	49580
	TOTAL	80007	1448		42857	368	124482	300003	8025	20333	0	49269	69602	37958	397176

Source: Dept. of Economics & Statistics

Table 5.4. Gross area under Irrigation-crop wise 2013-14 (area in hectare)

Sl. No.	District	Paddy				Vegetable	Coconut	Arecanut	Cloves	Nutmeg	Banana	Betel leaves	Sugarcane	Other Corps	Total
		Autumn	Winter	Summer	Total										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Thiruvananthapuram	873	993	133	1999	1080	2145	3	0	0	2343	14	1810	1810	9394
2	Kollam	48	937	5	990	987	438	14	0	0	1407	30	23	23	3889
3	Pathanamthitta	2	488	1964	2454	821	1025	31	2	514	1652	22	138	138	6675
4	Alappuzha	5613	10847	19626	36086	1303	6823	4	0	77	423	47	1331	1331	46139
5	Kottayam	1087	6817	7823	15727	1346	121	6	104	1478	718	7	202	202	19716
6	Idukki	62	560	39	661	4702	602	90	76	1607	1148	0	79	79	10625
7	Ernakulam	580	2707	433	3720	1948	11648	1342	9	6046	4609	7	2862	2862	32191
8	Thrissur	7	12552	7884	20443	1434	44122	4555	10	6523	2331	2	4690	4690	84110
9	Palakkad	2708	42373	4642	49723	3748	26118	3658	1	167	15637	5	8378	8378	107906
10	Malappuram	8	4162	1798	5968	1194	19443	5344	3	269	5419	173	1587	1587	39400
11	Kozhikkode	0	2	563	565	510	2761	269	0	194	1547	7	193	193	6046
12	Wayanad	0	9915	1522	11437	637	54	60	0	1	6633	0	2	2	18824
13	Kannur	0	2285	20	2305	851	12403	1666	3	43	1967	1	509	509	19748
14	Kasargod	2	1542	407	1951	505	38677	17440	34	126	478	17	4428	4428	63657
	TOTAL	10990	96180	46859	154029	21066	166380	34482	242	17045	46312	332	26232	26232	468320

Source: Dept. of Economics & Statistics

Table 5.5. State/UT Kerala Minor Irrigation Statistics 2013-14

	1.Area Statistics	(in Ha)
1	Geographical Area	3886287
2	Gross Cropped Area	2616670
3	Net cropped /Sown Area	2050994
4	Gross irrigated area	468320
5	Net Irrigated area	397176

*Source : Irrigation (RMIS)***Table 5.6. Minor Irrigation Scheme****(By nature of scheme)**

Sl. No.	Name of Scheme	Norm for Potential created @ (in Ha)	Norm for Potential utilised @ (in Ha)	Rate of depreciation @ (in Ha.)	Cost of Irrigation @ (Rs. Per ha)	Reasons for Disuse @
1	2	3	4	5	6	7
1	Dug Well	100	91.70	8.30	101892	Shortage of water
2	Shallow Tube Well	100	94.57	5.43	92925	
3	Deep Tube Well	100	95.12	4.88	19781	
4	Surface Flow	100	94.89	5.11	11946	
5	Surface Lift	100	95.29	4.71	8300	

Source : Department of Minor Irrigation (RMIS)

Table 5.7 Irrigated Area Production Statistics

Sl. No.	Name of Crop	Crop wise Area in Ha.	Area irrigated (in Ha.)			Production in Tonnes
			Major Medium source	Minor source		
				Surface Water	Ground Water	
1	2	3	4	5	6	7
a) Kharif Season						
	Food Crops					
1	Paddy	65813				185195
2	Vegetable	9901				
3	Nutmeg	8182				5508
4	Banana	22948				195624
5	Sugar Cane	1034				
6	Others	13241				
	Total	121119				
Non Food Crops						
1	Betel Leaves	176				5487
b) Rabi Season						
	Food Crops					
1	Paddy	88216	101788	140535	154853	254616
2	Vegetable	11165				
3	Nutmeg	8863				5966
4	Banana	23364				199576
5	Sugar Cane	1166				
6	Others	13233				
	Total	146007				
Non Food Crops						
1	Betel Leaves	156				6188
Food Crops						
1	Coconut	166380				1218 (Million tones)
	Non Food Crops					
1	Arecanut	34482				34485

Source : Department of Minor Irrigation (RMIS)

6. Drinking Water Supply and Sanitation

Table 6.1 District wise population covered by Water Supply Scheme 2013-14

Sl. No.	District	Rural population covered	% to Total Rural population	Urban population covered	%to total Urban population	Total population covered	% to Total population
1	Thiruvananthapuram	873399	57.16	894797	50.29	1768196	53.46
2	Kollam	1094521	75.83	459269	38.71	1553790	59.09
3	Pathanamthitta	418636	39.34	74427	56.62	493063	41.24
4	Alappuzha	882521	90.52	201325	17.55	1083846	51.08
5	Kottayam	601652	42.56	167615	29.63	769267	38.86
6	Idukki	241518	22.88	28161	54.13	269679	24.35
7	Ernakulam	1915185	82.87	760707	34.07	2675892	81.59
8	Thrissur	994509	97.45	445235	21.31	1439744	46.29
9	Palakkad	765479	35.88	245035	36.18	1010514	35.95
10	Malappuram	863377	37.63	165727	9.12	1029104	25.03
11	Kozhikkode	500477	49.32	516655	24.9	1017132	32.92
12	Wayanad	430576	54.85	11659	36.92	442235	54.16
13	Kannur	587210	66.52	158179	9.63	745389	29.51
14	Kasaragode	197782	24.80	34975	6.92	232757	17.87
	Total	10366842	59.39	4163766	26.13	14530608	43.52

Source : Kerala Water Authority

Table 6.2 District wise No. of Water Supply scheme KWA in operation 2013-14

Sl. No.	Name of District	No. of Urban Water supply schemes	Rural water supply schemes		Total
			Multi Panchayat	Single Panchayat	
1	Thiruvananthapuram	6	10	94	110
2	Kollam	3	5	66	74
3	Pathanamthitta	2	8	63	73
4	Alappuzha	4	1	61	66
5	Kottayam	5	21	84	110
6	Idukki	1	11	89	101
7	Ernakulam	8	17	82	107
8	Thrissur	4	7	104	115
9	Palakkad	4	8	84	96
10	Malappuram	5	10	42	57
11	Kozhikkode	2	12	87	101
12	Wayanad	0	5	25	30
13	Kannur	3	5	109	117
14	Kasaragode	1	5	77	83
	Total	48	125	1067	1240

Source : Kerala Water Authority

Table 6.3 District Wise Details Of Water Supply Connections and Street Taps 2013-14

Sl. No.	Name of District	Water Supply Connection				Street Taps		
		Domestic	Non-Domestic	Industrial	Total	Panchayat	Corporation/ Municipalities	Total
1	Thiruvananthapuram	250683	35819	102	286604	12449	5615	18064
2	Kollam	131523	6257	198	137978	14716	4770	19486
3	Pathanamthitta	61820	2820	36	64676	10567	1550	12117
4	Alappuzha	132809	4396	184	137389	22967	4422	27389
5	Kottayam	75654	5419	75	81148	7599	2096	9695
6	Idukki	22054	1997	5	24056	3276	532	3808
7	Ernakulam	352167	25606	220	377993	29791	9286	39077
8	Thrissur	135554	4967	46	140567	22055	5370	27425
9	Palakkad	106067	6707	82	112856	13744	3214	16958
10	Malappuram	62769	3698	9	66476	7255	2331	9586
11	Kozhikkode	59963	4105	28	64096	4516	3525	8041
12	Wayanad	13340	1325	3	14668	4216	222	4438
13	Kannur	42932	5342	77	48351	5582	1632	7214
14	Kasaragode	17141	994	10	18145	3170	599	3769
	Total	1464476	109452	1075	1575003	161903	45164	207067

Source : Kerala Water Authority

Table 6.4 District wise ongoing Water Supply Schemes during 2013-14

Sl. No.	Name of District	Number of ongoing Water Supply schemes (including Major and Minor water supply schemes)															Total		
		Rural water supply schemes										Urban water supply schemes							
		NRDWP	Technology Mission	TRP schemes funded by Govt	State Plan	SAARK (2010-11)	New Water Supply Schemes(2013-14)	NABARD	Externally Assisted (JICA)	Deposit works of KWA (For schemes of local bodies/other agencies)	Saark (2009-10) New capital schemes	Completion of ongoing UWSS-special package	Externally Assisted (JICA)	JNNURM	SAARK (2009-10) Replacement of old pipes.	UIDSSMT		Bank	
1.	Thiruvananthapuram	17	-	Completed	4	-	-	4	-	73	1	2	1	1	Now taken under new head-Replacement of old and obsolete pipe	-	-	103	
2.	Kollam	11	-		0	-	-	1	1	60	-	-	-	-		-	-	73	
3.	Pathanamthitta	20	-		1	-	-	1	-	131	-	-	-	-		-	-	153	
4.	Alappuzha	8	1		1	-	-	-	-	25	-	-	-	-		-	1	-	36
5.	Kottayam	25	-		6	-	-	1	-	50	1	-	-	-		-	2	-	85
6.	Idukki	21	-		-	-	-	1	-	18	-	-	-	-		-	-	-	40
7.	Ernakulam	14	-		-	-	-	1	-	385	-	1	-	1		-	-	-	402
8.	Thrissur	6	-		-	1	-	3	-	326	-	5	-	-		-	2	-	343
9.	Palakkad	14	1		-	-	-	2	-	39	-	1	-	-		-	2	-	59
10.	Malappuram	24	-		-	3	-	2	-	134	-	-	-	-		-	2	-	165
11.	Kozhikkode	16	1		1	-	-	1	-	56	-	-	1	-		-	1	-	77
12.	Wayanad	3	-		-	-	-	3	-	29	-	-	-	-		-	1	-	36
13.	Kannur	9	-		-	1	-	-	1	96	-	3	-	-		-	2	-	112
14.	Kasaragode	7	-		-	-	-	6	-	51	-	-	-	-		-	-	-	64
	Total	195	3		13	5	0	26	2	1473	2	12	2	2		13	0	1748	

Source: Kerala Water Authority

Table 6.5 District wise Distribution of KWA Transferred to Local Bodies 2013-14

Sl. No.	Name of District	No. of Schemes (Rural)		Total	Population Coverage
		From the list of 1050 schemes	From other than the list of 1050 schemes		
1	Thiruvananthapuram	2	0	2	33667
2	Kollam	2	0	2	3950
3	Pathanamthitta	0	0	0	0
4	Alappuzha	0	0	0	0
5	Kottayam	4	5	9	8710
6	Idukki	9	0	9	32400
7	Ernakulam	20	24	44	61630
8	Thrissur	1	0	1	1500
9	Palakkad	69	56	125	434300
10	Malappuram	45	58	103	264643
11	Kozhikkode	54	66	120	163315
12	Wayanad	11	3	14	42645
13	Kannur	7	2	9	5100
14	Kasaragode	14	25	39	28700
	Total	238	239	477	1080560

Source : Kerala Water Authority

Table 6.6 Jala Nidhi on going Water Supply schemes as on 31.03.2014

Sl. No.	District	Rural water supply schemes		
		Spread between more than one Panchayath	One Panchayath	Total
1	Thrissur	-	527	527
2	Palakkad	-	683	683
3	Malappuram	-	880	880
4	Kozhikkode	-	738	738
5	Thiruvananthapuram	-	85	85
6	Kollam	1	60	61
7	Pathanamthitta	-	62	62
8	Kottayam	-	142	142
9	Ernakulam	-	49	49
10	Idukki	-	106	106
11	Wayanad	-	144	144
12	Kannur	-	182	182
13	Kasaragode	-	201	201
14	Alappuzha	-	0	0
	Total	1	3859	3860

Source : Kerala Rural Water Supply Authority

**Table 6.7 Jala Nidhi on going Water Supply schemes as on 31.03.2014
(population covered)**

Sl. No.	District	Rural Population covered	Rural population as per 2011 Census	% of Total rural population
1	Thiruvananthapuram	17746	1528030	1.16
2	Kollam	11581	1443363	7.76
3	Pathanamthitta	13746	1064076	1.29
4	Alappuzha	0	974916	0.00
5	Kottayam	30885	1413773	2.18
6	Idukki	17071	1055423	1.62
7	Ernakulam	11964	1047296	1.14
8	Thrissur	153894	1020537	15.08
9	Palakkad	200280	2133699	9.39
10	Malappuram	272471	2294473	11.88
11	Kozhikkode	155598	1014765	15.33
12	Wayanad	41002	784981	5.22
13	Kannur	28783	882745	3.26
14	Kasaragode	35767	797424	4.49
	Total	1090788	17455501	6.25

Source : Kerala Rural Water Supply Authority

Table 6.8 Jalanidhi I& II Water Supply connections and Public Taps as on 31.03.2014

Sl. No.	No. of water supply connections					
	District	Domestic	Non Domestic	Industrial	Public Taps	Total
1	Thrissur	25655	9	0	7	25671
2	Palakkad	35205	31	0	680	35916
3	Malappuram	49522	87	0		49609
4	Kozhikkode	28510	25	0		28535
5	Thiruvananthapuram	3227	1	0		3228
6	Kollam	20285	0	0		20285
7	Pathanamthitta	2518	0	0		2518
8	Kottayam	5941	2	0		5943
9	Ernakulam	2173	8	0		2181
10	Idukki	3190	0	0		3190
11	Wayanad	7460	1	0	60	7521
12	Kannur	5262	11	0		5273
13	Kasaragode	6980	0	0		6980
14	Alappuzha	0	0	0	0	0
	Total	195928	175	0	747	196850

Source : Kerala Rural Water Supply Authority

7. STORAGE FACILITIES

Table 7.1 Storage Capacity with FCI Kerala Region 20013-14

Sl. No.	District (FCI)	Depot	Capacity 2013-14	
			Covered	Open
1	Thiruvananthapuram	Valiathura	33440	2250
		Kazhakuttom	36136	0
2	Kollam	Kollam	11900	0
		Karunagappally	30000	0
		Avaneeswaram	9200	0
		Kilikolloor	5000	1200
3	Alappuzha	Alleppy	10000	0
		Mavelikkara	20000	5000
4	Kottayam	Chingavanam	15320	0
		Aarakkulam	5000	0
5	Chengannur	Kochi	18700	0
		Angamally	40000	0
6	Thrissur	M.G. Kavu	48960	5750
		Chalakkudy	10000	1670
7	Palakkad	Palakkad	70740	5000
		Angadippuram	10000	0
8	Kozhikkode	West Hill	35160	0
		Thikkodi	45000	0
		Kuttippuram	5000	0
		Meenangadi	5000	0
9	Kannur	Muzhappilangad	10640	0
		Neeleswaram	9500	0
		Payyannur	29000	0
10	Kottayam	CWC Kunnathanam (Hired)	5000	0
GRAND TOTAL			518696	20870

Source : Food Corporation India

Department of Economics & Statistics

Table 7.2 District wise Food grain storage capacity, cold storages, warehouses and container depots: 2013-14

Sl. No.	Name of District	Food grain storage (in tones)	Cold storage in number	Warehouses in number	Container Depots in number
1	Thiruvananthapuram	1689	Nil	4	Nil
2	Kollam	1441	Nil	6	Nil
3	Pathanamthitta	0	Nil	2	Nil
4	Alappuzha	595	Nil	6	Nil
5	Kottayam	437	Nil	5	Nil
6	Idukki	136	Nil	3	Nil
7	Ernakulam	513	Nil	4	1
8	Thrissur	780	Nil	4	Nil
9	Palakkad	3649	Nil	4	Nil
10	Malappuram	19	Nil	3	Nil
11	Kozhikkode	0	Nil	2	Nil
12	Wayanad	13	Nil	3	Nil
13	Kannur	190	Nil	5	Nil
14	Kasargod	185	Nil	4	Nil
	Total	9647	Nil	55	1

Source: Kerala State Warehousing Corporation

Table 7.3 Public Distribution System of essential commodities 2013-14

Sl. No	Item	Unit	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	No of Ration Cards and Permits								
	a) Ration cards for families as on 1 st April	No	7025638	7034886	6835945	7340488	7863698	8100536	8273778
	b) Ration permits for institutions as on 1 st April	No	13330	10952	8709	7603	6311	6311	6311
2	No. of FCI sub depots as on 1st April	No	20	22	22	22	22	22	24
3	No. of wholesale shop as on 1st April								
	a) Co-operatives	:	36	35	25	36	36	35	28
	b) Supply Co				10	10	9	10	14
	c) Others	:	302	301	300	288	288	287	291
	c) Total wholesale shops	:	338	336	335	334	333	333	333
4	No. of Retail shops as on 1st April								
	a) Co-operatives	:	472	425	423	419	413	411	412
	b) Others	:	13776	13819	13816	13833	13854	13890	13912
	c) Total Retail shops	:	14248	14244	14239	14252	14267	14301	14324
5	Kerosene Allotted	Kilo Ltr	57236	49236	49338	49362	62855	58076	55931

Source: Economic Review

Table 7.4 Distribution of Rice, Wheat, Kerosene, Sugar From 2007-08 to 2013-14

Sl. No.	Year	Rice (M T)	Wheat (M T)	Kerosene (KL)	Sugar (M T)
1.	2007-08	854104	258931	249871	37023
2.	2008-09	859092	202608	243961	53786
3.	2009-10	1013930	172287	244873	68145
4.	2010-11	1159830	195925	196923	86776
5.	2011-12	1276635	185259	166424	60316
6.	2012-13	1265618	180268	125196	58076
7.	2013-14	1302730	200564	120192	54261

*Source: Civil Supplies***Table 7.5 Annual allocation of Rice from Centre to Kerala from 2010-11 to 2013-14 (in '000 tons)**

Sl. No.	Year	Total Allotment	BPL	% to total	AAY	% to total	APL	% to total
1.	2010-11	1149.638	318.792	27.73	250.260	21.77	580.586	50.502
2.	2011-12	1156.304	318.792	27.57	250.26	21.64	587.252	50.787
3.	2012-13	1187.220	318.792	26.85	250.26	21.08	618.168	52.069
4.	2013-14	1187.220	318.792	26.85	250.26	21.08	618.168	52.069

*Source: Civil Supplies***Table 7.6 Annual off take of Rice from Centre to Kerala from 2010-11 to 2013-14 (in '000 tons)**

Year	Total Allotment	BPL	% to total	AAY	% to total	APL	% to total
2010-11	1123.21	327.58	1.2.76	256.36	102.44	539.26	92.88
2011-12	1155.66	318.79	100.00	249.38	99.65	587.49	100.04
2012-13	1189.91	318.00	99.75	250.05	99.91	621.87	100.60
2013-14	1194.11	320.12	100.42	256.57	102.52	617.42	99.88

Source: Civil Supplies

Table 7.7 Details of Ration Cards in Circulation July 2014 (Population & Units)

Sl. No.	Name of District	No. of Cards including Temporary card	Adults	Non Adults	Total	Unit	No. of permits	No. Of ARDS
1.	Thiruvananthapuram	928706	3002559	572672	3575231	6577790	707	1882
2.	Kollam	713705	2343814	714048	3057862	5401676	559	1421
3.	Pathanamthitta	335048	1229182	211591	1440773	2669955	25	833
4.	Alappuzha	572158	1987124	382172	2369296	4356420	57	1243
5.	Kottayam	501412	1793836	341737	2135573	3929409	235	990
6.	Idukki	294368	1055072	219737	1274809	2329881	592	700
7.	Ernakulam	820134	2837672	560084	3397756	6235428	672	1342
8.	Thrissur	804457	2884251	569790	3454041	6338292	778	1202
9.	Palakkad	701168	2628326	542086	3170412	5798738	108	931
10.	Malappuram	850251	3395408	1468085	4863493	8258901	70	1241
11.	Kozhikkode	720291	2671475	629339	3300814	5972289	71	973
12.	Wayanad	204240	688086	158642	846728	1534814	668	314
13.	Kannur	582503	2371040	437890	2808930	5179970	1315	859
14.	Kasaragode	284837	1138298	240571	1378869	2517167	454	388
	Total	8313278	30026143	7048444	37074587	67100730	6311	14319

Source: Civil Supplies



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