

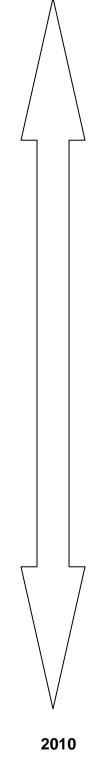


# HIGHWAYS AND MINOR PORTS DEPARTMENT

**DEMAND NO. 21** 



2009-2010



# PERFORMANCE OF HIGHWAYS AND MINOR PORTS DEPARTMENT DURING 2009-10

# 1. Roads and Bridges

Tamil Nadu is one of the largest States in India with high level of urbanisation. The road transport infrastructure in the State contributes substantially to the strong industrial development and the overall Economic development of the State. The Highways Department is in-charge of works such as planning, design, construction and maintenance of Government Roads and Bridges in Tamil Nadu.

# **ROAD LENGTH**

The details of various Government roads in Tamil Nadu as on 31.03.2010 is as below:

SI. No.	Classification	Length	Authority
1	National Highways	1613 km	National Highways wing
	(NH)	3260 km	National Highways Authority of India
	Sub total for National Highways	4873 km	
2	State Highways (SH)	9384km	General wing
3	Major District Roads (MDR)	11288km	General wing
4	Other District Roads (ODR)	36096km	General wing
Gove	rnment Roads Total	56768 km	
Over	all Total	61641km	

# LANEWISE DETAILS OF GOVERNMENT ROADS AS ON 31.03.2010 IN TAMILNADU ARE GIVEN BELOW:

(length in Kms)

					licingui	n rans)
S. No.	Category of road	Single lane	Inter mediate Iane	Double lane	Multi Iane	Total
1	National Highways					
	a)National Highways wing	18	42	1528	25	1613
	b) National Highway Authority of India	-	-	1157	2103	3260
	Sub-Total	18	42	2685	2128	4873
	Percentage of lanewise width of roads		1%	55%	44%	
2	State Highways	32	1414	7261	677	9384
	Percentage of lanewise width of roads		15%	78%	7%	
3	Major District roads	4170	3894	3109	115	11288
	Percentage of lanewise width of roads	37%	35%	28%	1%	
4	Other District roads	32825	2292	948	31	36096
	Percentage of lanewise width of roads	91%	6%	3%		
	Total	38071	6998	14535	2037	61641
	Percentage of lane width to the total length of roads	60%	12%	23%	5%	

# SURFACE WISE LENGTH

					(length in	Kms)
S. No.	Category of Road	Cement Concrete (C.C)	Black Top (B.T)	Metalled (*)	Un metalled	Total
1	National Highways	2	4871	-	-	4873
2	State Highways	4	9380	-	-	9384
3	Major District Roads	3	11285	-	-	11288
4	Other District Roads	6	36085	5	-	36096
	Total	15	61621	5		61641

\* The 5 Km. length of road in Kancheepuram District lies in Forest area. This road stretch could be improved after getting necessary permission from Forest Department.

# FINANCIAL PERFORMANCE

The financial and physical targets and achievements under plan schemes for the year 2009-10 and targets for 2010-11 are given below:

	1	(Rupees in La				
S.	Name of Scheme		09-10	2010-11		
No.		Budget Estimate	Expenditure	Budget Estimate		
	Chief Engineer (National Highways)					
1	Revamped Central Road Fund	7214.38	18491.19	10000.00		
2	Western Ghat Development Programme (Road Sector)	50.10	90.88	100.00		
3	Inter State Connectivity Scheme	2233.85	1170.86	1617.19		
4.	Economic Importance Scheme	-	479.82	1088.00		
5	Bharat Nirman Scheme	-	347.98	133.88		
6	National Highways- Original Works	0.01	10.90	0.01		
7	Formation of roads in Tribal areas	0.05	-	-		
8	Central Road Fund-State Allocation	0.11	52.69	0.11		
	Total for Chief Engineer, National Highways	9498.50	20644.32	12939.19		
	Chief Engineer (General)					
	State Highways					
9	Bridges (Part II Scheme)	362.29		334.87		
10	Roads (Part II Scheme)	0.13		126.71		
11	16 major works	233.67	230.48	221.65		
12	Bridges- 17 minor works	53.59		22.60		
	Sub-Total	649.68	560.42	705.83		
	Major District Roads					
13	Major District Roads (Part II Scheme)	0.47	30.95	0.01		
14	16 Major works	201.71	188.01	213.29		
15	17 minor works	64.86		87.76		
	Sub-Total	267.04	281.75	301.06		
	Other District Roads					
16	Other District Roads (Part II Scheme)	483.30		180.26		
17	16 major works	212.19	209.16	212.19		
18	17 minor works	91.75		95.69		
	Sub-Total	787.24	1899.72	488.14		
	Rehabilitation of Distressed Bridges					
19	Rehabilitation of Distressed Bridges (Part II Scheme)	763.19	870.10	754.33		
20	16 major works	136.12	131.26	140.00		
	Sub-Total	899.31	1001.36	894.33		
21	construction of bridges iin Unbridged crossings (Part II Scheme)	37.58	43.82	0.12		
22	Other Roads (Part II Scheme)	50.27	151.83	0.17		

S.	Name of Scheme	20	2010-11	
No.		Budget Estimate	Expenditure	Budget Estimate
	Comprehensive Road Infrastructure Development Programme			
23	CRIDP- SH	42274.00	47142.43	48567.00
24	CRIDP- MDR	26068.00	36129.36	40245.00
25	CRIDP- ODR	21911.00	25590.70	29649.00
26	CRIDP- SCP	12238.00	11102.52	13385.00
	Sub- total	102491.00	119965.01	131846.00
27	Plastic and Litter Free Highways	25.00	25.18	25.00
28	Improvement to Chennai Radial Roads	100.00	0.00	0.01
29	Acquisition of lands for bypasses			
	(i) works	0.02	0.02	500.00
	(ii) lands	10.00	423.95	1289.26
	Sub- total	10.02	423.97	1789.26
30	Improvement of roads in Kancheepuram City under Textile Centre Infrastructure Development Scheme	0.01	0.01	0.01
31	Improvement of vital roads in industrial areas through Tamil Nadu Road Infrastructure Development Corporation	15000.00	15000.00	16500.00
32	Chennai – Outer Ring Road	10000.00	275.00	10000.00
33	Construction of Buildings- CE (General)	10.00	22.13	348.01
34	Construction of Quarters for Basic Servants and Drivers in circuit houses and TBs	0.09	0.01	0.01
35	Miscellaneous Original works	0.01	0.00	0.01
	Improvement of roads with loan assistance from MRL	0.01	0.00	0.01
37	Improvement to accident prone spots	0.01	0.00	0.01
38	Improvement of roads with Ioan assistance from HUDCO/ TUFIDCO	0.02	0.00	0.01
39	Upgradation of IT highway in Chennai	0.02	1524.02	0.03
40	Special Bridges Scheme	0.04	0.00	0.03
41	Improvements of roads in Coastal Districts	0.01	0.00	0.01
42	Improvements of roads in Industrial Areas	0.02	0.00	0.02
43	Tools and Plant	0.01	0.00	0.01
44	City Traffic Improvement works - CE (Gen)	0.01	0.00	0.01
45	Expenditure met from floatation of TIDCO bonds for ODR works	0.01	0.00	0.01
46	Construction of bridges in PU areas	0.02	0.00	0.01
47	High density Corridor	0.01	0.00	0.01
48	World Classical Tamil Conference		2000.00	4000.00

S.	Name of Scheme	20	09-10	2010-11
No.		Budget Estimate	Expenditure	Budget Estimate
49	Improvements to Junctions in Rajiv Gandhi Salai	0.00	0.00	5000.00
50	Formation of Rods in Tribal areas			0.05
	Plan – Total (General Wing)	130327.44	143174.23	
51	Tsunami – Centrally assisted	30.00	967.00	12895.00
	Total for Chief Engineer (H) Gen	130357.44	144141.23	184793.18
	Chief Engineer (H) (Metro Wing)			
52	Chennai Metropolitan Development Plan	10253.43		5465.80
	Total for Chief Engineer (H) (Metro Wing)	10253.43	9170.36	5465.80
	Chief Engineer (H) (NABARD and Rural Roads Wing)			
53	Improvement to district and other roads with NABARD assistance	200.01	5013.18	8901.01
54	Construction of Bridges in Government Roads	6511.83	3327.56	2720.91
55	Construction of Bridges in Government and rural roads	8300.00	4694.80	7500.00
56	Improvement of Rural Roads with NABARD assistance	1190.01	1530.47	1605.01
57	Improvement to bus route with NABARD assistance	560.01	960.95	505.01
58	Improvement to Rural Roads with Ioan assistance from NABARD under Special Component Plan	100.01	308.69	57.01
59	Comprehensive Road Infrastructure Development Programme- Rural Panchayat union roads	0.01	0.00	0.01
60	NABARD assisted Panchayat and Panchayat Union Roads	0.01	0.00	0.01
61	Construction of bridges under Tsunami Emergency Assistance Project with Ioan assistance from ADB	4022.31	2144.79	0.02
	Plan – Total (Nabard and Rural Roads Wing)	20884.20	17980.44	21288.99
62	Tsunami – Centrally assisted	2039.00	695.00	2000.00
	Total for Chief Engineer (H), NABARD and Rural Roads Wing	22923.20	18675.44	23288.99
	Chief Engineer (Projects Wing)			
63	Construction of over and under bridges in lieu of existing level crossings	4250.98	5465.62	4998.53
64	Construction of ROB in Chennai Metro Area for Traffic Management	4300.03	1348.41	5000.00
65	Construction of bridges	1221.37	1935.37	950.54

S.	Name of Scheme	20	09-10	2010-11
No.		Budget Estimate	Expenditure	Budget Estimate
66	Construction/ Reconstruction of bridges	3886.17	1352.18	6014.04
	and improvement of roads with loan			
07	assistance from NABARD	0.07	074.00	4005.04
67	Provision for road works under TNUDP	0.37	971.60	1885.34
68	Construction of Road Over Bridge/Road Under Bridge in lieu of level crossings	40000.00	13706.48	60000.00
69	Madurai Radial Roads Phase I	300.05		0.03
70	CRIDP Madurai Radial Roads Phase II	0.14	694.95	0.01
71	Rural Roads - Marketing centre	0.36	33.47	0.01
72	Roads in cyclone affected areas	0.14	1.70	0.01
73	Construction of Interchange at the junction of Pondy- Krishnagiri road under IS&EI	0.01	0.00	0.01
74	City Traffic Improvement works - CE (Projects)	0.07	0.00	0.07
75	Road works under World Bank Project I	0.05	0.00	0.05
76	Integrated city development project	0.03	0.00	0.03
77	Road works under World Bank Project II	0.01	0.00	0.01
78	Bus route improvements in Chennai Metro Area	0.01	0.00	0.01
79	Missing links in Chennai Metro Area	0.01	0.00	0.01
	Total for Chief Engineer (H) Projects Wing	53959.80	25544.60	78848.65
	Project Director, Tamil Nadu Road Sector Project			
80	Lumpsum provision for East Coast Road	0.01	0.00	0.00
81	Establishment charges for Revenue staff for PMG and special staff for Environment Project Management	234.75	111.81	150.15
82	Establishment charges for PMG	688.36	533.20	636.66
83	TNRSP	69115.74	37101.24	40029.03
	Total for Project Director, TNRSP	70038.86	37746.25	40815.84
	Director, Highways Research Station			
84	Institute of Highways Research and Management	0.01	0.00	0.01
85	Equipment for lab	21.03	8.03	330.63
	Total for Director,	04.04	0.00	000.04
	Highways Research Station	21.04		330.64
	Plan – Total	294983.27	254268.23	
	Tsunami Rehabilitation Scheme - Total	2069.00		14895.00
	Grand Total	297052.27	255930.23	346482.29

# PHYSICAL PERFORMANCE:

		Achieve 2009-2		Targets 2010-2011	
S. No.	Name of Scheme	Bridges/ Culverts/ Structures in Nos.	Roads length in km.	Bridges/ Culverts/ Struc- tures in Nos.	Roads length in km.
	Chief Engineer				
1	(National Highways) Revamped Central Road Fund	3	256.80	18	680.96
	Western Ghat Development	0			
	Programme (Road sector)		10.20	3	1.70
3	Hill Area Development Programme (Road sector)		4.60	12	16.20
	Economic Importance & Interstate connectivity scheme				
	a) Economic Importance		8.80		46.40
	b) Interstate connectivity	1	10.00		65.20
	Total – National Highways Wing	4	285.80	33	810.46
	Chief Engineer(General)				
5	Part II Scheme	12		10	
6	ComprehensiveRoad Infrasturcture Development Programme				
	State Highways	169	950.00		
	Major District Roads	128	1081.00	95	1100.00
	Other District Roads	109	1318.00	60	1400.00
	Scheduled Caste Sub Plan (CRIDP)	29	621.00		800.00
	Plan Total	447	3970.00	340	4300.00
7	Tsunami Rehabilitation Programme(Centrally Assisted) - General wing	1	13.30	20	
	Total General Wing	448	3981.30	360	4300.00
	Chief Engineer (Metro Wing)				
8	Chennai Metropolitan Development Plan				
	1) ROB/RUB				
	2) Grade Separator				
	3) River Briges			2	
	4) Roads/Bridges	2	121.00		88.00
9	Tamil Nadu Urban Development III				
	Total Metro Wing	2	121	2	88

	Chief Engineer (NABARD&RR)				
	<b>,</b>				
10	Improvements to Major District Roads				
	/ Other District Roads under	2	40.70		000 50
	NABARD loan assistance	3	18.70		226.50
	Construction of Bridges in			07	
	Government Roads	21		27	
12	Construction of Bridges in			o-	
	Government and Rural Roads	65		25	
	Rural Roads Scheme	13	53.00		
-	Bus Route Scheme	8	19.00		
	Scheduled Caste Sub Plan Scheme	6	5.00		
16	ADB assisted Projects(TEAP)	4		1	
	Plan Total	120	95.70	60	226.50
17	Tsunami Rehabilitation Programme				
	(Centrally Assisted) -NABARD wing	3		3	6.00
	Total – Nabard & RR wing	123	95.70	63	232.50
	Chief Engineer(Projects)				
18	Road over/ under bridges in lieu of			3	
	existing Level Crossings			5	
	Construction of Over Bridges/ Under	3		11	
	Bridges in lieu of level crossings				
-	Construction of bridges	2		5	
	Construction of bridges in Cauvery				
	delta districts and Improvement of		4.84	5	
	Sugarcane roads with NABARD loan	-	4.04	U	
	assistance				
22	Madurai Radial Roads		3.00		
23	Tamil Nadu Urban Development				F 00
	Project				5.00
24	CMDP Grade Separator	1			
	Total	10	7.84	24	5.00
-	Chief Engineer(TNRSP)	10	1.04	24	5.00
	Tamil Nadu Road Sector Project				
20	Upgradation				
	Opgradation		85.00		26.00
	Maintenance component		102.00		80.00
	Bridges/Minor Bridges	121			
	Total	121	187.00		106.00
	Over all Total	706			5564.20

#### NON-PLAN

The main objective is to ensure proper upkeep of Government roads by utilising annual provisions under "Non-Plan". The allocation and expenditure incurred during 2009-2010 for maintenance of roads viz., State Highways, Major District Roads, Other District Roads, Sugarcane roads and City roads under the control of Highways Department and Panchayat and Panchayat Union Roads maintained by Rural development Department. The funds allocation for the year 2010-2011 are here under:

(Rs. in lakhs)					
•		2009	-2010	2010-2011	
S. No.	Name of Scheme	Budget Estimate	Expendi- ture	Budget Estimate	
1	National Highways (Urban)	183.75	178.00	192.94	
2	Certain important Roads in the city of Chennai taken from Corporation of Chennai	1653.75	1653.75	1736.43	
3	State Highways	10668.50	11579.00	12090.13	
4	Major District Roads	14261.50	15152.00	10716.17	
5	Other District Roads	34106.00	33157.00	39065.43	
6	Sugarcane Roads	1449.35	1445.00	1521.82	
7	Improvements to Nilgirs Ghat Roads			0.02	
8	Maintenance of Panchayat and Panchayat Union Roads through Chief Engineer, NABARD and Rural Roads	15000.00	14942.00	0.01	
9	Maintenance of Panchayat and Panchayat Union Roads through Director, Rural Road Development	10360.00	10360.00	0.02	
	Total	87682.85	88466.75	65322.97	

# FINANCIAL ALLOCATION AND EXPENDITURE

# PERFORMANCE

# (Length in Km.)

SL.No	Name of wing	Achievement 2009-10	Target 2010-11
1.	General	4452.00	4500.00
2.	NABARD & RR	1940.00	
	Total	6392.00	4500.00

# PLAN SCHEMES

During the year 2009-2010 an amount of Rs. 2949.83 crores was provided in the Budget Estimate for all the wings of Highways Department and the expenditure incurred under Plan Schemes is Rs.2542.68 crores.

# **1. Part II Scheme of the Government**

Under this Scheme during the past four years (2006-10) 153 Km length of a road works and 54 bridge works have completed at a cost of Rs.126.10 Crores. During 2009-10, Government accorded sanction for Rs.9.51 Crores for construction of 7 bridges. During 2009-10, 12 bridge works including spill over works have been completed. Under this scheme an expenditure of Rs.30.78 Crores has been incurred during 2009-10.

# 2. Comprehensive Road Infrastructure Development Programme (CRIDP)

## 2.1. State Highways

Under this Scheme during the past four years (2006-10) Widening and Improvements to 4883 Km length of roads has completed at a cost of Rs.1711 crores.

During 2008-09, sanction has been accorded to a tune of Rs.442.23 Crores for Widening 389 Km length of State Highways Improving 548 Km length of roads, Construction of 101 Culverts / Minor Bridges, Improving 43 Black Spots and Improving 14Km length of Tourist important roads

During 2009-10, 950 Km length of road works and 169 bridges / culverts has been completed out of the newly sanctioned works and spill over works.

Under this scheme, an expenditure of Rs.471.42 Crores has been incurred during 2009-10.

## **2.2.** Major District Roads

Under this Scheme during the past four years (2006-10) Widening and Improvements to 5567 Km length of roads has completed at a cost of Rs.1363 crores

During 2009-10, sanction has been accorded to a tune of Rs.352.90 Crores for Widening 600 Km length of Major District roads,Improving 515 Km length of Major District roads,Construction of 88 Culverts / Minor Bridges,Improving 26 Black Spots and Improving 12Km length of Tourist important roads.

During 2009-10, 1081 Km length of road works and 128 bridges / culverts has been completed out of the newly sanctioned works and spill over works.

Under this scheme, an expenditure of Rs.361.29 Crores has been incurred during 2009-10.

#### 2.3. Other District Roads

Under this Scheme during the past four years (2006-10) Improvements to 6129 Km length of roads has been completed at a cost of Rs.793.66 Crores

During 2009-10, sanction has been accorded to a tune of Rs.245.26 Crores for Widening and Improving 1405 Km length of Other District roads, Construction of 137 Culvets/Minor Bridges and Improving 23Km length of Tourist important roads.

During 2009-10, 1318 Km length of road works and 109 bridges / culverts has been completed out of the newly sanctioned works and spill over works.

Under this scheme, an expenditure of Rs.255.91 Crores has been incurred during 2009-10.

#### 2.4. Improvement to Road connectivity to Adi Dravida habitations

Under Comprehensive Road Infrastructure Development Programme, this Government is implementing the scheme of improving Other District Roads connecting Adi Dravida habitations from the year 2006-07.

Under this Scheme during the past four years (2006-10) Improvements to 2637 Km length of roads has been completed at a cost of Rs.368Crores.

During 2009-10, sanction has been accorded to a tune of Rs.96.59 Crores for Widening and Improving 598 Km length of roads, Construction of 39 Culverts / Minor Bridges.

During 2009-10, 621 Km length of road works and 29 bridges / culverts has been completed out of the newly sanctioned works and spill over works.

Under this scheme, an expenditure of Rs.111 Crores has been incurred during 2009-10.

#### 3. Bye passes to Major Towns

In order to regulate the vehicular traffic and to ease the traffic congestion it is essential to form Byepasses / Ring roads. Hence the Government gives importance for thesquisition and in the second phase formation of road works are taken up.

As per the announcements made during the past years formation of byeapss to Cheyyar town in Tiruvanamalai District for a length of 3 kms has been completed at an expenditure of Rs.4.40 crores.

# Ongoing byepass works

The work of formation of byepass to the following 6 towns has commenced during 2009-10 and is in progress

- Byepass to Ettukudi town in Nagapattinam District for a length of 1.60 Km at a cost of Rs.1.55 crores.
- Byepass to Kancheepuram town for a length of 8.50 Km at a cost of Rs.34.18 crores.
- Byepass to Thuraiyur town in Trichy District for a length of 3.60 Km at a cost of Rs.9.45 crores.

Also,

- Byepass to Elayankudi town in Sivagangai District for a length of 2.60 Km at a cost of Rs.3.50 crores.
- Byepass Vandawasi town in Tiruvanamalai District for a length of 2.00 Km at a cost of Rs.3.50 crores.
- Ring road to Hosur town in Krishnagirii District for a length of 5.00 Km at a cost of Rs.6.00 crores.

The above three Byepasses are taken up in CRIDP 2009-10 and are in Progress

The following are the Byepass in LA stage after the completion of LA the works are to be taken up

- Erode Byepass
- Thiruthuripoondi Byepass
- Perambalur Byepass
- Pattukottai Byepass
- Thanjavur (Phase II) Byepass
- Dharapuram Byepass
- Rasipuram Byepass

# 4. Tsunami Rehabilitation Scheme

# 4.1. Tsunami Emergency Assistance Project with Asian Development Bank Assistance

Sanction was accorded for construction of 5 major Bridge works and one road work at the cost of Rs.42.70 Crores In Tsunami affected Thiruvallur, Cuddalore and Nagapattinam districts with loan assistance from the Asian Development Bank. But, due to change in design, the Government accorded Revised Administrative Sanction for Rs.92.55 Crores.

In Cuddalore district, 20.60 km length of Alappakkam – Annankovil road work has been completed incurring an expenditure of Rs.9.40 Crores and put in to use of public.

During 2009-10, 4 Bridge works have been completed with an expenditure of Rs.21.45 crores

# 4.2 Tsunami Rehabilitation Scheme

The Government accorded administrative sanction for taking up works of improving 423.22 Km length of roads and construction of 55 new bridges at a total cost of Rs.224.38 crores under the Tsunami Rehabilitation Programme taken up by General wing of Highways Department.

Of these, 4 road works and 3 bridge works were deleted and due to change in design and revised design due to adoption of inland water way authority norms, Revised Administrative Sanction has been obtained for Rs.258.40 Crores for 16 bridge works. Thus, 413.37 Km length of road works and 52 bridge works have been taken up under this scheme. Of these, 32 bridge works and 410 Km length of road works have been completed at the cost of Rs.125.85 Crores.

During 2009-10 ,an expenditure of Rs.9.67 crores has been incurred .

Under this scheme, the Government sanctioned Rs. 53.40 Crores for improving 47.15 Km length of roads and for construction of 6 high level bridges in Nagapattinam District by NABARD and RR wing.

Revised administrative sanction has been obtained for Rs.73.79 crores.

Under this scheme during 2009 – 10, 3 bridges have been completed and an expenditure of Rs.6.95 crores

# 5. NABARD Assisted Schemes

# 5.1 Improvements to Major District Roads / Other District Roads ( Project 29,51,85 and 125)

Under this scheme, improvements to roads and construction of bridges in MDR/ODR are taken up with loan assistance from NABARD. During 2009-10, last year spill over works of 3 bridges were taken up and all the bridge works completed.

In addition, a new project has been sanctioned under project 125 by the Government for improvements of 260 Km length of roads in 14 districts at a cost of Rs. 113 Crores. Of which, 18.70 Km length of roads are completed

Expenditure incurred during the year 2009 -10 under this scheme is Rs.50.13 Crores.

# 5.2. Construction Of Bridges In Government Roads (Project 91)

During the current year, spill over works of construction / reconstruction of 48 bridges in State Highways, MDR and ODR were taken up at a cost of Rs.74 Crores. Of which, 21 bridges have been completed incurring an expenditure of Rs. 33.28 Crores. The balance works which are in progress will be completed in 2010-11.

# 5.3. Construction of Bridges in Government and Rural Roads (Project 121& 122)

During the current year, spill over works of construction / reconstruction of 90 bridges in SH, MDR, ODR and Panchayat and Panchayat Union Roads were taken up at a cost of Rs.129 Crores. Of which 65 bridge works have been completed at an expenditure of Rs.46.95 Crores.

The balance 25 bridge works which are in progress will be completed in 2010-11.

# 5.4 Rural Roads Scheme (Project 103 & 110)

Under this scheme, BT road connectivity is provided for villages with a population between 500-1000. During 2009-10, spill over works of improvements to 53 Km length of roads and Construction of 19 bridges were taken up at a cost of Rs.33 Crores.

Of which all the road works and 13 bridge works have been completed thereby providing BT road connectivity to 57 villages. The expenditure incurred during 2009-10 is Rs. 15.31 Crores.

The balance 6 bridge works which are in progress will be completed in 2010-11.

# 5.5 Improved connectivity to adi dravidar habitations under the scheduled caste sub plan (project–103 and 110).

Under this scheme, BT road connectivity is provided to villages where Adi-Dravidar population is more than 50% of the total population. During 2009-10, spill over works of improvements to 5 Km of roads and Construction of 6 bridges are completed thereby providing connectivity to 19 villages. An expenditure of Rs. 3.09 Crores incurred during the year 2009-10.

#### 5.6 Bus route improvements scheme (project 110)

Under this scheme, Bus Plying Panchayat and Panchayat Union Roads have taken up for improvements. During 2009-10, spill over works of improvements to 19 Km length of roads and Construction of 9 bridges were taken up at a cost of Rs.15. Crores. Of which all the road works and 8 bridge works have been completed incurring an expenditure of Rs. 9.61 Crores.

The balance one bridge work which is in progress will be completed in 2010-11.

# 5.7. Construction of bridges in Cauvery Delta Areas and 4 Major Bridges with NABARD assistance

Under this scheme Government had sanctioned construction of 59 bridges including 4 major bridges and improvements to 417 Km length of Sugar Cane roads at a cost of Rs. 204.73 Crores in Cauvery Delta Districts and other districts upto 2008. Of these 47 bridge works and 412 Km length of road works have been completed. Balance 5 bridge works will be completed during this year.

# **Details of 4 Major Bridges**

Construction of bridges across major rivers are taken up at an estimated cost of Rs. 133.30 Crores.

- 1. Construction of bridge across Cauvery River connecting Vangal in Karur District and Mohanur in Namakkal District at a estimated cost of Rs. 36.30 Crores.
- 2. Construction of bridge across Kollidam river connecting Neelathanallur in Thanjavur District and Madhanathur in Ariyalur District at a estimated cost of Rs. 36.50 Crores.
- 3. Construction of bridge across Kollidam river connecting Muttam in Cuddalore District and Manalmedu in Nagapattinam District at a estimated cost of Rs. 48.85 Crores.
- 4. Construction of bridge across Vaigai river connecting Paramakudi and Emaneswaram in Ramnad District at an estimated cost of Rs.11.65 Crores.

An expenditure of Rs. 13.52 Crores has been incurred during 2009-2010.

# 6. Inner Ring Road in Chennai City (Southern Sector)

To ease the traffic congestion in Southern Part of Chennai City, Government Sanctioned formation of Southern Sector of Inner Ring Road starting from Km 14/1 of NH45 to join at Km 13/4 of Old Mamallapuram road for a length of 9.40 Km. In the first Phase 4.40 length of road works have been completed.

In the second phase formation of road for a length of 5 Km. including construction of a bridge for a length of 350m at a cost of Rs. 15.20 Crores across Adambakkam Lake is in progress.

RAS has been accorded for Rs. 67.91 Crores. Road works and Adambakkam lake bridge will be completed by March 2010 and June 2011 respectively.

As expenditure of Rs. 9.71 Crores has been incurred during 2009-2010.

# 7. Erode Ring Road

The Government have accepted the policy of formation of road from Kokkarayanpettai in Namakkal District to Thindal in Erode District for a length of 14.80 Km under phase I and from satty road to Thindal for a length of 9 Km under Phase II and allotted an amount of Rs. 22.00 Crores for Land Acquisition.

Formation of road from Kokkarayanpettai to Karur road junction for a length of 2.20 Km including construction of High Level Bridge across Cauvery river between Kokkarayanpettai – Lakkapuram has been sanctioned for Rs. 14.00 Crores under CRIDP and tenders called for.

The proposals for formation of road from Erode Karur road junction to Kangeyam road junction (Km. 2/2 - 7/6) for a length of 5.40 Km length for Rs.12.00 Crores and Erode Kangeyam road junction to Thindal (7/6-14/8) for a length of 7.20Km for Rs. 36.00 Crores are under consideration by the Government.

# 8. Madurai Radial Roads

Under CRIDP sanction had been accorded in the second phase comprising 14 works of 123.20 Km at a cost of Rs. 70.60 Crores. These works were completed during the year 2009-2010.

An expenditure of Rs. 6.95 Crores has been incurred during 2009-2010.

# 9. Construction of ROB / RUB across level crossing under Railway Works Programme

The construction of Road Over / Under Bridges in lieu of existing level crossings on Government roads are undertaken on priority basis when Train Vehicle Units (TVU) exceed One Lakh per day. The State Government and Ministry of Railways share the cost equally for construction of Railway Over / Under Bridges including approach and service roads.

During the Five Year period from 2001-2006 only 7 ROB / RUB works for Rs. 168.35 Crores were sanctioned under Railway Works Programme. But in the years between 2006 and this current year the Government have given administrative sanction for 104 No. of Works of ROB/RUB at a cost of Rs.2246 Crores

Out of 104 works sanctioned from 2006 to this year 30 works are in progress and 4 works for which tenders have been called for and are under process.

From 2006-2010, 22 ROB/RUB works have been completed at a cost of Rs. 271.00 Crores.

An expenditure of Rs.191.70 Crores has been incurred during 2009-10.

#### **10.** Construction of Bridges

Under this scheme the Government sanctioned Construction of 61 bridges at a cost of Rs. 60.00 Crores. Out of these bridges, 54 bridges have been completed.Out of balance 7 works excepting 2 works, 5 works will be completed during the current year.

An expenditure of Rs. 8.58 Crores has been incurred during 2009-10.

#### Fly Over at Tirunelveli

The Government have sanctioned construction of a fly over along Tirunelveli Bye Pass near Chellapandian Statue at a cost of Rs. 16.40 Crores and work is in progress.

An expenditure of Rs. 10.77 Crores has been incurred during 2009-10. This work will be completed in July 2010.

#### 11. Tiruppur Nagar roads Infrastructure Development Programme

Under this scheme, Government sanctioned improvements of roads for a length of 99 Kms, 2 Railway Over Bridges and 9 River Bridges at a cost of Rs. 70.00 Crores.

One ROB work is included in Railway Works Programme.

Road works, 2 river bridges and 3 bridges are completed.

#### 12. Sugar Cane road Development Scheme (SCRD)

The cess fund collected from sugar mills is utilized for formation and maintenance of roads from sugarcane growing areas to sugar mills. The Government have ordered to undertake maintenance these roads through general wing.

Under this scheme 50 road works for 90 Km length at a cost of Rs.25.61 Crores has been sanctioned during 2009-10.

An expenditure of Rs. 4.93 Crores has been incurred during the year 2009-10.

## 13. Chennai Metropolitan Development Plan (CMDP)

This scheme is being implemented to improve the road infrastructure net work in in and around Chennai Metropolitan area. Under this schemes, 473 Kms length of improvements of roads, Six Bridges, Five Grade Separators, One ROB and repair to pedestrian Sub ways, centre medians and foot paths etc., at a cost of Rs.825 crores have been approved.

Up to 2009-10, about 385Km length of road work, besides the repairs to subways, construction of footpaths and centremedian works were completed at a cost of Rs.412 crores. The spill over of 88 Km length of roads will be completed during this financial year.

Further, the details of major works under this schemes are as follows.

#### **RIVER BRIDGES**

- 1. Widening of the Bridge near Vellavedu at Thirumazhisai Sathyavedu road in Tiruvallur District at an estimated cost of Rs.2.00 crores is nearing completion. This bridge will be completed by May 2010.
- 2. Bridge near RedHills lake at Km.17/2 of G.N.T road in Tiruvallur District at an Estimated cost of Rs.4.96 crores is in advanced stage of completion. This work will be completed by May 2010.
- 3. Construction of new three lane bridge adjoining the old existing bridge at Aminjikarai in Chennai, at a cost of Rs.3.30 crores is in progress and scheduled for completion by July 2010.
- 4. The work of providing a high level bridge across Coovan River on the road connecting GWT Road with Mogappair at a cost of Rs. 16.04 Crores, has been approved and contract for execution was also finalized. The confirmatory bores for ascertaining sub soil strata for finalizing the pile foundations are in progress.
- 5. The work of construction of additional 3 lane bridge adjacent to the existing Thiru.Vi.Ka Bridge across Chennai Adyar River at an estimated cost of Rs. 13.08 Crores has been taken up. Tender for this work was received on 19-4-2010 and under consideration.
- 6. The work of construction of a bridge in Tiruvallur district across Ennore Creek to connect Ennore Express way with North Chennai Thermal Power Station Road has been sanctioned at a cost of Rs. 20.00 Crores. The proposed bridge site is across the Bukingham canal and Kusasthalayar river. Due to the notification of the Inland Water Way Authority, the alignment finalization got delayed. Only, during February 2010, the alignment has been finalized after the joint inspection with various agencies including PWD. Detailed Project Report is under preparation for the revised alignment and General arrangement based on the requirement of Public Works Department. This work will be taken up for implementation during this financial year.

#### Grade separators

- One Grade Separator work taken up under this scheme at the intersection of Pallavaram Thuraipakkamin in Kancheepuram district and Maraimalai Adigal Bridge Irumpuliyur road near Pallikaranai in Kancheepuram district has been completed by the Project wing at an estimated cost of Rs.21.02 crores and opened to public by the Hon'ble Deputy Chief Minister on 29-10-2009.
- 2. In Tiruvallur District ,Construction of Grade separator at the intersection of Kodambakkam- Sriperumpudur road with Mount Poonamallee road at Porur, at an estimated cost of Rs.34.72 crores has been sanctioned. The contract for this work was finalized. Preparatory works are in progress.
- 3. In Tiruvallur District, Construction of Grade separator at the intersection of Madhavaram High Road with G.N.T road at Moolakadai Junction at a cost of Rs.49.55 crores has been taken up. Tender for this work was received on 19-4-2010 and under consideration.
- 4. In Chennai District, Construction of Grade Separator at the intersection of Anna Nagar 2<sup>nd</sup> Avenue, Thirumangalam Mogappair Road with Inner Ring Road at Thirumangalam has been taken up at an approximate cost of Rs. 46.46 Crores. Since the Chennai Metro Rail alignment and the proposed Grade Separator alignments are overlapping with each other, the concurrence from the CMRL has been sought for. The CMRL has given its concurrence on 17-12-2009 and only after the concurrence, configuration of the Grade separator proposal has been finalized. This work will be taken up for execution this year.
- 5. Construction of Grade Separator at the intersection Inner ring road with NSK road at Vadapalani at a cost of Rs.30 crores has been sanctioned. As the alignment of this Grade separator runs along the Metro Rail alignment, the proposed work will be integrated with Metro Rail Project and decided to be carried out by the Chennai Metro Rail Limited.

## Road over bridge

Road Over Bridge at Viyasarpadi in Chennai District has been approved at an estimated cost of Rs.80.68 crores. The contract for this work was also finalized. This work is being carried out by this Project Wing. Confirmatory bores to ascertain Sub Soil strata for finalizing the pile foundations are in progress

# Tamil Nadu Urban Development Project-III

Under the World Bank assisted scheme, Tamilnadu Urban Development Project-III, 5 Road works, involving Widening and Strengthening for length of 36 kms at a restructured cost of Rs. 145 Crores in Chennai Metropolitan Area has been sanctioned and are under progress.

### The details of works are as below

- 1. In Tiruvallur district ,the work of Widening the existing intermediate lane into two lane and Strengthening of Minjur Kattur Thirupalaivanam Road, Km 0/0-17/4, has been sanctioned at a cost of Rs. 49.73 Crore. The Widening work is in progress.
- 2. In Chennai district, the work of Widening the existing 2 lane road into six lane and strengthening of Taramani Link Road, Km 0/0-3/650, at a cost of Rs. 38.94 Crore has been sanctioned and the widening work is in progress
- 3. In Tiruvallur District, the work of Widening the existing single lane into two lane and Strengthening of Ariyalur Vilangadupakkam Road, Km 0/0-6/4, at a cost of Rs. 15.10 Crore has been sanctioned and the work is in progress. This work will be completed during this financial year.
- 4. In Tiruvallur district, the work of Widening the existing single lane into two lane and Strengthening of Koladi Road, Km 0/0-7/0 has been sanctioned at a cost of Rs. 33.48 Crore. At present, the Land Acquisition for this work is in progress. Work will be completed during this financial year.
- 5. In Tiruvallur district, the work of Widening the existing single lane road into two lane and strengthening the Madharavedu Road, Km 0/0-1/6, at a cost of Rs. 4.82 Crore has been sanctioned and the work is in progress. This work will be completed during this year.

# 15. Road Infrastructure Development in Oragadam Industrial Park Area

Under the first phase of this scheme, the following works are in progress.

SI. No.	Name of road	Length in Km.
1.	In SH–57, (Singaperumalkoil – Sriperumbudur road) (24.60 Km) widening to four lane with centre median and improving.	12.60
2.	In SH-57 (from Oragadam to Sriperumbudur) widening to four lane with centre median and improving (including construction of 2.40 Km. length of bypass to Ponthur Village).	12.00
3.	In SH-48 (from Vandalur to Oragadam) widening to four lane with centre median.	16.60
4.	In SH-48 (from Oragadam to Walajhabad) widening to four lane with centre median.	16.80
	Total	58.00

Of these 29 Km length works have been completed. Out of the total no.of 166 culvert works 113 works have been completed. The bridge costing Rs.23 crores at the Oragadam road junction has been commenced.

In 2009-10 a sum of Rs.145.38 crores has been spent for these works including land acquisition cost. Balance road works will be completed this year.

In the second phase, the works of six laning the Oragadam – Sriperumpudur road would be taken up in the current year on completion of land acquisition.

# 16. Rajiv Gandhi Salai (IT Expressway) (Extension) – Phase II

Under Phase-I the Rajiv Gandhi Salai (IT Corridor) was developed to six lane road at international standards from Madhya Kailash, Chennai to Siruseri for a total distance of 20 Km and the Link Road connecting East Coast Road at Sholinganallur to four lane road at a cost of Rs.300 crores. This road is being maintained through Tamil Nadu Road Development Company (TNRDC). In the second phase, the Government has proposed to construct six lane road for a distance of 25 Kms from Siruseri to Mamallapuram connecting East Coast Road, under Public Private Partnership on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

The rough cost estimate for the project is Rs.550 crores. In this, a grant of Rs.150 crores is to be given as Government share. The Government has sanctioned Rs.70 crores for land acquisition and the land acquisition works are in progress. On completion of land acquisition, steps will be taken to implement the project.

# **17. National Highways**

Tamil Nadu has 4873 Km length of National Highways, including 373 Km length of newly declared National Highways road. Out of this, 1613 Km length of roads are improved and maintained by National Highways wing of this Department making use of the funds provided by Government of India. The balance 3260 Km length of roads are being maintained by National Highway Authority of India (NHAI).

#### **17.1 National Highways Plan works**

Under Annual plan 2009-10, Government of India has sanctioned 31 works costing Rs.227 crores for the development of National Highways in Tamilnadu which includes 29 Nos of road works to an amount of Rs.218 Crores and 2 minor bridge works costing Rs. 9 Crores.

During 2009-10, 48 works have been completed which includes 103 km, length of roads under improvement to riding quality, 94 km length of strengthening two lane stretches, 28km length of paved shoulders on both sides, 1 major bridge, 11 minor bridges and 23 Nos of culverts.

An expenditure of Rs.169 crores has been incurred during 2009-10.

#### **17.2 Maintenance works in National Highways**

During 2009-10, renewal works in National Highways for a length of 59 kms have been completed at a cost of Rs.33 crores.

#### **18. Central Road Fund Scheme**

The Government of India had accorded Administrative approval for 178 Nos. of works amounting to Rs.594 crores for the period from 2005 to 2010. Out of this, 125 Nos of works have been completed at a cost of Rs.381 crores till 31.03.10. Balance 50 Nos. of works will be completed during this year itself,

Further, the Government of India had accorded Administrative approval for 16 nos. of road works amounting to Rs.147 crores on 31.03.2010 under this scheme. The above works will be taken up during this year.

### **19. Bharat Nirman Programme**

Under Phase I of this scheme 1254 km length of 288 Other District Roads have been taken up at a cost of Rs.247 crores. Out of this, 178 Nos of works were completed at a cost of Rs.152 Crores. Balance works will be completed during this year itself.

Under Phase II of this scheme 246 Km length of 75 Other District Roads at a cost of Rs.49 crores The above works will be completed during this year itself.

# 20. Tamil Nadu Road Sector Project (TNRSP)

Tamil Nadu Road Sector Project with the assistance of World Bank Loan and the fund of Government of Tamil Nadu is constructing roads conforming to international standards. The project commenced with World Bank assistance at the estimated cost of Rs. 2160 crores. The current revised estimate of the project is Rs. 2442 crores, of which the World Bank loan component is Rs. 1903 crores and the remaining Rs. 539 crores is funded by Government of Tamil Nadu.

## 20.1 Upgradation of Roads

Upgradation of roads from Arcot to Tiruvarur and Nagapattinam to Tuticorin were taken up in four packages for a length of 724.91 km at a contract price of Rs. 1174.69 crores. Out of this stretch, 705 km of road works were completed. Balance road works will be completed by December 2010.

In TNRSP package 05 Construction of Ramanathapuram bypass for a length of 10.40 Km at a Contract value of Rs. 35.29 crores was started on 23.06.2008 and will be completed in December 2010. The Contract of package five A for the extension of Kumbakonam bypass at an estimated cost of Rs. 24.56 crores has been taken up. The bids for this work have been received and the bid evaluation process is in progress. The reconstruction of Tsunami affected bridge between Keezhamanakudi and Melamanakudi village at a contract price of Rs.21.29 crores taken up as package six has been commenced on 16.03.2010 and will be completed by April, 2011.

#### 20.2 Road maintenance works

Under First Year Enhanced Periodical Maintenance works (2004-05) 597 km Roads are completed at a cost of Rs. 167.24 crores. Under Second Year Enhanced Periodical Maintenance, 252 km road works at a cost of Rs. 135.01 crores have been completed.

Under Third and Fourth Year Maintenance, 183.89 km of roads at a cost of Rs. 124.31 crores have been taken up, out of which 104 km have been completed. During 2009-10 an expenditture of Rs. 62.72 crores has been incurred. Balance works will be completed during current year.

#### 20.3 Improvement of Accident prone spots

Out of the 307 accident prone spots identified in the National Highways and Highways Department roads, 254 accident prone spots are in the roads under the control State Government. In this, improvement works completed in 200 spots. In the remaining 54 spots improvement works will be taken up in a phased manner since land is required for certain works.

Out of the 53 black spots identified in the National Highways improvement works completed in 36 places and improvement works in the remaining 17 places would be completed in the current year.

#### 20.4 Road Safety Assessment

M/s. Indian Institute of Technology-Madras, has been engaged as Consultant on 22.01.2010 for this services. The objective of the services is to conduct Road Safety Assessment of the upgraded roads under contract TNRSP 02, 03 & 04 to about 335 km of roads. This Services include reviewing the safety status of the selected roads, Comprehensive Road Safety Assessment of the selected corridors to identify safety related problems, deficiencies, shortcomings and suggesting remedial measures. This work is in progress in the stretch of Nagappattinam-Kattumavadi road of 118.60 kn improved under TNRSP 2.This work will be completed during this year.

#### 20.5 Road Safety Awareness

Consultancy Services for Road Safety Awareness Programme was Awarded to M/s. Institute of Road Transport, Taramani, Chennai.

This Services involves preparation of detailed Programme Implementation Plan, Road Safety Awareness programme for three / four wheeler drivers, Road Safety Awareness programme for school children, creating Road Safety Awareness for General Public through safety Slogans and Measures to avoid rear end collusion with parked vehicles. All these works have been completed.

# 20.6 Road Accident Data Management System (RADMS)

The Road Accident Data Management System has been developed by International consultants in coordination with Police, Highways and Transport departments as per the Government Order dated 23.12.2008.

Standard Operating Procedure (SOP) has been approved by the Government in Government Order dated 22.09.09. SOP is being operationalised by Police, Highway and Transport Departments.

The objectives of this service are

- 1. To provide and implement a GIS based computerised software system for accident recording, storage, analysis and dissemination – completed.
- 2. G.O. has been issued to the State Traffic Planning Cell (STPC) to undertake the RADMS works.

# 20.7 Road Management System (RMS)

Consultancy Services for Technical assistant to establish Road Management System (RMS) on the core state road network has been offered. Testing of RMS software is completed and RMS software to be uploaded in the Tamil Nadu Highways Department Server at Chief Engineer (General) office.

# 20.8 Geographical Information System (GIS)

To enhance decision making in road works, the Road Information System (RIS) and Bridge Information System (BIS) is created on the map in GIS platform. The following are the procurements suggested by the World Bank:-

- 1. GIS Software was procured and No Objection for the Request for Proposal (RFP) to the Consultancy services for Customization of software has been received from World Bank and receipt of proposal from the Consultant is fixed on 5<sup>th</sup> May 2010. On finalization the work will be implemented.
- 2. Data collection equipment –NOC from World Bank for Draft Bid Document is awaited.

## 20.9 Performance Based Maintenance contract (PBMC)

The existing procedures of maintaining the roads are now being substituted by the new concept of maintaining the roads for a term of 5 years. The World Bank has approved the following roads under PBMC on a pilot basis and Tender has been floated.

SI. No.	District	Name of road	Total length in Km
1.	Salem	Mecheri – Omalur Road (MDR)	14.60
2.	Salem and Namakkal	Omalur – Sangagiri – Tiruchengode - Paramathy Road (SH 86)	81.00
3.	Salem and Erode	Thoppur – Mettur – Bhavani – Erode Road (up to Bhavani) – (SH 20)	94.00
4.	Salem, Dharmapuri, Krishnagiri and Velur	Salem - Tirupathur – Vaniyambadi road – (SH 18)	106.40
		TOTAL	296.00

#### 20.10 Project and Financial Management System (P&FMS)

As per the advice of the World Bank, procurement of Consultant for the computerization to automate the existing manual procedures and process followed in Project Management, Financial Management and Employee Record System is in progress. The Draft contract is sent to the World Bank for NOC. After obtaining NOC the above system (P&FMS) will be implemented.

#### 20.11 ISO 9001:2008 certification

Accreditation of ISO 9001:2008 for five offices of Highways Department is taken up by Tamil Nadu Road Sector Project. The first stage of training and implementation of Quality Management System leading to certification was entrusted to the National Productivity Council (NPC). The National Productivity Council (NPC) has completed their work.

The second stage of conducting external Audit and certifying ISO 9001:2008 is entrusted to the Bureau of Indian Standards (BIS). The works are in progress and the ISO certification will be accredited in the month of June, 2010.

#### **EOT & Additional Financing**

The original closing date of Tamil Nadu Road Sector Project is 31.03.2009. Considering various delays in implementation of the Project at the initial stage the World Bank has extended the Project closing date upto 31.03.2010. Necessary proposal for the extension of the Project period upto 31.03.2012 has been recommended by the Government of India and the World Bank has accorded the extension upto 31.03.2012.

Due to variations in upgradation works and foreign currency fluctuation, the anticipated final project cost is Rs. 2442 crores. Additional financing to the extent of Rs. 232.67 crores (US\$ 50.70 Million) from World Bank have been submitted to Gol. The proposal for additional financing is also cleared by World Bank.

#### Expenditure

The expenditure incurred during 2009-10 is Rs. 376.623 crores and cumulative expenditure is Rs. 1955.698 crores.

The reimbursement received from the World Bank upto March, 2010 is Rs.1423.959 Crores.

#### 21. Road and Bridge maintenence works

Proper maintenance of road infrastructure developed at huge cost under various schemes of the Government is essential. In cognisance of this fact this Government is giving top priority to the works of renewal and maintenance of Government roads. Accordingly, this Government has taken steps to renew and maintain the roads keeping five years cycle of renewal as per IRC norms.

			(1	Rs.in crores)	
		Expenditure	Highways Department		
Year	Total Expenditure	by Rural Development Wing	Expenditure	Completed Length (in km)	
2006 –07	801.37	103.60	697.77	7889	
2007 –08	826.26	103.60	722.66	7115	
2008 –09	874.04	103.60	770.44	6632	
2009 –10	884.67	103.60	781.06	6392	
Total	3386.34	414.40	2971.93	28028	

This Government has allotted and spent adequate funds for road maintenance as detailed below :-

Thus, during the last 4 years, 28,028 Km length of roads have been renewed at a cost of Rs.2,971.93 crores.

The 4,225 Km length of Panchayat and Panchayat Union Roads, Agricultural Development Projects Roads and Sugarcane Roads which were improved from earthern to BT roads during 1996 – 2002 and left without maintenance had been renewed at an at the cost of Rs.288.46 crores.

#### **Bridge Maintenance**

Proper maintenance of bridges constructed at huge cost will enhance the life span of the bridges. In addition, maintenance of the bridges and cross drainage works will fecilitate easy draining of flood water during monsoon period and reduces the damages to the riding surface. Hence, the month of August 2009 was observed as bridge maintenance month and special methods were adopted for proper bridge maintenance as announced in the Budget Speech 2009-10.

Out of the 1,12,963 bridges maintained by the Highways Department as on 2009-10, maintenance works have been carried out in 50,645 bridges at the cost of Rs. 26.79 crores. Special attention will be given for bridge maintenance in the current year also.

# II. TAMIL NADU MARITIME BOARD

There are three major ports viz., Ennore, Chennai and Thoothukudi and twenty minor ports within the 1076 KM long coastline of Tamil Nadu. In addition, proposals for notifying another 3 minor ports are under the consideration of the Government. The major ports, set up under the Major Port Trust Act 1963, come under the control of Government of India and the minor ports, declared under the Indian Ports Act 1908, come under the control of the State Government.

## **1. Commodities handled in the Non Major Ports**

SI. No.	Port Loaded		Unloaded					
1.	Cuddalore		Fertiliser, Coal and Vinyl Chloride Monomer					
2.	Nagapattinam	Diesel and Naphtha	Edible Oil, Crude oil and General cargo					

#### 1. Government Ports

#### 2. Captive Ports

SI. No.	Port	Loaded	Unloaded
1.	Ennore Minor Port	-	Liquid Ammonia
2	PY 03 Oil field	Crude oil	-
3	Thirukkadaiyur	-	Naphtha

## 2. Government Ports

#### (1) Cuddalore Port

a) The rehabilitation of the Tsunami damaged infrastructures such as rehabilitating and extending the breakwaters and dredging, etc., have been completed in September 2009 with the assistance of Asian Development Funds of Rs. 11.91 crores.

b) M/s. Chemplast Sanmar Limited has developed Marine Terminal Facility (MTF), within Cuddalore port limits, to handle Vinyl Chloride Monomer (VCM) required for the Poly Vinyl Chloride (PVC) factory, established at SIPCOT Complex. 97,268 Metric tonnes of VCM has been handled through 16 ships during the year 2009-10.

c) M/s. Cuddalore Powergen Corporation Limited has proposed to set up a jetty at an approximate cost of Rs. 325 Crores for handling coal for their 1320 MW power plant. Vide G.O. Ms. No. 213, Highways and Minor Ports Department, dated 02.09.2008, the port limits of Cuddalore Port has been extended. The coastal land measuring 12.66 acres has been allotted on annual lease basis to the Company. Land acquisition is under progress.

#### (2) Nagapattinam Port

a) The rehabilitation of the Tsunami damaged infrastructures such as rehabilitating and extending the breakwaters, dredging and construction of cargo sheds have been completed in September 2009 with Asian Development Funds of Rs. 44.64 crores.

During the year 2009-10, the following cargo have been handled at this port.

Cargo	No. of Ships	Quantity (Metric Tonnes)
Edible Oil	12	47,285
Copra cake	2	9,635
Petroleum Products (Bunkers)	1	15,551
Total	15	72,471

b) M/s. Chennai Petroleum Corporation Limited has established a jetty to handle the products of their refinery and are handling cargo through the jetty.

During the year 2009-10, the following cargo have been handled at this jetty.

Cargo No. of Shi		Quantity (Metric Tonnes)
Crude Oil	24	2,93,915
Naptha	14	1,41,176
Diesel	10	97,393
Total	48	5,32,484

#### (3) Pamban Port

This port is situated in Rameswaram Island of Ramanathapuram district. The only function at this port is to pilot small drafted vessels passing through Pamban Channel in the Gulf of Mannar. 319 vessels were piloted at this port during the year 2009-10.

#### (4) Rameswaram Port

This port is situated in Ramanathapuram district. Presently, there is no activity at this port.

## (5) Valinokkam Port

This port is situated in Ramanathapuram district. Presently, there is no activity at this port.

#### (6) Kanyakumari Port

This port, situated in Kanyakumari district, is solely meant for facilitating ferry service between shore and Vivekananda Rock Memorial / Ayyan Thiruvalluvar Statue. M/s. Poompuhar Shipping Corporation Limited is operating this ferry service. Tamil Nadu Maritime Board is supervising the ferry service and derive establishment charges from the Corporation. 19,33,088 passengers were ferried and Tamil Nadu Maritime Board derived establishment charges of Rs.14,42,464/- during the year 2009-10.

# (7) Colachel Port

The Port is located in Kanniyakumari district and very close to the International Shipping route and has sufficient draft to establish a port to handle large ships close the shore. M/s. RITES Ltd., in their "Port Vision 2020" report, had identified Colachel as a suitable port for developing into Container transshipment Hub Port taking into account the above factors. Since this project involves large amount of investment, the Government of India was requested for funding assistance. Government of India informed on 21.07.2009 that the State Government may implement the project.

Tamil Nadu Maritime Board has appointed a consultant on 15.04.2010 and entered into an agreement for the preparation of a Techno Economic Feasibility Report within five months.

#### 3. Captive Ports

#### (a) Kattupalli Port

The port limits of this port, near Ennore in Thiruvallur District, have been extended for establishing shipyard cum minor port complex by M/s. L & T Shipbuilding Limited at an estimated cost of Rs.3,375 crores. Coastal land measuring about 77 acres has been allotted to the Company from 12/2008. The company has completed the Rehabilitation & Resettlement activities. Environmental clearance for this project has been issued by Ministry of Environment and Forests. The proposal of declaring Kattupalli as Sea Customs port is under the consideration of Government of India. The Equity and debt funds for the project have been fully tied up. Construction of North breakwater upto 400 mtrs and South breakwater upto 600 mtrs completed. Civil piling works for ship lift and dredging are in progress.

#### (b) Ennore Minor Port

The port, situated in Thiruvallur district, comprising of the marine structures of Multiple Buoy Mooring System with submarine pipelines for receiving Liquid Ammonia, had been developed by M/s. Coromandel International Ltd., Chennai at a cost of Rs..22.64 crores. During the year 2009-10, 5 vessels called at this port and 44,504 Metric Tons of Liquid Ammonia have been imported.

## (c) Mugaiyur Port

M/s. Marg Swarnabhoomi Port Private Limited have proposed to develop ship repair facility at a cost of Rs.500 crores at Mugaiyur near Mamallapuram in Kancheepuram District for which the Government have declared Mugaiyur as a minor Port vide G.O.Ms.No. 224, Highways and Minor Ports (HN 2) Department, dated 23.11.2009.

### (d) Thiruchopuram Port

M/s. Nagarjuna Oil Corporation Ltd., have been permitted to establish a captive port at a cost of Rs.1800 crores for handling crude and petroleum products from their proposed oil refinery at Thiruchopuram in Cuddalore district. During the year 2009-10, the company imported 9776 Metric Tonnes of Machinery required for the refinery through a temporary jetty.

The company has requested permission to develop this port through their equity partners, viz., Cuddalore Port Co. Pvt Ltd and also to handle other commercial cargo. The company has been requested to modify the assignment agreement and the Licencing and port development Agreement in line with the legal opinion offered by the Advocate General on these agreements.

#### (e) Silambimangalam Shipyard Port

Vide G.O. Ms. No. 183, Highways and Minor Ports Department, dated 23.07.2007, permission has been granted for M/s. Goodearth Shipbuilding Private Limited for establishing a captive shipbuilding yard in Cuddalore district at a cost of Rs.500 crores for building of ships upto 75000 DWT. The Government of India have also notified this port under Sea Customs Act, 1962.

Further, in-principle approval to establish a Single Super Phosphate Fertilizer Plant within Silambimangalam Shipyard Port area has also been granted. As per the conditions of the Board, the company has submitted the Technical Feasibility Report for the fertilizer Plant and the Technical Feasibility Report for the Shipbuilding yard. The company has now been requested to submit TOR as approved by MOEF, New Delhi, financial closure details, all clearances and No objections etc., The port construction will commence on obtaining the above approvals.

## (f) PY-03 Oil Field

This port, developed at a cost of Rs. 33.62 crores and situated 50 Kms South East off Cuddalore, has been exclusively declared for loading Crude oil being extracted from the oil wells situated at PY-03 Oil Field on to ships. During the year 2009-10, 68,364 Metric tonnes of Crude oil has been loaded through 7 ships.

# (g) Kaveri Port

M/s. PEL Power Limited have proposed to establish a jetty at a cost of Rs. 200 crores for handling coal for their 1320 MW Power Plant, for which the Government vide G.O.Ms.No. 2, Highways and Minor Ports (HN 2) Department, dated 07.01.2010, declared the port limits of Kaveri Port near Poompuhar in Nagapattinam district.

# (h) Vanagiri Port

M/s. NSL Power Limited have proposed to establish a jetty at a cost of Rs. 250 crores for handling coal for their 1500 MW Power Plant, for which the Government vide G.O.Ms.No. 147, Highways and Minor Ports (HN2) Department, dated 29.07.2009, declared the port limits of Vanagiri Port in Sirkazhi Taluk of Nagapattinam district. Proposal for Customs Notification of this port has been sent to Government of India. Waterfront has been allotted to the company from February 2010.

## (i) Thirukkadaiyur Port

port.

M/s. PPN Power Generating Company handles Naphtha and Natural gas through this port, declared in the year 1996 required for their 330 MW gas combined Cycle Power Project established at Pillaiperumalnallur near Thirukkadaiyur in Nagapattinam district.

During the year 2009-10, the following cargo have been handled at this

Naphtha	22 ships	2,62,147 Metric Tonnes
Gas		61,419 Metric tonnes
Crude oil		3,090 Metric Tonnes
Total	22 Ships	3,26,656 Metric Tonnes

In G.O.Ms.No. 16, Highways and Minor Ports Department, dated 20.01.2010 the port limits of Thirukkadaiyur port have been extended to accommodate the landfall point of gas pipelines of M/s. Hindustan Oil Exploration Company Ltd.,

## (j) Thirukkuvalai Port

M/s. Tridem Port and Power Company Private Limited, has proposed to establish a port near Vettaikkaran Iruppu in Nagapattinam district at a cost of Rs.650 crores to handle coal required for their proposed 2000 MW Merchant Power Plant, for which the port limits have been declared. 276 acres of port land has been allotted to this company on annual licence basis for creating the marine facilities. The company has submitted a Detailed Project Report. The company has been requested to submit approval from MOEF, New Delhi for establishing the port.

## (k) Manappadu Port

The Government have declared Manappad in Thoothukudi district as a Minor Port to be established at a cost of Rs. 1800 crores for handling LNG for the proposed 2000 MW Gas Turbine Power Project to be set up by M/s. Indian Power projects Ltd., at Vembar. 100 acres of port land has been

allotted for construction of marine facilities. Financial closure for this project is to be finalised soon.

#### (I) Koodankulam Port

Koodankulam port in Thirunelveli district was declared for the captive use of M/s Nuclear Power Corporation of India Ltd., for their proposed Nuclear Power project at Koodankulam consisting of 2 units of 1000 MW each.

A dyke with a length of 1 KM and a breadth of 500 mtrs for storing seawater required for the power plant and a RCC Jetty with necessary breakwater protection established at a cost of Rs. 3.40 crores for receiving over- dimensional and heavy lift Machineries have been constructed. During the year 2009-10, 231 Metric tonnes of machineries have been handled at this port.

#### 4. Ports announced and under consideration

#### (a) Port near Panaiyur

M/s. Coastal Tamil Nadu Power Limited has been granted an inprinciple approval for developing a captive port at Panaiyur near Cheyyur in Kancheepuram district for handling coal required for their proposed 4000 MW Ultra Mega Power Project. Based on the discussion in the meeting of Expert Appraisal Committee on CRZ, held on 20.07.2009, Ministry of Environment and Forests (MOEF), New Delhi has suggested to look for an alternate site in view of the existing Eco-sensitive area. Based on the suggestion of the MOEF, New Delhi and as per the request of M/s. PFC Consulting Services Ltd, vide their letter dated 26.08.2009, in-principle approval for establishing a captive port at Panaiyur village south of Mudaliarkuppam in Kancheepuram district has been granted with a condition to submit the Techno Economic Feasibility Report. Application for TOR has been filed by the company with the Ministry of Environment and Forests, New Delhi.

## (b) Parangipettai Port

M/s. IL&FS Limited has been granted an in-principle approval on 19.06.2008, for developing a captive port in Cuddalore district at a cost of Rs. 1300 crores, to handle coal for their proposed 4000 MW Merchant Power plant. The request of the company to declare the port limits is under consideration of Government.

#### (c) Udangudi Port

M/s. Udangudi Power Corporation Limited, Chennai has been granted in-principle approval on 06.07.2009 for establishing an open sea jetty at a cost of Rs. 600 crores to receive coal for their 2X800 MW Udangudi Super Critical Thermal Power Project and also for establishing (1) Circulating water inlet tunnel and intake (2) Circulating water outlet and (3) temporary facilities for unloading project cargo (Barge jetty) at Udangudi near Thiruchendur in Thoothukudi district. The company has engaged National Institute of Oceanography (NIO), Goa as their consultant to prepare the Detailed Project Report. NIO, Goa are in the process of finalising their jetty alignment. **5.Cargo Traffic** 

During the year 2009-10, minor ports in Tamil Nadu handled a total cargo of 11,74,422 Metric Tonnes.

Metric Tons (Rs. in Lakhs)						
	GOVER POF		CAPTIV	E PORTS	то	TAL
	Total		Total		Total	
YEAR	Cargo	Total	Cargo	Total	Cargo	Total
	Handled	Revenue	Handled	Revenue	Handled	Revenue
2003-04	3,06,875	305.08	3,83,261	122.00	6,90,136	427.08
2004-05	4,18,552	333.81	4,35,317	124.07	8,53,869	457.88
2005-06	3,37,063	264.69	3,73,351	187.63	7,10,414	452.32
2006-07	3,18,337	315.81	4,82,433	273.46	8,01,770	589.27
2007-08	4,09,294	403.90	4,78,090	328.78	8,87,384	732.68
2008-09	3,94,712	613.03	5,01,453	897.02	8,96,165	1510.05
2009-10	7,24,891	782.88 #	4,49,531	1434.06 #	11,74,422	2216.94 #

# Cargo handled and revenue earned

# (Tentative)

# 6. Tamil Nadu Maritime Academy

The Tamil Nadu Maritime Academy was established at Thoothukudi and inaugurated on 16.09.1998 is functioning under Tamil Nadu Maritime Board as per the orders issued in G.O.Ms.No.196, Highways and Minor Ports Department, dated 01.08.2008. The Academy has so far conducted 15 batches of pre-sea rating course. Initially, the Academy conducted separate Seaman and Engine Rating Training courses. At present it is conducting General Purpose Rating training Course instead of separate Deck and Engine Rating Crew with 40 trainees per batch. The Academy is also conducting five STCW-95 courses namely, "Personal Survival Techniques", "Elementary First Aid", "Personal Safety and Social Responsibility", "Oil Tanker Familiarization" and "Fire Prevention and Fire Fighting". This academy has continuously achieved 100% pass in the last six batches. In recognition of the 100% result in the previous 5 examinations, the Board of Examinations for Seafarers Trust, which was authorised by the Directorate General of Shipping, Mumbai, for conducting the All India Exit Examinations for such courses, has recognised the consistent successful performance of Tamilnadu Maritime Academy, Thoothukudi and has awarded them a Certificate of Appreciation of service as a most consistent performing institute in India on 30.10.2009.

# **III.. POOMPUHAR SHIPPING CORPORATION LTD**

Poompuhar Shipping Corporation Limited (PSC) was formed on 11.04.1974 under the Companies Act, 1956 with the objective of transporting the coal required for the Thermal Power Stations of Tamil Nadu Electricity Board (TNEB). The coal required by TNEB is transported from the load Ports at Haldia, Paradip and Vizag and discharged at Ennore and Thoothukudi Ports. PSC has acquired three specially designed shallow draft geared bulk carriers of 40000 DWT between August 1985 and January 1987 which are exclusively utilized for this purpose.

The Dead Weight Tonnage (DWT) of the vessels were increased to 45000 M.T during dry docking of the vessels as follows.

Name of the own vessels	Month and Year	Total carrying capacity(M,T)
M.V Tamil Kamaraj	November 2004	45000
M.V Tamil Periyar	May 2005	45000
M.V Tamil Anna	November 2005	45000

In addition to its own three ships, PSC also charters ships from Indian ship owners and foreign owners to transport the coal required by TNEB for the various Thermal Power Stations in Tamil Nadu.

#### Movement of coal

The details of linkage of coal, arrival of coal at load ports and coal moved by own and chartered vessels are as follows:

Year	Allotment of coal	Coal arrived at load ports	Coal Moved by Chartered vessels	Coal moved by Own vessels	Total coal moved	Achieve ments
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		(In lakł	ns Metric Ton	nes)		
2006-07	130.00	131.01	98.25	33.49	131.74	100.56%
2007-08	149.10	132.97	104.38	29.52	133.90	100.90%
2008-09	135.00	134.40	108.99	24.12	133.11	99.04%
2009-10	135.68	128.34	94.18	33.61	127.79	99.57%

Physical performance of Own and Chartered Vessels for the period 2008-2009 and 2009-10 are as follows:

	2008-09	2009-10
Own Vessels		
No. of vessels	2	3
No. of voyages	55	78
Quantity of coal moved (in lakhs MT)	24.12	33.61
Average quantity of coal moved per voyage in MT	43854	43090
<b>Chartered Vessels</b>		
No. of Vessels	8	7
No. of voyages	228	202
Quantity of coal moved (in lakhs MT)	108.99	94.18
Average quantity of coal moved per voyage in MT	47803	46624
Total quantity moved (in lakhs MT)	133.11	127.79

#### Performance of own vessels

Cargo carried by own vessels per voyage for 2009-10 is 43090 M.T as against 43854 M.T. carried during 2008-09. Though Own Vessels have crossed over 23 years of operation they are performing satisfactorily. During the year 2009-10, in spite of two own vessels viz. M.V. Tamil Kamaraj and M.V Tamil Periyar had gone for dry docking survey repairs, own vessels voyage performance is satisfactory.

# Financial performance for 2008-09 and 2009-10

The estimated profit of PSC for the year 2009-10 is Rs. 324.38 lakhs as against the profit of Rs 291.88 lakhs earned during the previous year 2008 -09.

## Panamax self unloader vessel (CHSU)

For the Paradip-Ennore sector One Panamax CHSU vessel (M.V.Gem of Ennore DWT 75066 built in 2000) owned by M/s.West Asia Maritime Limited, Chennai, was inducted into PSC service on 19.02.2002 for a TEN YEARS TIME CHARTER. This is a very sophisticated and specially built modern vessel. The vessel has its own discharging gear consisting of cranes and grab and also has conveyor system with a discharge boom. The coal from the vessel is directly discharged to the shore based hopper. This vessel is achieving a discharge rate of 2600 MT per hour, thereby giving fast delivery of cargo to TNEB.

# Handymax geared vessel

For Haldia - Paradip-Tuticorin Sector and Visakhapatnam -Tuticorin Sector, the operation of Handymax Geared vessels will continue to be operated by PSC.

# Kanyakumari ferry service

PSC is operating passanger ferry services from the shore at Kanyakumari to the Ayyan Thiruvalluvar Statue and the Vivekananda Rock Memorial. PSC had purchased two new ferries namely M. L. Guhan and M. L. Pothigai during last financial year. Since, three ferries are in operation with the existing ferry M.L. Bagirathi, Tourists are being ferried to Vivekananda Rock Memorial and Ayyan Thiruvalluvar Statue without waiting for long time.

Physical and Financial Performance of the Ferry Service for the last four years are given below:

	<u>2006-07</u>	<u>2007-08</u>	<u>2008-09</u>	<u>2009-2010</u>
No. of Ferries in operation	2	2	3	3
No. of Passengers ferried (Rs. in lakhs)	14.79	16.65	18.48	19.23
Fare collection (Rs. in lakhs)	287.45	324.09	359.73	376.63
Operation Profit (Rs. in lakhs)	52.01	50.34	75.75	50.00 #

# (Estimated)

Vellakovil M. P. Saminathan Minister for Highways and Minor Ports Department