

Appendix 1.1

Year-wise break up of outstanding Inspection Reports (IRs) as on 30 June 2019

(Reference: Paragraph 1.6.1 - Page: 4)

Year	Up to 2015-16	2016-17	2017-18	2018-19	2019-20 (Upto 30 June 2019)	Total
PUBLIC WORKS DEPARTMENT						
Number of IRs	224	36	31	07	04	302
Number of paragraphs	1,070	262	277	79	19	1,707
Number of IRs for which initial reply has not been received (number of paragraphs)	11(82)	06(56)	16(122)	02(22)	06(38)	41(320)
AGRICULTURE DEVELOPMENT & FARMERS' WELARE DEPARTMENT (CROP HUSBANDRY)						
Number of IRs	133	NIL	03	10	10	156
Number of paragraphs	271	NIL	27	66	67	431
Number of IRs for which initial reply has not been received (number of paragraphs)	03(16)	02(17)	04(30)	NIL	NIL	09(63)
ANIMAL HUSBANDRY DEPARTMENT						
Number of IRs	21	NIL	46	NIL	NIL	67
Number of paragraphs	37	NIL	150	NIL	NIL	187
Number of IRs for which initial reply has not been received (number of paragraphs)	05(08)	NIL	20(56)	NIL	NIL	25(64)
SOIL SURVEY AND SOIL CONSERVATION DEPARTMENT						
Number of IRs	06	NIL	NIL	18	01	25
Number of paragraphs	15	NIL	NIL	82	06	103
Number of IRs for which initial reply has not been received (number of paragraphs)	01(09)	NIL	NIL	18(82)	NIL	19(91)
DAIRY DEVELOPMENT DEPARTMENT						
Number of IRs	04	NIL	08	NIL	NIL	12
Number of paragraphs	07	NIL	67	NIL	NIL	74
Number of IRs for which initial reply has not been received (number of paragraphs)	02(03)	NIL	03(37)	NIL	NIL	05(40)
FOREST AND WILD LIFE DEPARTMENT						
Number of IRs	100	19	03	NIL	NIL	122
Number of paragraphs	294	126	14	NIL	NIL	434
Number of IRs for which initial reply has not been received (number of paragraphs)	02(04)	06(61)	NIL	NIL	NIL	08(65)

Year	Up to 2015-16	2016-17	2017-18	2018-19	2019-20 (Upto 30 June 2019)	Total
CO-OPERATION DEPARTMENT						
Number of IRs	24	06	02	20	NIL	52
Number of paragraphs	80	47	21	166	NIL	314
Number of IRs for which initial reply has not been received (number of paragraphs)	05(28)	05(34)	01(17)	20(155)	NIL	31(234)
FOOD, CIVIL SUPPLIES AND CONSUMER AFFAIRS DEPARTMENT						
Number of IRs	59	NIL	11	21	09	100
Number of paragraphs	138	NIL	73	194	105	510
Number of IRs for which initial reply has not been received (number of paragraphs)	05(12)	NIL	11(71)	21(194)	09(105)	46(382)
HARBOUR ENGINEERING						
Number of IRs	13	NIL	04	04	NIL	21
Number of paragraphs	28	NIL	32	17	NIL	77
Number of IRs for which initial reply has not been received (number of paragraphs)	NIL	NIL	NIL	NIL	NIL	NIL
FISHERIES DEPARTMENT						
Number of IRs	16	NIL	20	08	NIL	44
Number of paragraphs	38	NIL	160	75	NIL	273
Number of IRs for which initial reply has not been received (number of paragraphs)	01(01)	NIL	18(128)	NIL	NIL	19(129)
PORT & HYDROGRAPHIC SURVEY WING						
Number of IRs	11	1	NIL	8	NIL	20
Number of paragraphs	22	10	NIL	33	NIL	65
Number of IRs for which initial reply has not been received (number of paragraphs)	02(04)	01(10)	NIL	07(30)	NIL	10(44)
ENVIRONMENT AND CLIMATE CHANGE DEPARTMENT						
Number of IRs	NIL	NIL	NIL	NIL	01	01
Number of paragraphs	NIL	NIL	NIL	NIL	20	20
Number of IRs for which initial reply has not been received (number of paragraphs)	NIL	NIL	NIL	NIL	01(20)	01(20)
					Total IR	922
					Total Paras	4,195
					Initial replies not received (IR(Para))	214(1,452)

Appendix 2.1

Composition of the General Council

(Reference: Paragraph 2.1.1- Page: 6)

Sl. No.	Designation
Ex-Officio members	
1	The Chancellor;
2	The Pro-Chancellor;
3	The Vice-Chancellor;
4	The Agricultural Production Commissioner;
5	The Principal Secretary, the Secretary or the Special Secretary to Government, as the case may be, in the Departments of Agriculture, Finance, Fisheries and Animal Husbandry.
6	The Director of Agriculture;
7	The Director of Animal Husbandry;
8	The Director of Dairy Development;
9	The Director of Fisheries;
10	The Principal Chief Conservator of Forests;
11	The Chairman, Rubber board.
12	The Chairman, Spices Board.
13	The Chairman, Marine Products Export Development Authority.
14	The Director, Central Plantation Crops Research Institute.
15	The Director, Kerala Forest Research Institute.
16	One representative of the Indian Council of Agricultural Research.
17	The Member of the Legislative Assembly representing the constituency in which the Headquarters of the University is situated.
Elected members	
1	Four members elected according to the principles of proportional representation by means of single transferable vote by the members of the Legislative Assembly from among themselves of whom one shall be a member belonging to a Scheduled Caste or a Scheduled Tribe;
2	One member elected by the Deans of Faculties of the University from among themselves.
3	Four members elected by the teachers of the University from among themselves according to the principles of proportional representation by means of single transferable vote.
4	Two members elected by the students of the University from among themselves according to the principles of proportional representation by means of single transferable vote.
5	Two members elected by the non-teaching staff of the University from among themselves according to the principles of proportional representation by means of single transferable vote.
6	Two members elected by the permanent labourers of the University from

	among themselves according to the principles of proportional representation by means of single transferable vote.
Members nominated by the Chancellor	
1	Four eminent Scientists in the field of agriculture and allied subjects from the concerned university or from outside
2	Four farmers of whom one shall be a member belonging to a Scheduled Caste or a Scheduled Tribe and one shall be women.
3	One Member from the association of planters Kerala.
4	Two Presidents of Grama Panchayath.
Other Members	
1	Three members to represent respectively the University of Calicut, Cochin and Kerala, elected by the Senates of the respective Universities.
2	One representative of the Indian Council of Agricultural Research.
3	The member of the Legislative Assembly representing the constituency in which the Headquarters of the University is situated.

Source: University Records

Note:

1. General Council : The Act prescribes that the General Council shall meet at least once in four months. During the period 2014-15 to 2018-19, 15 meetings were held against the prescribed 15.
2. In the composition shown above, one representative of the Indian Council for Agricultural Research and one member of the Legislative Assembly representing the constituency in which the Headquarters of the University is included under both 'Ex-officio' members and 'Other members'.

Appendix 2.2

Composition of the Executive Committee

(Reference: Paragraph 2.1.1 - Page: 6)

Sl. No.	Designation
Ex-Officio members	
1	The Vice-Chancellor;
2	The Agricultural Production Commissioner and the Principal Secretary, the Secretary or the Special Secretary to Government as the case may be in the Finance department.
Other Members	
1	The member representing the Indian Council of Agricultural Research in the General Council;
2	One Dean of Faculty elected by the General Council;
3	One member elected from among the teachers in the General Council, by the Council;
4	Five non-official members of the General Council elected by the Council of whom one shall be a member belonging to a Scheduled Caste and Scheduled Tribe and one shall be a women.
5	The member of the Legislative Assembly representing the constituency in which the Headquarters of the University is situated.

Source: University Records

Note:

The Executive Committee shall meet as and when required. During the period 2014-15 to 2018-19 and a total of 40 meetings were held.

Appendix 2.3

Composition of the Academic Council

(Reference: Paragraph 2.1.1 - Page: 6)

Sl. No.	Designation
1	The Vice-Chancellor;
2	The Deans of Faculties;
3	The Director of Research;
4	The Director of Extension;
5	The Director of Students Welfare;
6	The Librarian;
7	Six members from among the Heads of Departments of the Faculties, nominated by the Chancellor on rotational basis.
8	Three members from among the staff of the research stations of the University, nominated by the Chancellor;
9	Two members from among the Post-Graduate students and one member from among the Research Students of the University, elected in such manner as may be prescribed;
10	One member elected by the teachers (other than the Dean) of each Faculty, from among themselves;
11	The Registrar,
12	Such other members as may be prescribed.
13	The Academic Council may co-opt as members, not more than ten persons for such periods and in such manner as may be prescribed, so as to secure adequate representation to different aspects of agriculture.

Source: University Records

Note:

As per the Statute, the Academic Council shall meet every trimester. But the University switched over to semester system. The Council had met 12 times during the period 2014-15 to 2018-19.

Appendix 2.4

Posts of Teaching Staff not having Statutes

(Reference: Paragraph 2.5.1.1- Page: 9)

Sl. No.	Post
1	Director of Education
2	Director of Students Welfare
3	Director (Planning)
4	Dean, Forestry
5	Controller of Examination
6	Associate Dean College of Agriculture, Padannakad
7	Associate Dean, College of Horticulture, Vellanikkara
8	Associate Dean, College of Agriculture, Ambalavayal
9	Associate Dean (CCBM)
10	Special Officer, ACCER
11	Associate Director of Research (Planning)
12	Associate Director of Research (GA)
13	Associate Director of Research (M&E)
14	Associate Director of Research (Coconut Mission)
15	Associate Director of Research (Vegetable Mission)
16	Associate Director of Research (NZ), Pilicode
17	Associate Director of Research (Seeds)
18	Associate Director of Research RARS, Kumarakom
19	Associate Director of Research, College of Agriculture, Vellayani
20	Associate Director of Research, RARS, Pattambi
21	Associate Director of Extension (South Zone)
22	Teaching Staff, ACCER

Source: University Records

Appendix- 2.5

Programmes/Colleges not granted Accreditation by NAEAB in September 2020

(Reference: Paragraph 2.5.2.2 - Page: 16)

Sl.	Name of the Programme/College	Reason	Action taken by the University
1	M. Sc.(Ag) in Agricultural Entomology & Nematology in CoA, Vellayani	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Appeal for granting accreditation furnished as Department of Agricultural Entomology and Department of Nematology are two separate Departments of College of Agriculture, Vellayani, of which accreditation was requested only for the Department of Agricultural Entomology.
2	M. Sc. (Hort) in Pomology & Floriculture in CoA, Vellayani	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Appeal for granting accreditation given as 134 th Meeting of the Academic Council held on 13/12/2019 had bifurcated Department of Pomology and Floriculture into two separate Departments, viz., Department of fruit science and Department of Floriculture & Landscaping as per ICAR nomenclature.
3	Ph. D in Agricultural Entomology & Nematology in College of Agriculture, Vellayani	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Appeal for granting accreditation furnished as Department of Agricultural Entomology and Department of Nematology are two separate Departments of College of Agriculture, Vellayani, of which accreditation was requested only for the Department of Agricultural Entomology.
4	Ph. D in Pomology & Floriculture in College of Agriculture, Vellayani	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Appeal for granting accreditation given as 134 th Meeting of the Academic Council held on 13/12/2019 had bifurcated Department of Pomology and Floriculture into two separate Departments, viz., Department of fruit science and Department of Floriculture & Landscaping as per ICAR nomenclature.
5	B. Tech in Food Engineering in KCAE & T, Tavanur	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Appeal given. The nomenclature and syllabus was changed as per the recommendation of the ICAR's 5 th Deans' committee in 2019 as B.Tech (Food Technology). From 2020 admission onwards, KAU is admitting students to B.Tech (Food Technology) programmes.
6	Ph. D in Processing & Food Engineering in KCAE & T, Tavanur	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Appeal furnished to ICAR. The nomenclature of this programme has been changed from Ph. D in Agricultural Processing & Food Engineering to Ph. D in Processing & Food Engineering from 2019 admission onwards as per the recommendation of ICAR.

Sl.	Name of the Programme/College	Reason	Action taken by the University
7	College of Co-Operation, Banking & Management, Vellanikkara, KAU, Thrissur and its following programmes <ul style="list-style-type: none"> • B.Sc. (Hons.) Co-Operation & Banking • M.Sc. (C&B) in Rural Marketing Management • M.Sc. (C&B) in Rural Banking & Finance Management • M.Sc. (C&B) in Co-operative Management • Ph.D (C&B) in Rural Marketing Management 	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Academic Council has decided to have further discussions with stakeholders regarding changing the nomenclature of programmes as it may affect employment of the graduates.
8	Academy of Climate Change Adaption Education Sit Research Vellanikkara, KAU, Thrissur and its following programmes <ul style="list-style-type: none"> • B.Sc. (Integrated) Climate Change Adaptation • M.Sc. (Integrated) Climate Change Adaptation 	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Changed to 4+2 system as per ICAR guidelines.
9	Integrated B.Sc. and M. Sc. programmes in Biotechnology	Not approved for accreditation on the ground Degree nomenclature not adhering to ICAR guidelines.	Changed to 4+2 system as per ICAR guidelines.

Source: University Records

Appendix 2.6

Details of laboratory equipment as per the Fifth Deans' Committee and in actual possession of College of Agriculture, Ambalavayal

(Reference: Paragraph 2.5.2.5 - Page: 21)

Sl. No.	Name of equipment	Requirement (MSHAE)	In the possession of College	Shortfall
1	Different types of ovens	14	4	10
2	Different types of microscopes	67	2	65
3	Different types of balances	39	18	21
4	Different types of cameras	8	1	7
5	Computers	37	3	34
6	Moisture box	30	0	30
7	Tube Auger	10	1	9
8	Bucket auger	10	0	10
9	Seed germinator	6	0	6
10	Conductivity meter	2	1	1
11	pH Meter	9	1	8
12	Moisture meter	7	0	7
13	Chlorophyll meter	1	0	1
14	Brix meter	2	3	-1
15	Water bath	6	0	6
16	Shaker	4	2	2
17	Drip and Sprinkler System	3	5	-2
18	Meter Scale	10	0	10
19	Tape	5	5	0
20	LCD projector	1	1	0
21	Digital voice recorders	5	0	5
22	Audio recording-mixing consoles	1	0	1
23	Insect box	60	17	43
24	Insect collection nets	60	5	55
25	Collection bottles	60	5	55
26	Insect collection big boxes for museum (1 for each order)	29	2	27
27	Soxhlet Extraction Apparatus	1	0	1
28	Patters Tower	1	0	1
29	Fumigation Chamber 01	1	0	1
30	Automatic seed/grain counter	1	0	1
31	BOD Incubator	3	2	1
32	Centrifuge	4	0	4
33	Growth chamber	1	0	1
34	Distillation assembly	2	1	1

Sl. No.	Name of equipment	Requirement (MSHAE)	In the possession of College	Shortfall
35	Hand refractometer	5	2	3
36	Digital refractometer	2	2	0
37	Refrigerator	3	1	2
38	Deep Freezer	2	1	1
39	Fruit crusher	1	1	0
40	Grinding and mixing machine	1	1	0
41	Grafting and budding knife	60	70	-10
42	Secateur	60	60	0
43	Saw	5	10	-5
44	Loppers	5	5	0
45	Mist Chamber	1	10	-9
46	Poly house with drip irrigation system	2	10	-8
47	Muffle furnace	1	0	1
48	Fruit penetrometer	2	0	2
49	Pulper	1	1	0
50	Juice extractor	1	1	0
51	Crown corking machine	1	1	0
52	Spectrophotometer	2	1	1
53	Poly pouch sealer	1	1	0
54	Crusher	1	1	0
55	Masala grinder	1	1	0
56	Dehydrator	1	1	0
57	Cold room	1	0	1
58	Vacuum pump	2	0	2
59	EC Meter	5	1	4
60	Flame Photometer	1	1	0
61	Hot Plate	3	1	2
62	Distilled water unit	3	1	2
63	Autoclave	4	4	0
64	Laminar Air Flow	1	3	-2
65	Digestion block	2	1	1
66	Hydrometer	5	0	5
67	Infiltrimeter	2	0	2
68	Atterberg's limits meter	5	0	5
69	Nitrogen Analyser	2	1	1
70	Thermometer Max	5	3	2
71	Thermometer Min	5	3	2
72	Digital Anemometer	2	0	2
73	Cup Anemometer	2	1	1

Sl. No.	Name of equipment	Requirement (MSHAE)	In the possession of College	Shortfall
74	Pan Evaporimeter	1	1	0
75	Soil thermometers	15	9	6
76	Rain gauges	2	2	0
77	Sunshine Recorder	1	1	0
78	Stevenson's Screen	1	1	0
79	Thermograph	1	1	0
80	Hygrograph	1	1	0
81	Soil Heat Flux Plate	1	0	1
82	GPS	10	1	9
83	AWS (optional)	1	2	-1
84	Lysimeter (optional)	1	0	1
85	Luxmeter	2	0	2
86	Solar Pyranometer	1	2	-1
87	Sterobinocular	5	0	5
88	Sample processing board (Dry preservation of samples)	4	0	4
89	Wet preservation jars	50	0	50
90	Incubator	2	0	2
91	Ocular meter	5	0	5
92	Stage Micrometer	5	0	5
93	5000/6500 Feed and Forage Analyzer	1	0	1
94	Micro kjeldahl N digestion & distillation apparatus	1	0	1
95	Soxhlet unit for fat estimation	1	0	1
96	Willy mill grinder	1	0	1
97	Milk analyzer (automatic)	1	0	1
98	Crude fiber estimation unit	1	0	1
99	Incubator cum hatcher	1	1	0
100	Brooder machine	1	0	1
101	Feeder	1	0	1
102	Waterer	1	0	1
103	Egg candling machine	1	0	1
104	Debeaker	1	0	1
105	Vaccinator	1	0	1
106	Chaff cutter	1	0	1
107	Lactometer	1	0	1
108	Castrator	1	0	1
109	Shearer	1	1	0
110	Electric dehorner	1	0	1

Sl. No.	Name of equipment	Requirement (MSHAE)	In the possession of College	Shortfall
111	Artificial vagina	1	0	1
112	Common medication device	1	1	0
113	Cattle crate	1	0	1
114	Seed drill	1	0	1
115	Working models of reaper and mowers	2	0	2
116	Cut model of CI & SI engine	1	0	1
117	Cut model of tractor	1	0	1
118	Internet Server	1	0	1
119	Intranet Server	1	0	1
120	Heavy duty photocopiers	2	1	1
121	Computerized Issue and Catalogue Systems	2	0	2
122	CCTV monitoring system for library	1	0	1
123	RFID and Access Control System (Optional)	1	0	1
124	Broadband Internet Connectivity with minimum speed of 1Gbps	1	0	1
Total		853	305	548

Source: University Records

Appendix 3.1

Instances of duplicate invoices submitted for different works

(Reference: Paragraph 3.1 - Page: 43)

Sl. No.	Invoice No. and Date	Amount (₹)	Quantity (MT)	Work for which bitumen was purchased (as noted in the invoice)	Work to which copy of the invoice was submitted in support of purchase of bitumen
1	63000592718 dated 27/03/2017	3,11,884	9.720 VG 30	Thavinjal-Valad-Kunjome road, km 0/000 to 8/300 under Roads Division, Wayanad, Contractor: Farooque Constructions, Alappuzha	Thavinjal-Valad-Kunjome road, km 0/000 to 8/300 under Roads Division, Wayanad Contractor : Farooque Constructions, Alappuzha (Quintuplicate copy submitted)
2	6300016644 dated 16/05/2017	2,30,012	6.370 Emulsion	Airport road-Providing DBM to Thalassery -Irikkur road from km 3/300 to 15/000 under Roads Division, Kannur. Contractor: Farooque Constructions, Alappuzha	Thavinjal-Valad-Kunjome road, km 0/000 to 8/300 under Roads Division, Wayanad Contractor : Farooque Constructions, Alappuzha (Quintuplicate copy submitted)
3	4550075564 dated 18/01/2018	2,96,987	7.826 Emulsion	Improvements and providing BM&BC to Methurumba - Chapparappadavu - Kuttoor road km 16/450 to 23/285 under Roads Division, Kannur. Contractor: M/s Abcon Engineering, Kasaragod	Improvements and providing BM&BC to Methurumba - Chapparappadavu - Kuttoor road km 16/450 to 23/285 under Roads Division, Kannur. Contractor M/s Abcon Engineering, Kasaragod (Duplicate copy submitted)
4	4550067335 dated 30/12/2017	1,19,312	3.094 Emulsion	Manvila-pullukadavu road km 0/000 to 3/000 under Roads Division, Thiruvananthapuram. Contractor: Sri. A. Thajudeen	Improvement to Karattee-Nagaroor-Puthusserymukku road, from chainage 0/000 to 4/000 under Roads Division, Thiruvananthapuram. Contractor Sri. A. Thajudeen (Duplicate copy submitted)
5	4550017329 dated 25/08/2017	2,64,139	9.469 VG30	Mechira-Sastampara-Vilappilsala road under Roads Division, Thiruvananthapuram. Contractor: Sri. A. Thajudeen	Improvement to Karattee-Nagaroor-Puthusserymukku road, from chainage 0/000 to 4/000 under Roads Division, Thiruvananthapuram. Contractor Sri. A. Thajudeen (Duplicate copy submitted)
		₹12,22,334	36.48 MT		

Source: Department Records

Appendix 3.2

Details of the additional payments made to the contractors on account of the inadmissible items

(Reference: Paragraph 3.2 - Page: 45)

Sl. No. & Name of bridge work	Items included in the Original Estimate	Additional/extra items included in the Revised Estimate corresponding to the items under Col. 2	Expenditure on the additional/extra items (₹)	Remarks
1	2	3	4	
1. Construction of Chekki-kkadavu Bridge	<p>Item-7: Sinking of RCC (M 200) circular well of 9m external dia and 6.60m internal dia in all classes of soil other than rock to lines and levels and plumb by scooping out earth from inside and below steining with dredgers or any other applications for abutment wells including hire charges, labour charges, dewatering, casting, vibrating, removal of obstacles, dumping the spoil at suitable places with all leads and lifts, incidental expenses etc. complete as per standard specifications and as directed by the departmental officers.</p> <p>Item-8: Sinking of RCC circular well of 6.50 m outer dia and 4.30m inner dia in all classes of soil other than rock to lines and levels and plumb by scooping out earth from inside and below steining with dredgers or any other applications for abutment wells including hire charges, labour charges, dewatering, casting, vibrating, removal of obstacles, dumping the spoil at suitable places with all leads and lifts, incidental expenses etc. complete as per standard specifications and as directed by the departmental officers.</p>	Item No.30 of Appendix A: Actual labours & machineries for removal of abstract and seating of wells.	1,35,41,526	According to Sn.1216 (e) of MoRTH specifications for Roads and Bridge works, the contract unit rates for sinking of wells shall cover the cost of labour, tools, equipment and plant and for all operations and other incidentals for sinking of wells including seating. The contract unit rates of items 7 & 8 are inclusive of the items 'hire charges, labour charges' and 'seating of wells' which is incidental to the work 'sinking of well. So, the contractor is not eligible for separate payments for any of these items.
2. Construction of Kariyattukadavu Bridge	Item-5: Sinking of RCC circular well of 6.5 m outer dia and 4.5 m inner dia for foundation of piers in all classes of soil other than rock to lines and levels and plumb by scooping out earth from inside and below steining with dredgers or any other appliances including hire charges, labour charges, dewatering, casting, vibrating, removal of obstacles, dumping the spoil at suitable places with all leads and lifts, incidental expenses etc. complete as per standard specifications and as directed by the departmental officers.	Additional item No.28: Cutting and breaking down in to small pieces boulders more than 40 dm3 and logs of wood more than 100 dm3 in size from below the cutting edge portion of the well kerb etc. complete.	43,17,254	The contract unit rate of item 5 of the original estimate was for sinking of well in all classes of soil, except rock and removal of obstacles irrespective of their size. The contractor quoted rates considering these aspects. So, the contractor was not eligible for separate payments for the

Sl. No. & Name of bridge work	Items included in the Original Estimate	Additional/extra items included in the Revised Estimate corresponding to the items under Col. 2	Expenditure on the additional/extra items (₹)	Remarks
1	2	3	4	
				removal of boulders of more than 40 dm ³ and logs of wood more than 100 dm ³ in size.
		Item No.29: Seating of well in hard rock up to average depth of 50 cm by cutting and breaking down the rock by using Jack hammer, chisel etc. to maintain the well in correct level and embedment in rock etc. complete.		As stated against work No.1, seating of wells' is incidental to the work 'sinking of well. So, the contractor was not eligible for separate payments for that work.
3. Construction of Pathikkalkadavu bridge	Item No.8: : Sinking of RCC circular well of 8.5m outer dia and 6.5m inner dia for foundation of abutments in all classes of soil other than rock to lines and levels and plumb by scooping out earth from inside and below steining with dredgers or any other appliances including hire charges, labour charges, dewatering, casting, vibrating, removal of obstacles, dumping the spoil at suitable places with all leads and lifts, incidental expenses etc. complete as per standard specifications and as directed by the departmental officers.	Extra Item 2: Removal of obstacles and Seating of Well engaging Labour and equipment	20,19,088	The contractor was not eligible for separate payment for removing obstacles and seating of well, for reasons stated in the remarks column against work No.1
	Total		1,98,77,868	

Source: Department Records

Note :

The labour charges and hire charges of machineries for removal of obstacles and seating of wells, claimed as extra items in the revised estimates, were already included in the original estimate by the words, *“including hire charges, labour charges, dewatering, casting, vibrating, removal of obstacles, dumping the spoil at suitable places with all leads and lifts, incidental expenses”*

Appendix 3.3

Details of works involving short recovery of cost of bitumen

(Reference: Paragraph 3.3 - Page: 47)

Agreement No	Rate of bitumen as per Agreement / estimate (₹)	Quantity of bitumen used in the work (in MT)	Amount required to be recovered as per agreement/ estimate (₹) (2x3)	Amount actually recovered (₹)	Short recovery (₹)
1	2	3	4	5	6
SE (K) 60/2015-16 dated 22/08/2015	51,250	531.420	2,72,35,275	1,63,90,874	1,08,44,401
	37,500	25.940	9,72,750	8,00,081	1,72,669
			2,82,08,025	1,71,90,955	1,10,17,070
SE (K)331/2015-16 dated 27/02/2016	50,600	26.403	13,35,992	10,83,958	
	39,283	4.105	1,61,257	1,78,738	
			14,97,249	12,62,696	2,34,553
SE(K)122/2014-15 dated 27/03/2015	54,400	46.173	25,11,811	18,47,040	6,64,771
Total					1,19,16,394

Source: Department Records

Appendix 3.4

The works in which cost of bitumen was neither reimbursed nor recovered

(Reference: Paragraph 3.3 - Page: 48)

SI No	Agreement No	Rate of bitumen as per Agreement / estimate (₹)	Quantity of bitumen used in the work executed	Amount required to be recovered as per agreement /estimate (₹) (3 x 4)	Amount required to be reimbursed to contractors (₹)	Undue benefit to contractors due to non-recovery of cost of bitumen (₹) (5-6)
1	2	3	4	5	6	7
1	SE (K) 138/16-17 dated 10/08/2016	41,000	326.879	1,34,02,039	1,00,24,455	35,20,462
		39,283	23.908	9,39,178	7,96,300	
				1,43,41,217	1,08,20,755	
2	SE(K) 16/17-18 dated 02/06/2017	38,167	557.821	2,12,90,354	1,86,07,729	26,58,458
		39,961	321.971	1,28,66,283	1,27,73,900	
		33,294	55.942	18,62,532	19,79,082	
				3,60,19,169	3,33,60,711	
3	SE(K) 375/15-16 dated 04/03/2016	41,000	400.198	1,64,08,118	1,44,21,476	33,83,388
		39,283	35.556	13,96,746		
				1,78,04,864	1,44,21,476	
4	SE(K) 126/15-16 dated 17/09/2015	41,000	312.598	1,28,16,518	1,05,10,209	30,92,077
		39,283	8.048	3,16,150		
		29,800	15.759	4,69,618		
				1,36,02,286		
5	SE(K) 202/15-16 dated 06/10/2015	50,600	67.694	34,25,316	20,16,682	14,08,634
6	SE(K) 306/15-16 dated 08/02/2016	41,000	10.977	4,50,057	3,95,578	58,082
		39,283	1.590	62,460	58,857	
				5,12,517	4,54,435	
7	SE(K) 9/16-17 dated 20/05/2016	50,600	10.511	5,31,857	64,89,618	17,75,129
		41,000	187.936	77,05,376		
		39,283	5.499	2,16,017		
		29,800	9.616	2,86,557		
				87,39,807		
8	SE (K) 37/2015-16 dated 09/07/2015	41,000	300.205	1,23,08,405	88,59,118	35,10,157
		39,283	20.951	8,23,018	7,62,148	
				1,31,31,423	96,21,266	
9	SE(K) 95/2014-15 dated 24/12/2014	41,320	187.124	77,31,964	48,68,599	30,54,450
		34,975	27.520	9,62,512	7,71,427	
				86,94,476	56,40,026	
10	SE (K) 64/2015-16 dated 26/08/2015	41,320	62.727	25,91,880	21,37,873	5,02,111
		34,975	11.834	4,13,894	3,65,790	
				30,05,774	25,03,663	

SI No	Agreement No	Rate of bitumen as per Agreement / estimate (₹)	Quantity of bitumen used in the work executed	Amount required to be recovered as per agreement /estimate (₹) (3 x 4)	Amount required to be reimbursed to contractors (₹)	Undue benefit to contractors due to non-recovery of cost of bitumen (₹) (5-6)
1	2	3	4	5	6	7
11	SE (K) 99/2016-17 dated 15/07/2016	41,000	125.563	51,48,083	40,75,932	11,10,566
		39,283	18.386	7,22,257	6,83,842	
				58,70,340	47,59,774	
12	SE(K) 300/15-16 dated 06/02/2016	41,000	45.029	18,46,189	12,83,639	6,35,045
		39,283	6.954	2,73,174	2,00,679	
				21,19,363	14,84,318	
13	SE(K) 96/2014-15 dated 24/12/2014	41,320	29.534	12,20,345	7,88,690	5,00,327
		34,975	8.868	3,10,158	2,41,486	
				15,30,503	10,30,176	
14	SE(K) 332/2015-16 dated 27/02/2016	41,000	28.590	11,72,190	8,06,937	3,95,149
		39,283	2.698	1,05,986	79,885	
		29,800	2.497	74,411	70,616	
				13,52,587	9,57,438	
15	SE(K) 4/2015-16 dated 10/04/2015	50,600	9.653	4,88,442	2,83,239	2,22,284
		39,040	1.924	75,113	58,032	
				5,63,555	3,41,271	
16	SE (K) 287/2015-16 dated 27/01/2016	41,000	7.520	3,08,320	2,27,520	96,157
		39,283	1.703	66,899	51,484	
		29,800	0.684	20,383	20,441	
				3,95,602	2,99,445	
17	EE/85/2015-16 dated 16/11/2015	49,610	12.220	6,06,234	3,27,677	3,18,288
		47,238	2.014	95,137	55,406	
				7,01,371	3,83,083	
18	EE/155/2014-15 dated 13/10/2014	55,200	20.216	11,15,923	7,56,761	3,71,526
		41,400	1.786	73,940	61,576	
				11,89,863	8,18,337	
19	EE/128/14-15 dated 29/09/2014	50,800	14.405	7,31,774	5,36,389	2,02,783
		38,100	2.042	77,800	70,402	
				8,09,574	6,06,791	
20	EE/127/14-15 dated 29/09/2014	50,800	17.510	8,89,508	7,54,018	1,31,719
		38,100	1.550	59,055	62,826	
				9,48,563	8,16,844	
21	EE/122/14-15 dated 24/09/2014	50,800	12.353	6,27,532	5,59,254	65,940
		38,100	0.961	36,614	38,952	
				6,64,146	5,98,206	
Total						2,70,12,732

Source: Department Records

Appendix 3.5

The works in which cost of bitumen was recovered / reimbursed partially

(Reference: Paragraph 3.3 - Page: 48)

Sl. No.	Agreement No.	Rate of bitumen as per Agt. /estimate (₹)	Qty. of bitumen used in work	Amount required to be recovered as per Agt. /estimate (₹) (3 x 4)	Amount actually recovered (₹)	Balance to be recovered (₹) (5) – (6)	Amount reimbursed to contractor (₹)	Balance amount due to the contractor (₹)	Net amount due to be recovered from contractors (₹) (7) - (9)
1	2	3	4	5	6	7	8	9	10
1	SE(K) 46/15-16 dated 01/08/2015	41,000	320.600	1,31,44,600	1,28,24,554	3,20,046	1,08,10,989	2,37,080	1,09,926
		39,283	21.238	8,34,292	7,07,801	1,26,491	6,58,522	99,531	
				1,39,78,892	1,35,32,355	4,46,537	1,14,69,511	3,36,611	
2	SE(K) 42/2015-16 dated 24/07/2015	56,580	228.194	1,29,11,217	96,00,042	33,11,175	51,38,527	17,16,666	16,32,322
		41,400	19.165	7,93,431	6,66,954	1,26,477	4,92,836	88,664	
				1,37,04,648	1,02,66,996	34,37,652	56,31,363	18,05,330	
3	SE (K) 76/2012-13 dated 13/07/2012	38,167	818.476	3,12,38,773	2,15,58,163	93,08,015		75,88,304	17,28,957
		33,294	64.710	21,54,455	19,02,686	2,51,769		2,42,523	
				3,33,93,228	2,34,60,849	95,59,784	2,46,24,613	78,30,827	
4	SE(K) 14/2014-15 dated 14/05/2015	50,800	167.211	84,94,319	76,86,243	8,08,076	49,14,684	4,83,944	3,45,376
		38,100	24.095	9,18,020	8,18,236	99,784	8,09,841	78,540	
				94,12,339	85,04,479	9,07,860	57,24,525	5,62,484	
5	SE(K)346/2015-16 dated 02/03/2016	41,000	217.249	89,07,209	77,57,200	11,50,009	60,74,015	8,17,744	3,50,089
		39,283	1.867	73,341	3,14,569	52,030		34,206	
		29,800	9.841	2,93,262					
				92,73,812	80,71,769	12,02,039	60,74,015	8,51,950	
6	SE (K) 42/2013-14 dated 01/06/2013	37,073	65.132	24,14,639	18,85,384	5,29,254	19,82,726	4,25,666	1,03,588
7	SE(K)71/ 2014-15 dated 18/10/2014	41,320	410.502	1,69,61,943	1,67,81,291	1,80,651	1,75,48,757	1,48,222	32,971
		34,975	35.108	12,27,902	11,97,404	30,498		29,956	
				1,81,89,845	1,79,78,695	2,11,149	1,75,48,757	1,78,178	

Sl. No.	Agreement No.	Rate of bitumen as per Agt./estimate (₹)	Qty. of bitumen used in work	Amount required to be recovered as per Agt./estimate (₹) (3 x 4)	Amount actually recovered (₹)	Balance to be recovered (₹) (5) – (6)	Amount reimbursed to contractor (₹)	Balance amount due to the contractor (₹)	Net amount due to be recovered from contractors (₹) (7) - (9)
1	2	3	4	5	6	7	8	9	10
8	SE(K)38/2015-16 dated 10/07/2015	41,000	237.036	97,18,476	87,71,786	9,46,690	67,61,432	6,68,502	2,81,095
		39,283	0.365	14,338	3,52,534	5,547	4,46,099	2,640	
		29,800	11.535	3,43,743					
				1,00,76,557	91,24,320	9,52,237	72,07,531	6,71,142	
9	SE(K)70/2014-15 dated 16/10/2014	41,320	124.755	51,54,877	38,53,090	13,01,787	41,60,007	12,46,478	51,989
		34,975	14.699	5,14,098	3,81,927	1,32,171		1,35,491	
				56,68,975	42,35,017	14,33,958	41,60,007	13,81,969	
10	SE(K)254/2015-16 dated 07/12/2015	41,000	50.016	20,50,656	19,98,914	51,742	14,86,667	32,588	42,042
		39,283	3.646	1,43,226	1,20,338	22,888			
				21,93,882	21,19,252	74,630	14,86,667	32,588	
								Total	46,78,355

Source: Department Records

Appendix 3.6

Salary paid to the crew of 86 idling road rollers

(Reference: Paragraph 3.4 - Page: 50)

Period for which the rollers idled	Number of road rollers idling	Salary paid to the crew (in ₹) during the period 2014-15 to 2018-19
Up to five years	18	5,60,05,448
Five to 10 years	33	6,46,01,196
10 to 15 years	27	5,69,43,712
15 to 20 years	5	23,88,594
Above 20 years	3	34,52,572
Total	86	18,33,91,522 Rounded to ₹18.34 crore

Source: Department Records