

# APPENDICES

**Appendix 1.1**  
**Year-wise break up of outstanding Inspection Reports as on 30 June 2015**  
**(Reference: paragraph 1.7.1; Page:6)**

Year	Agriculture Department				Forest Department				Total			
	No. of outstanding IRs	No. of outstanding paras	No. of paras for which first reply has not been received		No. of outstanding IRs	No. of outstanding paras	No. of paras for which first reply has not been received		No. of outstanding IRs	No. of outstanding paras	No. of paras for which first reply has not been received	
			IR	Paras			IR	Paras			IR	Paras
Upto 2010-11	4	6	0	0	12	26	0	0	16	32	0	0
2011-12	17	41	0	0	10	25	0	0	27	66	0	0
2012-13	0	0	0	0	3	4	0	0	3	4	0	0
2013-14	16	53	0	0	27	99	5	17	43	152	5	17
2014-15	122	463	38	191	55	300	42	215	177	763	80	406
<b>Total</b>	<b>159</b>	<b>563</b>	<b>38</b>	<b>191</b>	<b>107</b>	<b>454</b>	<b>47</b>	<b>232</b>	<b>266</b>	<b>1017</b>	<b>85</b>	<b>423</b>

**Appendix 2.1**  
**Encroachments on West Coast Canal, as on October 2015**  
**(Reference: Paragraph 2.5.2(ii); Page:16)**

Sl. No.	Place	Chainage			Extent of encroachment, if known	No. of families residing therein	No. of families evicted	Reasons for non-eviction of encroachers, and other remarks
		From	To	Length				
		(km)	(km)	(km)		(Nos.)	(Nos.)	
<b>1</b>	<b>Thiruvananthapuram &amp; Kollam District (jurisdiction of IN Division, Kollam)</b>							
	<b>Pallithura bridge to Kadinamkulam kayal</b> (falling under jurisdiction of IN Section, Kazhakootam)	Ch. 21.05 km (Pallithura bridge)	Ch. 22.55 km (Arattuvazhi Bridge)	1.50	Not assessable, as demarcation not yet completed by Survey Department	56	nil	Demarcation not yet completed. Hence, assessment of encroachments, and resultant evictions required, was not possible.
		Ch. 22.55 km (Arattuvazhi Bridge)	Ch. 26.00 km (Anakkapillai Bridge)	3.45		192	nil	
		Ch. 26.00 km (Anakkapillai Bridge)	Ch. 26.90 km (Channamkara Bridge)	0.90		53	nil	
		Ch. 26.90 km (Channamkara Bridge)	Ch. 27.45 km (Kadinamkulam kayal begins)	0.55		3	nil	
	<b>Kadinamkulam kayal to Anjengo kayal</b> (falling under jurisdiction of IN Section, Chirayinkeezhu)	Ch. 33.63 km (Kadinamkulam Kayal ends)	Ch. 35.23 km (Kadakam Road)	1.60		20	nil	Demarcation not yet completed. Hence, assessment of encroachments, and resultant evictions required, was not possible.
		Ch. 35.23 km (Kadakam Road)	Ch. 36.56 km (Vadakke Arayathuruthu Road)	1.33		32	nil	
		Ch. 36.56 km (Vadakke Arayathuruthu Road)	Ch. 37.29 km	0.73		17	nil	
	<b>Anjengo kayal to Nadayara kayal</b> (falling under jurisdiction of IN Section, Varkala)	Ch. 42.46 km (Anjengo kayal)	Ch. 43.78 km (Thazhevettloor)	1.32		5	nil	Demarcation not yet completed. Hence, assessment of encroachments, and resultant evictions required, was not possible.
		Ch. 50.90 km (Sivagiri)	Ch. 52.20 km (Nadayara)	1.3		40	nil	
		Ch. 52.20 km (Nadayara)	Ch. 55.17 km (Nadayara)	2.97		10	nil	

Sl. No.	Place	Chainage			Extent of encroachment, if known	No. of families residing therein	No. of families evicted	Reasons for non-eviction of encroachers, and other remarks
		From	To	Length				
		(km)	(km)	(km)		(Nos.)	(Nos.)	
			kayal)					
	<b>Kovalam to Pallithura</b> <i>(falling under jurisdiction of IN Section, Thiruvananthapuram)</i>	0.00 km (Kovalam)	21.05 km (Pallithura bridge)	21.05		700	nil	Demarcation not yet completed. Hence, assessment of encroachments, and resultant evictions required, was not possible.
				<b>36.70</b>	<b>TOTAL</b>	<b>1128</b>	<b>nil</b>	
<b>2</b>	<b>Thrissur District (jurisdiction of Addl. Irrigation Division, Thrissur) **</b>							
	Kodungallur	-	-		4.92 Ha	214	nil	Demarcation not yet completed. Hence, assessment of encroachments, and resultant evictions required, was not possible.
	Mukundapuram	-	-		3.44 Ha	78	nil	
	Thrissur	-	-		3.02 Ha	97	nil	
	Chavakkad	-	-		6.6 Ha	443	nil	
	** Data provided by the Division as available in Report for year 2011 of Distt. Collector, Thrissur				<b>TOTAL</b>	<b>832</b>		
<b>3</b>	<b>Malappuram District (jurisdiction of Irrigation Division, Malappuram)</b>							No family is to be rehabilitated, but 18 shops are to be removed from the banks of PC Canal in Ponnani Taluk.
				-	-	nil	-	
					<b>GRAND TOTAL</b>	<b>1960</b>	<b>nil</b>	

**Appendix 2.2**  
**Details of Feeder canals improved without adequate width and having bridges of low vertical clearance**  
**(Reference: Paragraph 2.5.3(i);Page:18)**

Sl.No.	Division	Name of Feeder canal	Width (m)	No. of bridges with low vertical clearance	Amount (₹ in lakh)
1.	Alappuzha	Kumbalathankarythodu	10.85	-	63.06
2.		Kattachirathodu	1.80	-	76.10
3.		Chandiroorthodu	2	1	37.73
4.		Chethipozhy	8	-	6.50
5.	Kottayam	Lappalam	-	1	195.77
6.		Muttom- Changanacherry canal	-	5	53.85
7.		Chethipuzha	-	1	58.05
8.		Muttar- Neelamperoor canal	-	3	74.61
9.		Kodur river	-	11	110.14
10.		Neendoor canals	-	1	146.99
11.		Kallara canal	-	3	82.62
12.		Chullithodu	-	1	28.91
13.		Appanchira canal	-	2	57.78
14.		Perinjillathodu	-	3	110.66
15.		Valiyathodu	-	4	142.81
16.		Kariyar link canal	-	1	157.88
17.	Thrissur	Shanmugham canal	6 to 8	-	114.50
<b>Total</b>					<b>1517.96</b>

**Appendix 2.3**  
**Details of feeder canal where joint inspection was conducted by Audit**  
**(Reference: Paragraph 2.5.3(ii);Page:18)**

Sl. No.	District	Name of FC	Nature of work	Date of completion	Amount (₹ in lakh)	Present Condition (November 2014)
1.	Alappuzha	Madayanthodu	Desilting, removal of water hyacinth	24 October 2008	82.21	Completely covered with water hyacinth. Width and depth of the canal in most places were less than the standard required.
2.	Do	Kumbalathankary	Side protection, deepening	30 July 2009	63.05	Getting thick with water hyacinth. Width is only 10.85 m and depth 0.80 m
3.	Do	Ambalapuzhathodu	Desilting, side protection, and removal of water hyacinth	27 September 2008	65.80	Thickly covered with water hyacinth, low bridges, no navigability
4.	Thrissur	Shanmughamthodu	Desilting, side protection	30 January 2010	114.50	No connectivity throughout the year. A salt water barrier is there between WCC and the Feeder Canal (FC). Narrow canal.
5.	Kottayam	Valiyathodu	Protection of left bank, desilting.	19 July 2014	142.81	Two low railway bridges, work done on one side alone while other side of Kaduthuruthy bridge is shallow, full of dirt. Water weeds are fastly growing in the recently improved area.
6.	Do	Perinchillathodu	Side protection and desilting	19 January 2013	110.66	Thickly covered with water hyacinth and waste thrown in to the FC.
7.	Do	Mannanam-Chuzhalykkuzhy	Deepening	31 August 2011	115.94	Three km towards Mannanam was full of water weeds, rock preventing navigability.
<b>TOTAL</b>					<b>694.97</b>	

**Appendix 2.4**  
**Details showing delay in repair of barges and their disposal**  
**(Reference: Paragraph 2.6.1; Page:22)**

Sl. No.	Barge and year of construction	Withdrawal from service	Details of action taken after withdrawal of the vessel from service	Ultimate impact
1	Bhavana, 1992	June 2009	Estimates for dry dock repair were prepared in June 2009 (₹18.06 lakh), and re-estimated in December 2011 (₹58.09 lakh) and in June 2012 (₹129 lakh) but repair was not carried out.	After withdrawal from service, the vessel remained idle for 3.5 years and later found in severely corroded condition. Finally, it became unviable for repair and was disposed of in December 2012, for ₹15.09 lakh
2	Aiswarya	June 2009	Estimate for dry dock repair was prepared in June 2009 (₹17.51 lakh). But repair was not carried out.	After one year, the vessel was found in severely corroded condition. Disposed of in September 2011 for ₹30 lakh.
3	Bhagya, 1991	January 2011	Estimates for dry dock repair were prepared and approved by Board of Directors frequently since December 2010 (₹22.67 lakh). Finally repaired at a cost of ₹78 lakh and released in August 2012.	On account of idling of barge for long time without repair, the quantum of steel replacement increased by 29 MT which led to additional expenditure of ₹55.33 lakh.

**Appendix 3.1**  
**The details of extent of EFL area notified by Forest Department**  
**(Reference: Paragraph 3.1; Page:27, 29)**

**Extent of EFL area**

Sl. No.	District	Division	Total Notified	
			No. of bits	Extent (Ha)
1	Kollam & Thiruvananthapuram	Thiruvananthapuram	55	929.33490
2	Kollam	Achencovil	1	133.05090
3	Kollam	Punalur	1	15.71000
4	Kollam	Shendurney (Wild life)	4	35.43900
5	Kollam	Thenmala	3	45.45320
6	Idukki	Munnar	14	898.01250
7	Idukki	Marayur	75	248.74000
8	Idukki	Kottayam	89	265.06737
9	Thrissur	Chalakyudy	3	4.56200
10	Thrissur	Thrissur	19	75.48019
11	Palakkad	Mannarkkad	54	713.04420
12	Palakkad	Nenmara	140	1,417.69070
13	Palakkad	Palakkad	289	3,060.80693
14	Palakkad & Malappuram	SVNP (Wild life)	8	114.45000
15	Malappuram	Nilambur North	25	948.05070
16	Malappuram	Nilambur South	13	298.93700
17	Kozhikode	Kozhikode	104	1,544.99140
18	Kannur & Kasargod	Kannur	75	1,154.17850
19	Wayanad	Wayanad North	74	903.54010
20	Wayanad	Wayanad South	65	2,098.62577
21	Wayanad	Wayanad (Wild Life)	1	5.23058
		<b>Total</b>	<b>1,112</b>	<b>14,910.39594*</b>

\* Out of the total 14910.39 Ha of the notified EFL area, 14,905.17 Ha was notified u/s 3 of EFL Act and an extent of 5.23 Ha (Serial No.21) was notified u/s 4 till July 2015.

**Appendix 3.2**  
**Details showing delay in notifying as EFL in respect of proposals received in**  
**Custodian's Office**  
**(Reference: Paragraph 3.5.2;Page:30)**

Sl. No.	Division	Date of receipt of proposal	Area (in Ha)	Delay as on 31 December 2015 (in years)	Reason for delay
1	Nenmara	27.11.2008	0.9120	7	Sample plot details sought from sub office
2	Palakkad	20.05.2010	12.9800	5.5	Report sought from CCF (Eastern Circle)
3	Thrissur	08.10.2010	2.1034	5	Sample plot details sought from sub office
4	Palakkad	23.12.2011	7.6100	4	Sample plot details sought from sub office
5	Palakkad	20.11.2012	2.1450	3	Court Stay
6	South Wayanad	31.12.2013	6.0000	2	Sample plot details sought from sub office
7	Nilambur South	05.03.2014	1.9230	1.8	Sample plot details sought from sub office
8	Thrissur	25.03.2014	0.6072	1.8	Sample plot details sought from sub office
9	Nilambur North	04.06.2014	4.0480	1.5	Sample plot details sought from sub office
10	Kozhikode	30.06.2014	6.8790	1.5	Under enquiry by Custodian
11	Mannarkkad	28.10.2014	21.2120	1	Sample plot details sought from sub office
12	Mannarkkad	28.10.2014	4.8562	1	Sample plot details sought from sub office
13	Palakkad	12.11.2014	0.3346	1	Sample plot details sought from sub office
14	Thrissur	22.11.2014	2.5334	1	Sample plot details sought from sub office
15	Marayoor	27.11.2014	79.5000	1	Sample plot details sought from sub office
16	Palakkad	06.03.2015	6.0703	0.8	Sample plot details sought from sub office
17	Nenmara	20.06.2015	2.8210	0.5	Sample plot details sought from sub office
18	Nilambur North	09.12.2015	0.6550	-	Sample plot details sought from sub office
<b>Total</b>			<b>163.1901</b>		

**Appendix 4.1**  
**Statement showing reduction in required amount**  
**(Reference: Paragraph 4.5.3; Page:41)**

Sl. No.	Name of Watershed	Project cost (₹ in crore)	Item	Quantity approved (m <sup>2</sup> )	Rate approved (₹ per m <sup>2</sup> )	Prevalent rate (₹ per m <sup>2</sup> )	Difference in rate (₹ per m <sup>2</sup> )	Amount reduced (₹ in crore)
<b>RIDF XIX</b>								
1.	Potta, Thrissur	1.65	Stone pitched contour bund (with quarried stone)	44100	143.52	225.446	81.926	0.36
2.	Kavungal <i>thodu</i> , Malappuram	0.92	Stone pitched contour bund (with quarried stone)	12700	143.52	225.446	81.926	0.10
3.	Areeckal <i>thodu</i> , Kottayam	1.39	Stone pitched contour bund (with quarried stone)	40000	143.52	225.446	81.926	0.33
			Stone pitched contour bund (with non quarried stone)	10000	114.84	180.39	65.55	0.07
4.	Chathirur-Mangad, Kannur	1.38	Stone pitched contour bund (with quarried stone)	61000	143.52	225.446	81.926	0.50
5.	Alachakonam, Trivandrum	0.74	Stone pitched contour bund (with quarried stone)	35000	143.52	225.446	81.926	0.29
6.	Kochukoyikkal, Pathanamthitta	1.00	Stone pitched contour bund (with quarried stone)	50000	143.52	225.446	81.926	0.41
7.	Valliyankavu, Idukki	1.10	Stone pitched contour bund (with quarried stone)	65000	165.048	259.26	94.212	0.61
8.	Meenmutty, Idukki	1.15	Stone pitched contour bund (with quarried stone)	50000	165.048	259.26	94.212	0.47
9.	Mylapra, Pathanamthitta	1.69	Stone pitched contour bund (with quarried stone)	50000	143.52	225.446	81.926	0.41
10.	Adukkalampady, Kasargod	1.01	Stone pitched contour bund (with quarried stone)	37000	143.52	225.446	81.926	0.30
11.	Blavady, Kollam	1.25	Stone pitched contour bund (with quarried stone)	309000	143.52	225.446	81.926	0.25
			Stone pitched contour bund (with non quarried stone)	4400	114.84	180.39	65.55	0.03
12.	Kozhimalakandam, Idukki	0.85	Stone pitched contour bund (with quarried stone)	45000	165.048	259.26	94.212	0.42
13.	Kappathodu, Thrissur	2.78	Stone pitched contour bund (with quarried stone)	15000	143.52	225.446	81.926	0.12
14.	Kunduthodu-chiramanangad, Thrissur	2.17	Stone pitched contour bund (with quarried stone)	3000	143.52	225.446	81.926	0.02

Sl. No.	Name of Watershed	Project cost (₹ in crore)	Item	Quantity approved (m <sup>2</sup> )	Rate approved (₹ per m <sup>2</sup> )	Prevalent rate (₹ per m <sup>2</sup> )	Difference in rate (₹ per m <sup>2</sup> )	Amount reduced (₹ in crore)
15.	Anayankunnu Parathodu, Kozhikode	1.00	Stone pitched contour bund (with quarried stone)	41518	143.52	225.446	81.926	0.34
16.	Nelliyeri, Kozhikode	0.65	Stone pitched contour bund (with quarried stone)	16000	143.52	225.446	81.926	0.13
17.	Cherukad, Kozhikode	0.60	Stone pitched contour bund (with quarried stone)	20000	143.52	225.446	81.926	0.16
18.	Rajagiri, Kannur	1.65	Stone pitched contour bund (with quarried stone)	78000	143.52	225.446	81.926	0.64
			Stone pitched contour bund (with non quarried stone)	2000	114.84	180.39	65.55	0.01
19.	Randamkadavu, Kannur	1.80	Stone pitched contour bund (with quarried stone)	73000	143.52	225.446	81.926	0.60
			Stone pitched contour bund (with non quarried stone)	3300	114.84	180.39	65.55	0.02
20.	Kuzhikkalthodu, Kannur	0.75	Stone pitched contour bund (with quarried stone)	30000	143.52	225.446	81.926	0.25
21.	Kolanchithodu, Kannur	0.96	Stone pitched contour bund (with quarried stone)	45500	143.52	225.446	81.926	0.37
			Stone pitched contour bund (with non quarried stone)	3300	114.84	180.39	65.55	0.02
22.	Kanhirakolly, Kannur	1.49	Stone pitched contour bund (with quarried stone)	8300	143.52	225.446	81.926	0.07
			Stone pitched contour bund (with non quarried stone)	2000	114.84	180.39	65.55	0.01
23.	Edappuzha Manchodu, Kannur	1.11	Stone pitched contour bund (with quarried stone)	42000	143.52	225.446	81.926	0.34
24.	Addakkathodu, Kannur	1.50	Stone pitched contour bund (with quarried stone)	70000	143.52	225.446	81.926	0.57
			Stone pitched contour bund (with non quarried stone)	2000	114.84	180.39	65.55	0.01
<b>Total</b>		<b>30.59</b>						<b>8.23</b>
25.	Adampara watershed, Kannur	1.95	Stone pitched contour bund (quarried stone)	1,00,000	143.52	281.0774	137.5574	1.38
			.. (without quarrying)	2000	114.84	224.9089	110.0689	0.02
			Agrostological measures	30000 /RM	8.80/ RM	10.9673/ RM	2.1673/ RM	0.007
26.	Karalam-Mankayam (Vellarikundu) watershed, Kasargod	2.05	Stone pitched contour bund (quarried stone)	60000	143.52	281.0774	137.5574	0.83
			.. (without quarrying)	5000	114.84	224.9089	110.0689	0.06

Sl. No.	Name of Watershed	Project cost (₹ in crore)	Item	Quantity approved (m <sup>2</sup> )	Rate approved (₹ per m <sup>2</sup> )	Prevalent rate (₹ per m <sup>2</sup> )	Difference in rate (₹ per m <sup>2</sup> )	Amount reduced (₹ in crore)
			Agrostological measures	30000 / RM	8.80/ RM	10.9673/ RM	2.1673/ RM	0.007
			Earthern Bund	2500 / RM	61.83/ RM	77.0848/ RM	15.2548/ RM	0.004
27.	Poyyamala – Ilimukku, Kannur	1.95	Stone pitched contour bund (quarried stone)	22000	143.52	281.0774	137.5574	0.30
			Agrostological measures	20000 / RM	8.80 / RM	10.9673/ RM	2.1673 / RM	0.004
<b>Total</b>		<b>5.95</b>						<b>2.61</b>

**Appendix 4.2**  
**Details of NABARD assisted RIDF schemes under implementation by the**  
**Directorate of Soil Survey and Soil Conservation**  
**(as on 30 November 2015)**  
**(Reference: paragraph 4.8.4; Page:45)**

SI No.	RIDF Tranche	No. of project sanctioned	Project area (Ha)	Project cost (₹ in crore)	Cumulative achievement		Achievement		Completed/ Ongoing
					Physical (Ha)	Financial (₹ in crore)	Physical (%)	Financial (%)	
1	RIDF I	40	5,902	10.13	5,718	9.96	97	98	completed
2	RIDF II	32	8,725	12.93	7,859	10.87	90	84	completed
3	RIDF III	40	13,423	21.61	10890	18.45	81	85	completed
4	RIDF VI	20	6,220	10.23	4,627.5	8.45	74	83	completed
5	RIDF VII	40	13,694	17.79	9,768.92	16.17	71	91	completed
6	RIDF VIII	12	6,128	6.47	3,562.8	5.55	58	86	completed
7	RIDF IX	7	3,199	4.65	2503	3.78	78	81	completed
8	RIDF X	51	28,537	35.52	16,641	27.52	58	77	completed
9	RIDF XI	3	1,200	2.49	639	0.89	53	36	completed
10	RIDF XII	25	10,577	18.58	8,987.5	17.03	85	92	completed
11	RIDF XIII	10	4,088	7.14	3,952.97	6.87	97	96	completed
12	RIDF XIV	13	4,338	9.5	4,135.56	9.04	95	95	ongoing
13	RIDF XV	22	8,158	15.6	7,245.98	13.76	89	88	ongoing
14	RIDF XVI	11	4,049	9.84	3763	8.73	93	89	ongoing
15	RIDF XVII	31	12,554	26.2	10,709.84	22.83	85	87	ongoing
16	RIDF XIX	68	33,320	87.53	14,830.73	37.77	45	43	ongoing
17	RIDF XX	6	5,816	27.35	0	0.005	0	0	ongoing
		56 ponds	1,458						
	<b>Grand total</b>	<b>431</b>	<b>1,71,386</b>	<b>323.56</b>	<b>1,15,834.8</b>	<b>217.67</b>			

**Appendix 5.1**  
**Statement showing the works executed during the period 2011-15 treating as**  
**ordinary repairs**  
**(Reference: paragraph 5.6; Page:52)**

Sl. No.	Name of work	Division	Total claim disallowed (₹ in lakh)
1.	Renewal/IRQP from km 231/000 to km 263/444 of NH-17	Kozhikode	1251.14
2.	Resurfacing NH-212 km 66/00 to km 76/00	Kozhikode	656.18
3.	Periodical renewal (PR) of NH-17 providing 50mm BM and 25mm BC km 194/610 to km 206/500	Kozhikode	1,042.86
4.	Repairs to Railway overbridge at Vengali, Vengalam and Chengathukavu on NH-17	Kozhikode	179.82
5.	PR 2010-11, providing BM and BC in km 29/000 to km 41/000 of NH-17	Kannur	664.56
6.	Resurfacing of NH-17 from km 58/000 to km 63/000	Kannur	464.05
7.	Improvements to Kondotty town km 27/500 to km 29/150 of NH-213	Malappuram	330.90
8.	Widening of NH-213 between Angadipuram and Perinthalmanna	Malappuram	336.46
9.	Monsoon work NH-49 Madurai-Kochi road 40mm BC between km 279/000 to km 286/610	Muvattupuzha	349.99
10.	NH-17 2013-14 providing 1.20 x 1.50 span slab culvert and drainage facilities (km 331/500 to km 331/750)	Malappuram	19.93
11.	NH-212 – resurfacing work between km 97/600 to km 117/600 in Wayanad district	Kozhikode	580.53
12.	NH-213 for 2013-14 extension of culvert drain (km 41/040 and km 40/700) and (km 42/800 and km 43/200)	Malappuram	4.62
13.	NH-213 for 2013-14 extension of culvert drain at km 79/200 (left side)	Malappuram	4.98
14.	NH-213 for 2013-14 extension of culvert at km 46/800	Malappuram	4.95
15.	NH-47 Resurfacing work from Vadakkancherry to Vaniyampara (km 240/000 to km 249/000 and Vazhukumpara to Mannuthy)	Kodungallur	1,526.00
16.	Repairs to damaged drain in providing cover slabs between km 70/800 to km 70/900 (right side)	Malappuram	2.99
17.	Repairs to damaged drain in providing cover slabs between km 70/900 to km 71/000 (right side)	Malappuram	3.00
<b>Total</b>			<b>7,422.96</b>