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Proceedings of the Chief Commissioner of Coorg.

No. 3030/132-31, dated Bangalore, the 17th November 1931.

READ-

Letter No. A. 2-2924-31, dated the 29th October 1931, from the Commissioner of Coorg, submitting a copy of the Progress Report of the Forest Administration in Coorg for the year 1930-31.

Order thereon—No. 3030/132-31, dated Bangalore, the 17th November 1931.

The total revenue collected during the year was Rs. 3,10,160 against Rs. 5,71,941 in the previous year. The expenditure amounted to Rs. 2,83,147 resulting in a surplus of Rs. 27,013 against Rs. 2,68,231 in 1929-30. The decrease in the revenue is chiefly attributable to the depressed state of trade aggravated by political conditions in India.

- 2. Enumeration and stock mapping work in the Eastern Forests as a preliminary to a revised Working Plan was continued during the year and an area of 46,590 acres was enumerated and stock mapped.
- 3. The total number of offences reported was 38 against 26 in 1929-30.
- 4. Lantana regrowths were uprooted over 526 acres during the year.
- 5. Damage to the cardamom crop by some unknown borer was observed. Specimens of damaged cardamom berries were sent to the Government Entomologist, Coimbatore, for investigation.
- 6. The sandal sale held in December 1930, proved abortive. It was again held in February 1931. Only $162\frac{1}{2}$ tons of clean sandalwood were sold and the price realised was not satisfactory. The large drop in the revenue is chiefly due to this factor.

7. The Department worked satisfactorily throughout the year and its failure to realise the revenue expected of it was due to factors beyond its control. The Chief Commissioner is pleased to record his high appreciation of the work of Mr. Hicks, the Chief Forest Officer.

G. KIRKBRIDE, CAPTAIN, Secretary to the Chief Commissioner.

To-The Chief Forest Officer, Coorg (through the Commissioner of Coorg).

The Secretary to the Government of India, Department of Education, Health and Lands.

PROGRESS REPORT OF THE FOREST ADMINISTRATION IN COORG

FOR THE

YEAR 1930-31.

CHAPTER I.— CONSTITUTION OF STATE FORESTS.

1. ALTERATION IN AREA.

Reserved forests.

1. The area of reserved forests at the beginning of the year was 331,871 acres or 519 sq miles, which remained the same till end of the year. But according to details in Form 7 the total area comes to 331,875 acres or 4 acres in excess over the area given in the last year's report which is due to omission of fractions of acres.

2. Forest Settlements.

2. No expenditure was incurred during the year.

3. DEMARCATION.

3. A sum of Rs. 1,684 was spent during the	year as
follows:—	
(i) Clearing the western boundary in Nagerhole Range (from Lakshmanathirtha to eastern line over 4½ miles, Karmad Sub-Range 4	Rs.
miles and western demarcation line $1\frac{1}{2}$ miles).	200
(ii) Clearing the Coorg-Malabar District boundary in Nagerhole over 10 miles	50
(iii) Clearing the Coorg-Malabar District boundary line in Kutumpole Range from Makut to Udumbe and from Kariahole to Keepalli over 17 miles 1 furlong	82
(iv) Clearing eastern boundary line in Urti Reserve from Nadugani in Nangala village to Kadendi over 5 miles 5 furlongs	245
(v) Clearing demarcation lines in Yedavanad, Nidtha and Malambi over 18 miles 1 furlong.	108
(vi) Clearing reserve lines in Yedavanad, Nidtha, Jainkal and Malambi over 33½ miles	604
(vii) Clearing reserve boundary lines and erecting cairns over 10 miles from Bachandi hole to the jungle of the South Kanara boundary	90-
line at Putya Peraje	395
Total	1,684

The Madras Government will, as usual, meet half the cost of clearing of the common boundary.

4. Forest Surveys.

4. Nil.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. REGULATION OF MANAGEMENT.

Preparation and control of Regular Working Plans. Eastern forests.

5. During the year the following areas were clear-felled and will be regenerated during 1931-32:—

(i)	Tithimatti Range.			acres.	acres.
	Devamachi Coupe	IV	•••	75	
	Ganagur	• • •	•••	10	
	Mallipatna	•••		10	95
(ii)	Nagerhole Range.				
	Kalhalla		7**	75	
	Nagerhole		•••	50	
	Irumani		•••	10	135
			Tota	1	230

6. The enumeration and stock mapping work in the Eastern forests sanctioned by the Chief Commissioner preliminary to revising the Working Plan for the Eastern forests was undertaken and a sum of Rs. 12,620 was spent during the year. A total of 46,590 acres was enumerated and stock mapped.

Ghat forests.

7. Fellings in the $118\frac{1}{2}$ acres coupe in the Urti Reserve leased out during 1929-30 were completed during the year. Another coupe of 124 acres in the Urti Reserve was leased out under the same conditions as those of the previous year for Rs. 1,800, the period of the lease expiring in September 1931.

2. Communications and Buildings.

(a) Roads and bridges.

8. Metalling on spall foundations of the bad portions of the road between Kutta and Nallurpala was continued during the year. 5 furlongs and 380 feet of road were metalled and consolidated.

A sum of Rs. 4,474 was spent on the above work including the cost of collection of metal and spalls, pay of establishment and purchase of explosives, etc. The total expenditure incurred on this road up to the close of the year amounted to Rs. 47,782 against the sanction of Rs. 52,000 thus leaving an unexpended balance of Rs. 4,218.

Metalling the bad portion of Tithimatti-Maldare road was taken up during the year and about half a mile of the road was metalled and consolidated at a cost of Rs. 3,282.

The total expenditure incurred on this road up to the close of the year amounted to Rs. 6,343.

The tramway line from Kariahole to Kunnoth was cleared of weeds for a distance of about 12 miles at a cost of Rs. 95.

9. The total expenditure on roads and bridges for the two divisions including repairs was Rs. 15,308 as against Rs. 18,974 in the previous year, the capital expenditure being Rs. 8,191.

(b) Buildings.

10. The expenditure on new buildings amounted to Rs. 3,442 in North Division and Rs. 4,742 in South Division as detailed below:—

North I	Division.—	Rs.
1.	Flooring the clerk's quarters at Fraserpet with tiles	242
2.	Roofing the Forester's quarters at Dubare	280
3.	Improvement to Koti Forester's quarters	359
4.	Construction of a new Range office at Fraserpet completed	1,272
5.	Improvement to guards' quarters at Koti	28
6.	Construction of quarters for 2 guards at Hudgur completed	1,035
7.	Forester's quarters at Sampaji completed	226

Total ... 3,442

South Division.—	Rs.
 Range clerk's quarters at Tithimatti completed. Ranger's camp house at Lakshmanathirtha 	1,479
completed	5 89
3. Quarters for 3 guards at Urti completed	73 0
4. Range clerk's quarters at Murkal completed	1,072
5. Completing the quarters for 2 guards at Ganagur.	
6. Do. 1 guard at Mallipatna	. 54
7. Improvements to	
(a) Range Officer's quarters at Murkal	153
(b) Range office at Balecove	7 7
(c) Range clerk's quarters at Balecove	61
(d) Range office at Murkal	48
(e) Range Officer's quarters at Balecove	30
(f) Murkal Rest House	241
(g) Nagerhole Rest House	78
Total	4,742

The expenditure on upkeep of buildings, etc., for the two divisions including temporary establishment was Rs. 5,431 against Rs. 5,719 in the previous year.

(c) Miscellancous works.

11. The expenditure on other works amounted to Rs. 3,341 against Rs. 3,108 in the previous year, the main reason for the increase being due to the construction of wells at Mechkolli and Devamachi.

3. PROTECTION OF FORESTS.

(a) General protection.

12. The following statement shows the number and classification of forest offences compared with the previous year:—

Class.	fores	Injury to forests by fire. Unauthorised felling or appropriation mission or in mission or in which grazing with- of wood and which grazing ing is prohibited.						ffences,	Total.		
	1929-30.	1930-31.	1929-30.	1930-31.	1929-30.	1980-31.	1929-30.	1930-31.	1929-30.	1930-31.	
Cases taken to court			2	1]		1	3	3	4	
Cases compounded			6	6	9	35	2	7	17	28	
Cases withdrawn	***		1	2	4	4	1		6	6	
Total			9	9	13	19	4	10	26	38	

The total number of offences reported was 38 as against 26 in the previous year. Twenty-eight cases were compounded and 6 cases withdrawn. Prosecution was instituted in 4 cases, of which 2 ended in conviction and 2 are still pending with the court.

It is gratifying to note that 8 cases of peaching were detected.

(b) Protection from fire.

13. A modified scheme of fire protection was introduced during the year by which the system of early burning has been superseded by one of rigid protection except in areas almost impossible to protect from fire except at great expense and where the forests are never likely to be of potential value. The results of the fire protection operations were, on the whole, very satisfactory.

There were 36 fires covering an area of 4,387 acres of which 1,510 acres of grass land forests were burnt against 19 fires covering an area of 965 acres in the previous year. It is to be noted that under a system of rigid protection complete immunity from fire is obtained in the unburnt areas, whereas early burning in practice involves firing and often firing badly, all areas deliberately. There were 3 fires covering an area of 110 acres on the grass land in the Ghat Forests where no protection was done.

14. The percentage of success and the cost of protection per square mile were 97 and Rs. 32 as compared with 99 and Rs. 40 respectively in the previous year.

(c) Protection from cattle.

- 15. Eighty-five per cent of the reserved forests was open to grazing for half the year. The number of cattle admitted on payment was 3,218 against 4,191 in the previous year. The number of cattle impounded was 1,162 against 1,197 in the previous year.
 - (d) Protection against injuries from natural causes.
- 16. (i) Teak (*Tectona grandis*) in the Eastern forest regeneration areas particularly in the Kalhalla felling series and bamboo seedlings in the kumries of Kutumpole Range suffered the usual damage from wild animals; damage by porcupine and wild boar being the most prominent.
- (ii) The observations of teak (*Tectona grandis*) defoliation were continued during the year. The attack was not so severe as that of last year, but it was prominent in the Sampaje kumries.

- (iii) Damage to the cardamom crop by some unknown borer was noticed during the year. Specimens of damaged cardamom berries were sent to the Government Entomologist, Coimbatore. As advised by the Entomologist small plots have been selected for oberservation.
- (iv) Loranthus was cut and removed in Muthugadare and Balumany plantations.
- (v) Spike disease on sandal is still prevalent. The experimental plot laid out in the Bambookadu sandal plantation (1918) is under observation. A conference dealing with the investigation of spike disease was held at the Indian Institute of Science, Bangalore, in July 1930 and experiments are conducted in cooperation with this Institute.
- 17. Lantana.—Lantana regrowths were uprooted over 516 acres of Kattepura reserve and along the outer edges of Hurlikal and Malambi plantations and over about 10 acres around the Veterinary Assistant Surgeon's quarters at Virajpet at a cost of Rs. 366.

CHAPTER III.—SILVICULTURE.

Section I. Formation and Regeneration of Forests.

- (i) General progress of areas under regeneration.
- 18. The progress of the areas under teak (Tectona grandis) regeneration in the Eastern forests and under saudal in North Coorg has, on the whole, been satisfactory except at Kalhalla.
- (ii) Establishment of reproduction under working plans or schemes.

(a) Mainly natural.

19. The areas already formed in past years were maintained. No fresh fellings were carried out during the year.

(b) Mainly artificial.

- 20. The following area which was clear felled and burnt last year was regenerated with teak (*Tectona grandis*) during the year:—
- (i) Coupe III of 86 acres—(1930 regeneration area)— Devamachi.—Eighty acres were dibbled with teak (Tectona grandis) $6' \times 6'$ and $4\frac{1}{2}' \times 4\frac{1}{2}'$. The whole area was cultivated with ragi—25 acres departmentally and 61 acres by Kurubars. On the

25 acres of departmental kumri, $9\frac{1}{2}$ acres were spaced $6' \times 6'$, $10\frac{1}{2}$ acres $4\frac{1}{2}' \times 4\frac{1}{2}'$ and 5 acres were sown broadcast with teak (Tectona grandis), of the remaining 6 acres, 4 acres composed of low lying patches and stream beds were dibbled with honne (Pterocarpus marsupium) and 2 acres with matti (Terminalia tomentosa) both the species being put in at $4\frac{1}{2}' \times 4\frac{1}{2}'$.

Germination of teak (Tectona grandis) was first noticed in the second week of May and continued till the last week of July 1930. Casualties were replaced with one year old stumps and the stocking at the end of October 1930 was about 80%, but a number of plants died back during the hot weather, bringing the percentage down to about 50 at the end of March 1931, when the area was reburnt and cut back and vacant stakes redibbled. The results of this operation are promising. The total expenditure on this area during the year amounted to Rs. 2,035.

In the departmental ragi kumri of 25 acres, ragi was a complete failure owing to a root fungus locally known as "Katte". The teak (*Tectona grandis*) on this area is very poor.

The following areas which were rubbish felled and burnt last year were regenerated during the year:—

(ii) Coupe VI of 75 acres—(1930 regeneration area,)—Kalhalla.—The whole area has been dibbled with teak (Tectona grandis) 6'×6'. Germination was good and at the end of November 1930 the stocking was 75%. An area of 30 acres was kumried departmentally, but the crop of ragi was very poor for want of early rains.

The yield of ragi was 157 pallas (valued at Rs. 629) or 5 pallas per acre, which at the current market rate of Rs. 4 per palla is equivalent to Rs. 21 per acre.

The damage by wild animals has been very severe in this area and the percentage of stocking has been greatly reduced. The area has been burnt and cut back in February 1931 and redibbling was done at vacant stakes.

(iii) Coupe II of 50 acres—1930 regeneration area—Nager-hole. Thirty-three acres was kumried departmentally and 17 acres was done by Kurubars. Teak (Tectona grandis) was dibbled 6'×6' throughout. The stocking was about 65% at the close of the hot weather. The yield of ragi on the departmental area was 260 pallas (valued at Rs. 1,040) or 8 pallas per acre, which at the present market rate of Rs. 4 per palla is equivalent to Rs. 32 per acre.

In the older areas the following works were done:-

- (i) Coupes I and II, Devamachi-1928 and 1929 regeneration, areas—47 and 75 acres respectively.—Climber cutting, uprooting lantana and bamboos, pruning excess shoots and soil aeration. The regrowth after last year's burn has produced very encouraging results. The stocking in the two areas, 1928 and 1929, is now 80% and 78% respectively, the tallest plant being 8'-7" and 8' respectively.
- (ii) Coupe V, Kalhallu-80 acres -- 1929 regeneration area.—Casualties were replaced by stumps. The area was burnt at the end of the year and the casualties again replaced by dibbling. Results are promising.
- (iii) Coupes I, II and IV, Kolhalla—25 acres, 25 acres and 65 acres respectively—1925, 1926 and 1928 regeneration areas.—Climber cutting, uprooting lantana and freeing suppressed seedlings was done. A strip of 14 acres in coupe IV was burnt and cut back to see if burning would stimulate the growth of teak (Tectona grandis) which at Kalhalla generally appears to be very slow

No work was done in coupe III, 1927 regeneration area, as the whole area requires to be redone.

(iv) Coupe I, Nagerhole-25 acres-1929 regeneration area.-Casualties were replaced by stumps, weeding and uprooting lantana was done. No burning in the second year was carried out

During the year coupe IV at Devamachi, coupe VII at Kalhalla and coupe III at Nagerhole, 75 acres, 75 acres and 50 acres respectively were rubbish felled and burnt. These areas will be regenerated with teak (*Tectona grandis*) during 1931-32, honne (*Pterocarpus marsupium*), and matti (*Terminalia tomentosa*), being substituted in swampy and low lying places.

A sum of Rs. 1,025 was spent on collection of seeds for stocking regeneration areas during 1931-32 and teak (*Tectona grandis*) nurseries intended to supply a sufficient quantity of stumps for replacing casualties were opened at Tithimatti, Kalhalla and Nagerhole.

Casualties were replaced in the 1929 Dubare, Anekad and Meenkolli sandal kumries and in the Santedare and Attur teak kumries in Fraserpet Range and in the Kattepura, Gangawara, Kargode, Kajoor, Hudgur, Hirikere and Banawara sandal kumries in Somwarpet Range.

The sandal areas opened during 1927 and 1928 at Hirikere in Somwarpet Range were accidentally burnt in March 1931. The area was 13 acres and there was very little sandal.

A sum of Rs. 56 was spent on resowing, weeding, etc., over 10 acres of Doddamolthe sandal garden. There was no appreciable success. A sum of Rs. 111 was spent on uprooting lantana, removing Caesalpinia climbers and planting Lithosperma cuttings in the open areas of 1928 Hudgur kumri.

Last year's kumries at Karike and Mundrote were resown by kumridars.

During the year an area of 11 acres was planted up with Eucalyptus robusta $8' \times 8'$ (about 9 acres) $4\frac{1}{2}' \times 4\frac{1}{2}'$ (about 2 acres) in the Mercara Reserve at a cost of Rs. 380. Four other species, viz., (1) Eucalyptus eugenioides (2) Eucalyptus melliodora (3) Eucalyptus resinifera and (4) Eucalyptus siderophloia were also tried in the 1930 area, but none of the plants survived. Owing to the large number of casualties to be replaced it was decided to take up only 11 acres. At the same time casualties in the 1928 and 1929 areas were replaced with 15,833 plants at a cost of Rs. 526. A sum of Rs. 295 was spent on clearing and burning an area of 18 acres required for planting up during 1931.

(c) Afforestation.

- 21. None during the year under report.
- (iii) Plantation and other forms of Regenerations not under Working Plans or Schemes (with Form 18 B).
- 22. The following areas outside the regular regeneration areas covered with lantana or inferior treegrowth, were cleared for restocking with sandalwood, teak or rosewood during 1931-32:—

0	,		0
Name of Range.	Locality.	Area in acres.	. Remarks.
Fraserpet	Dubare	4)
•	Meenkolli	7	İ
	Attu r	14	
Somwarpet	Aygoor	$8\frac{1}{2}$	į
	Kargode	6	Sandal
	Kattepura	8	DAHUMI.
	Gangawara	9	
	Hudgur	\dots 12	
	Hirikere	16	
Tithimatti	Ganagur	10)
	Mallipatna		Teak and rosewood.
Nagerhole	Balecove		Teak.
** .	Irumani		Sandal.
Kutumpole	Makut	47	See below.

Teak (Tectona grandis) and biti (Dalbergia latifolic), will be dibbled $6' \times 6'$ and $4\frac{1}{2}' \times 4\frac{1}{2}'$ respectively at Mallipatna. The 36 acres at Balecove was kumried during 1930, but owing to late sowing by kurubars, the teak was not a success. It is being redone during 1931.

The 47 acres at Makut will be stocked as follows:-

Andaman Padauk (Pterocarpus dalber	gioides).		21 acres.
Biti (Dalbergia latifolia)		1	5,
Honne (Pterocarpus marsupium)		1	_ ′′
Buruga (Bombax Malaharicum)			5 ,
Noga (Cedrela toona)	***	•••	7,
Irupu (Hopea parviflora)	1		$2\frac{1}{2}$,,

The following table shows the results of 1929 regeneration areas:—

Range.		Locality.		Area in acres.	Species,	Percentage of success.	Height of highest plant.			
Fraserpet	**	Dubare Santedare Maldare Anekad Attur Meenkolli		5 5 5 9 11 8	Sandal, Teak, Teak Sandal Sandal, Teak, Sandal.	21 71 78 26 70 79	Ft. 2 3 3 9 6 Burnt and March 19		back	i
Somwarpet		Kargode Banawara Hudgur Gangawara Kattepura Hirikere Kajoor	* : * : : : : : :	5 4 22 3 6 12 5	33 33 33 33 33 34	11 12 31 6 61 22 29	7 4, 8 1 3 3 6	0 6 0 0 5 6 4		

The areas cleared last year have been stocked as follows:-

Range.		Locality.		Area in acres.	Species sown,	Height of the highest plant.		Percentage of success at the close of the year.	
South Divisio	n.					Ft.	in.		
Tithimatti		Ganagur Mallipatua		17 5 {	Sandal. Teak. Biti.	4 2 0	6 6 0	45 90 80	
Nagerhole North Divisio	n.	Balecove Irumani	10.	36 12	Teak.	2	6	Being a partial failure it has been reckared for dibbling during 1931. 75	
Fraserpet	•••	Dubare Meenkolli Attur	***	4 5 15	Sandal.	1 4 2	6 6 10	57 90 81	
Somwarpet	:	Banawara Hudgur Hirikere Kargode Aygoor		10 5 3 2	27 29 29 21 21	1 3 2 1 1	0 0 3 5 3	25 42 49 7 33	

The kumries at Ganagur, Mallipatna and Irumani in South Coorg Division were cultivated with ragi departmentally. The yield was 262 pallas or 10\frac{3}{4} pallas per acre. Similarly the new kumries at Dubare, Attur and Meenkolli in Fraserpet Range were sown with ragi. The total yield was 114 pallas or 5 pallas per acre.

An area of 28 acres adjoining the 1928 kumri at Kakethodu in the Kutumpole Range was kumried during the year. Bamboo (Eambusa arundinacca) was sown $24' \times 24'$ and at the close of the year 1889 seedlings or approximately 67 per acre were surviving. Biti ($Dalbergia\ latifolia$) was put in $4\frac{1}{2}' \times 4\frac{1}{2}'$ in a $2\frac{1}{2}$ acre patch. The percentage of success at the end of the year was 50. It is hoped that the figure will increase during the next monsoon.

Rosewood was dibbled under Burma bamboo 6'×6' at 1,000 stakes by guards. By the end of the hot weather about 45% survived.

About 100 acres in Karike and 10 acres in Mundrote covered with bamboos and inferior jungle were cleared by kumridars during the year and sown with biti (Palbergia latifolia) and honne (Pterocarpus marsupium). The percentage of success was 40 in both.

(iv) Tending.

23. Weeding, climber cutting, uprooting lantana and freeing existing growth was carried out in "Y" areas, old plantations and kumris wherever necessary.

Section II. Tending of growing stock.

24. Except in regular plantations, kumries and regeneration areas, no tending was done.

CHAPTER IV.—EXPLOITATION.

(a) System of management.

- 25. (i) Eastern forests.—As mentioned in previous reports the system of exploiting the Eastern forests by clear-felling followed by artificial regeneration was continued. The areas felled and regenerated during the year were 230 acres and 247 acres respectively. The result of the fellings in the coupes is dealt with specieswar under major produce.
- (ii) Ghat forests.—(a) 3,208 c.ft. of timber worth Rs. 665 was removed by the contractor from the 1927 Urti coupe; thus completing the 1928-29 contract.
- (b) In the coupe (124 acres) leased for felling timber during the year the contractor removed only 318 c.ft. of timber as there was no demand. A sum of Rs. 80 was realised in addition to the lease amount of Rs. 1,800.

(c) The Portland Rubber Co., Makut, removed 3,531 c.ft. or about 71 tons of fuel valued at Rs. 71 from the 1923 and 1930 bamboo kumries under the terms of their contract.

Major forest produce.

26. During the year departmental fellings were carried out in coupe IV Devamachi of 75 acres, coupe VIII Kalhalla of 75 acres and coupe IV Nagerhole of 50 acres.

The following quantities of timber were obtained from the three coupes:—

Species.	coup	matti e IV, cres.	Kalhalla coupe VIII, 75 acres.		Nagerhole coupe IV, 50 acres.		Total 200 acres.	
	Yield,	Per acre.	Yield	Per acre.	Yield.	Per acre.	Yield.	Per sere,
Logs.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Teak (Tectora grandis)	3,247	43.3	20,200	269.3	12,512	252 2	36,059	1803
Biti (Dalbergia latifolia)	2,543	33.9	3,593	47.9	1,211	21.2	7,347	36.7
Honne (Pterocarpus marsu-	638	8.2	903	12.0	988	19.8	2,529	12.6
pium).	0.000	**.0		* 4.0		0.0		
Matti (Terminalia	3,892	51.9	4,118	54.9	4,831	96.6	12,841	61.2
tomentosa).	1,790	23.9	864	11.5	683	13.6	3,337	10.7
Nandi (Lagerstræmia lanceolata).	3,770	200	Ç02	11 5	เดอ	13.0	0,331	16.7
Arsintega (Adina cardifolia).	3.060	40.8	148	2:0		i	3,208	16.0
Uluve (Terminalia	81	11	169	2.3			250	1.3
paniculata).								1
Thadasalu (Grewia	860	11'5		•••	•••		860	4.3
tiliafolia).	000	١			!		000	
Bilwara (Albizzia	329	4.4		•••			329	1.6
od or atissim a). Godda (Odino wodier), —	639	8.2	33	.,	,		672	1 9.4
Udi (Bignonia xylocarpa)	280	3.7		*			280	3.1
Bul (Bighonia a giocai pa)					***			1 4
Total	17,359	231 5	30,028	400.3	20,325	406 4	67,712	338-5
Branch pieces.		Ì						
Teak (Tectona grandis)	2,176.3	29.0			2.631	52.6	4,807.3	24.0
Do (undressed posts)					115.2	2.3	115.2	6
Do (billets)			5,003.7	66.2	1,529.2	30.6	6,53219	32.7
Biti (Dalbergia latifolia) 🔐	403.8	5.3	755 6	10.1	141.6	2.8	1,301 0	6.2
Home (Pterocarpus marsu-	55'1	.7	101.2	1.4	113.5	2.3	272.8	1.1
pium).	578.9	7.7	437.3	5.8	385.7	7:7	1,401.9	! ! ••.o
Matti (Terminalia tomentosa).	3/89	1 "	4010	9.8	969.1	17	1,attra	7:0
Nandi (Lagerstroemia lanceolata).	338.8	4.5	26	•3	22.2	٠.	387.0	1.9
Arsintega (Adina cardifolia)	269.3	3′6					269:3	1.3
Udi (Bignonia xylocarpa	1 1	7.6					41.8	2
Thadasalu (Grewia	1							-
tiliafolia).	127.3	1.7		.,,	ì,		127:3	.6
Uluve (Terminalia								
paniculata).	65.6	9					65'6	.3
Godda (Odina wodier)	7.6	1		•••			7.6	:::
Bilwara (Albirria	42.8	'6			***		42.8	'2
odoratissima).								
Total	4,107:3	54.7	6,326.8	81.3	4,9384	98.7	15,372 5	76.7
Grand Total	21,466 3	286.2	36,3548	484.6	25,263 4	505.1	83,084.5	415.3

Besides the above fellings, a small quantity of timber was also obtained by clear-fellings on lantana and poorly stocked areas taken up for cultivation of sandal and teak or rosewood.

In the Ghat forests no departmental felling was done-

In the Fraserpet and Somwarpet Ranges 9,637 c.ft. of timber of various species was removed from areas prepared for regeneration work.

- (b) Agency of Exploitation.
- (i) Departmental Agency.
- 27. The balance of timber on hand at the beginning of the year was 20,701 c. ft. The quantity of timber obtained during the year by fellings, confiscations, etc., was 110,682 c. ft. The outturn is chiefly accounted for by clear-fellings. 84,141 c. ft. of various species was sold or otherwise disposed of. The balance on hand at the close of the year was 47,242 c. ft.
- 28. Besides 1st and 2nd class teak (Tectona grandis), biti (Dalbergia latifolia) and honne (Pterocarpus marsupium), 5,464 c. ft of matti (Terminalia tomentosa) and 56 c. ft. of nandi (Lagerstræmia lanceolata), were also carted to the Hunsur Depot for sale during the year. 14,877 c. ft. of teak (Tectona grandis), 360 c. ft. of biti (Dalbergia latifolia), 51 c. ft. of honne (Pterocarpus marsupium) and 1,330 c. ft. of matti (Terminalia tomentosa) were sold at the Hunsur Depot by private sales which realised Rs. 35,095.

The year's yield of teak (Tectona grandis), branch pieces and billets was 10,878 c.ft. which was supplied to Mr. D. M. Tew, ex-forest depots under the terms of the 3 years' agreement entered into by him in 1928. The revenue realised on this account amounted to Rs. 2,409. 644 c.ft. of branch pieces and billets prepared during the previous year were delivered to the purchaser during the year and a sum of Rs. 319 was realised.

Excluding the timber specified in the above para. 20,389 c. ft. of various species including junglewood was also sold by private sales ex-forest depots and the revenue realised on this account was Rs. 9,879.

As a considerable quantity of timber had been sold by private sales only one auction was held at Hunsur in January 1931. 8,000 c. ft. teak (*Tectona grandis*), 2,809 c. ft. of honne (*Pterocarpus marsupium*) not up to the specifications governing the private sales, and 6,296 c. ft. of matti (*Terminalia tomentosa*),

nandi (Lagerstræmia lanceolutz), godda (Odina wodier) and thadasalu (Grewia tiliæfolia) or in all 17,105 c. ft. of timber were sold for Rs. 15,700. 607 c. ft. of honne and nandi timber was sold exforest depots for Rs. 171.

The prices realised in all the above sales were satisfactory in view of the present state of the timber market.

- 29. Firewood.—426 cartloads (or 25,560 c. ft.) were cut departmentally from the Mercara reserve and the same was sold during the year for Rs. 628. In addition to this 8,425 c. ft. of firewood from Anekad and Attur forests were sold for Rs. 3,226.
- 30. 18,850 c. ft. of dead junglewood trees from Anekad and Meenkolli forests were converted into charcoal for use of the Public Works Department, Government offices and private consumers and a sum of Rs. 1,200 was realised.

In addition 3,300 c. ft. of dead junglewood trees in the Ghat forests were converted into charcoal for supply at Virajpet. This realised a sum of Rs. 198.

- 31. Sandalwood.—There was a book balance of 58 tons of roughwood and 74 tons of cleanwood at the commencement of the year. During the year 412 tons of roughwood were collected and 392 tons were converted into cleanwood, $162\frac{1}{2}$ tons of cleanwood were sold by public auction in February 1931 for Rs.1,57,115, the average per ton being 967 against Rs. 1,356 in the previous year. The balance carried forward at the end of the year was 68 tons of roughwood and 261 tons of cleanwood. The cost of collection and conversion was Rs. 15,898.
- 32. The total value of disposals of major produce by departmental collection (less refunds) amounted to Rs. 2,49,556.

(ii) Purchasers.

33. Timber.—30,285 c. ft. of timber inclusive of branch pieces and poles were sold from the reserved forests for Rs. 4,221 excluding the royalty of Rs. 1,800 on account of 1930 Urti coupe. Rs. 21,009 was realised by sale of timber from paisaries and dharkast lands under the Waste Land Rules.

Other produce.—78,175 c. ft. of fuel, 113,725 bamboos and 113,480 reeds were removed from the reserved forests while 80,725 c. ft. of fuel and 66,500 bamboos were sold from paisaries.

The grazing revenue was Rs. 909 including the sale of grass against Rs. 1,213 in the previous year. Decrease was due to less cattle grazed in the Reserves.

The auctioning of minor forest produce realised Rs. 3,770 against Rs. 1,420 in the previous year. Increase was due to better crop in the case of (1) Terminalia chebula, (2) Acasia concinna and (3) Sapindus emerginata.

A sum of Rs. 1,044 was obtained by the sale of maramanjal (a yellow creeper used for dyeing), pepper, echalu leaves, etc., from the reserved forests.

The revenue from cardamom leases was Rs. 7,775 against Rs. 26,035 in the previous year. The decrease was due to the fall in the market price of cardamoms and consequent inability on the part of speculative tenderers to meet their obligations.

The Malabar Estates, Ltd., paid the lease amount of Rs. 1,000 for the right to collect *Vateria indica* fruits in the Ghat forests under their contract but removed no produce.

The total value of removals by purchasers (less refunds) from the two divisions was Rs. 45,784 against Rs. 65,453 in the previous year.

(iii) Rights and privileges.

34. The value of free grazing allowed under the existing rights amounted to Rs. 116.

(iv) Free grants.

35. The ryots of certain villages in the vicinity of Ghat forests were allowed free grazing on the grass hills of the Ghat forests in lieu of money rewards for assistance rendered in the protective burning of the grass hills to the east of the water shed.

18,027 head of cattle were reported to have grazed under this concession and the value of the grant at full rates was Rs. 4,903. Thirty-eight head of cattle belonging to lessees of hadlus granted for wet cultivation also grazed free under the Chief Commissioner's Notification No. 43, dated 16-8-1922, the value of which amounted to Rs. 10.

Besides the above, a free grant of 286 c. ft. of nandi (Terminalia tomentosa), halasu (Artocarpus integrifolia) and pali (Dichopsis elliptica) timber valued at Rs. 51 was made for the construction of a new school at Birunani. Of this quantity the school committee have felled and removed only 52 c. ft. of nandi. 2,050 bamboos valued at Rs. 29 were granted free for construction of temporary sheds on account of plague at Somwarpet and Siddapur. Fifty bamboos and 2 head loads of canes worth Rs. 2 were also made for construction of a raft on Lakshmanathirtha ferry.

(c) Outturn and sources of forest produce.

36. The total outturn of the year is summarised in the following table:—

	1	Ma j or pr o duce.		Minor produce.				
Sources of yield.	Timber.	Sandalwood.	Fuel.	Bamboos.	Grass and grazing.	Other produce.		
Reserved forests	Rs. 95,983	Rs.	Rs. 6,13 i	Rs. 1,444	Rs. 900	Rs. 13,819		
Unreserved forests	21,009	1,51,811	807	367				
Total	. 1,16,992	1,54,814	6,941	1,811	909	13,819		

The total expenditure under the head "Management of State Forests" was as follows:—

							Ks.
A. Conservancy and	works in	neluding (capit	ta1		•••	1,53,743
B. Establishment	***		,				1,29,404
					Total		2,83,147

CHAPTER V.—FINANCIAL RESULTS.

37. The following table compares the revenue and expenditure of the year with those of previous years:—

		Year.		Revenue.	Espenditure.	Surplus.	
1929-30	***) <i>II</i>			Rs. 5,71,941	Rs. 3,03,710	Rs. 2,68,231
1930-31		***	***		3,10,160	2,83,147	27,013
Average f	or 5 years	ending 1928-29			5,37,153	2,86,889	2,50,264

38. There was a decrease of Rs 2,61,781 in the forest revenue, compared with that of the previous year, directly attributable to the depressed state of trade aggravated by political conditions in India. The decreases occurred chiefly under I (a) Timber I (d) Sandalwood, II (f) Cardamoms and V (b) Other sources. The

decrease under "Timber" was due to drop in prices, under "Sandalwood" the drop is due to the fact that only $162\frac{1}{2}$ tons were sold at an average price of Rs. 967 per ton against 250 tons at Rs. 1,356 per ton in 1929-30.

Inability to dispose of elephants (captures) during the year is responsible for the drop under "Other sources".

Less money was also realised during the year from the disposal of tramway materials.

39. The important increases and decreases in expenditure under A. Conservancy and Works as compared with the previous year are explained below:—

_			
		Rs.	,
I (a) T	imber	-31,458	Due to drop in prices.
(d) S	andalwood -	-1,81,700	Due to smaller quantity of sandal- wood sold and to drop in the prices.
II (e) M	linor forest produce	+ 2,428	Increase due to better prices realised.
(f) Ca	ardamoms	-18,260	Due to 75% remission granted by the Chief Commissioner.
V (b) O	ther sources	- 35,102	Due partly to inability to sell the elephants (captures) and partly to less sum realised by the disposal of tramway materials at Makut.
	(d) Timber and lwood.	+3,973	Due to larger quantity of sandal- wood collected and carted to the Koti.
	Roads and bridges (capital).	-4,516	Due to no fresh metal and spalls collected during the year for want of funds.
(b) 1	Buildings (capital)	-19,099	Due to less number of buildings constructed or purchased.
A. VIII (d)	Working Plans (capital).	+12,084	Due to enumeration and stock mapping done during the whole year in connection with the Eastern Forests Working Plan.
A. VIII (e)	Sowing and plant-	+539	Due to increase in the arees

ing.

regenerated.

Under B.—Pay of Establishments.

Superior Officers.—The decrease of Rs. 3,600 was due to the pay of the Chief Forest Officer and the Divisional Forest Officer, North Coorg, being less than that of their predecessors.

Subordinate Forest and Depot Establishments.—The decrease of Rs. 1,295 was partly due to half of the compensatory allowance debited under this head not having been fully drawn by all subordinates on account of their remaining in the scheduled and non-scheduled tracts and partly to some of the guards' posts not having been filled up during the year.

Contingency.—The decrease of Rs. 303 was due to the contribution to the Indian Institute of Science, Bangalore, not having been paid during the year as the question of lump sum contribution of Rs. 3,500 was under correspondence.

The percentage of expenditure under A.—Conservancy and Works and B.—Establishment to total expenditure were 54 and 46 respectively.

40. The profit and loss statement is as follows:-

Profit and Loss statement.

	Direction (North)Division. 2	South Division.	Total. 4
Capital Expenditure. In 1930-31 In previous years (see last year's statement)	Rs. 5,000 12,27,000	Rs. 26,000 1,50,000	Rs. 31,000 13,77,000
Total	12,32,000	1,76,000	14,08,000
Profit and Loss Account for 1930-31. Receipts Outstandings Value of timber and sandalwood on hand on 31st March 1931 Value of elephants to be sold	2 99 000	1,08,000 31,000 50,000 20,000	3,10,600 63,000 3,72,000 26,000
Total	5,62,000	2,09,000	7,71,000
Expenditure of the year (excluding capital expenditure) Interest on capital at 6% per annum on the progressive total of last year	1,23,000 74,000	1,29,000 9,000	2,52,000 83,000
Total	1,97,000	1,38,000	3,35,000
Profit for the year	. 3 ,65,000	71,000	4,35,000

41. The following statement compares the revenue and expenditure under the principal working heads for the year 1930-31:—

Comparative Statement of Revenue and Expenditure under principal working heads for 1930-31.

Main working heads.	Revenue	Percentage of Revenue under head to total Revenue for the year.	endit hudin lishn	+ or — Balance. for 1930-31.	+ or — Balance for 1929-30.	Remarks.
A. Timber.	Rs. 1,16,992	87•7	Rs. 60,678	Rs. +56,314	Rs. +85,466	Shows a decrease of Rs. 29,152 on last year's figures. This is due to smaller quantity of timber sold and fall in prices on account of depression in the timber market.
B. Bamboos and Minor Forest Produce.	15,763	51	13,809	+ 1,957	+18,786	Shows a decrease of Rs. 16,829 on last year's figures. This is due to 75% remiseion of assessment allowed on cardamom leases.
C. Sandalwood	1,54,814	49.9	43,110	+1,11,794	+ 2,94,127	Shows a decrease of Rs. 1,82,423 on last year's figures. This is due to smaller quantity of sandalwood sold and fall in prices on account of trade depression.
D. Development	13,311	4.3	1,25,488	-1,12,177	-1,25,033	Represents money inves- ted on capital works, new kumries, etc., for which no revenue can be expected at present.
E. Elephants	1,427	•5	22, 9 01	-20,574	+ 4,497	The decrease is due to elephants not being sold as there was no demand.
F. Fuel G. Grazing	6,941 909	2·2 ·3	11,888 6,173		-3,987 -5,625	The loss is counter-balanced by Es. 5,029 worth of free grazing allowed to ryots in lieu of money rewards for the assistance rendered in connection with burning grass hills and also to the concession allowed under the settle-
Total	3,10,160	***	2,83,147	+ 27,013	+2,68,231	allowed under the settle- ment.

The expenditure under establishment, etc., has been allotted on the formula which was arrived at in the previous year.

CHAPTER VI.—RESEARCH AND EXPERIMENTS.

- 42. Results of research work carried out or started during the year:—
- I. Sandal regeneration.—The method of regenerating sandal with a field crop (ragi) was continued this year. Lantana ridden

areas were, as a rule, taken up and operations followed the same general lines as indicated in last year's report.

A modified espacement was adopted this year so as to permit of each sandal being surrounded by 6 hosts of Erythrina indica and giving an espacement for the sandal of $18' \times 12'$. In addition to dhall, Erythrina indica was dibbled in all areas this year—dibbling has proved a success and is very much cheaper than cuttings. The presence of Erythrina indica or lithosperma has the very serious disadvantage of attracting browsers on to the area but a quick growing substitute is not easy to find.

Experiments will be made next year with Cassia siamea which is reported to render sandal resistant to spike disease. Where dhall bushes did not afford sufficient shade to the sandal during the dry months the plants were artificially protected by heaped up brushwood and this was looked after by the guards themselves.

Unfortunately the market price of ragi fell considerably during the year so that great difficulty was experienced in disposing of the crops. Unless these crops can be disposed of at a price which recoups the cost of cultivation or nearly so, the cost of formation becomes prohibitively high—this year therefore this method has had to be drastically curtailed and attempts are being made to induce the local jungle tribes to cultivate the ragi for us.

A certain proportion of the ragi is consumed departmentally by the elephants.

Note: - The high cost of formation is due to the necessity of uprooting dense lantana.

The following areas were taken up in the Fraserpet and Somwarpet Ranges:—

Fraserpet Range.

Locality.	Area in acres.	Mar	d o	f 1 9 31	Total No. of sandal plants Isurviving at the end of March 1931.	Height of		Ragi in pallas per acre.	Value of ragi at Rs. 5 per palla,		
,		Rs.	a,	p.		ft.	inch.	Pallas.	Rs,	a.	p.
Dubare	 4.0	62	0	6	572	11/2	0	5	98	0	0
Meenkolli	 5.0	79	0	0	1,609	41	0	7	168	0	0
Attur	 15'0	61	0	0	4,919	2	10	4	305	0	0

REMARKS: Dubare-Area taken up was small on account of lack of labour. Both Erythrina and dhall poor, owing to heavy browsing by wild animals.

Meenkolli.—Area small owing to lack of labour. Sandal growth good—in fact too profuse and since reduced to 2 stems per acre. Dhall very poor, Erythrina poor.

Attur.—This is almost a model plantation at this stage, growth of sandal, shall and Erythrina all being very good. The most successful efford to far achieved.

1929 Kumries.

Casualties were replaced in all areas not only of sandal but also of dhall where necessary and Erythrina indica was sown in all cases.

The 1929 area at Dubare is a total failure and has therefore been abandoned, the area is for some reason evidently unsuited for sandal.

Sowings of sandal in the 2nd year is not a very happy operation, owing to the coarse growth of weeds, unless the dhall happens to afford suitable conditions for germination and growth.

The following statement shows the condition of the 1929 areas:-

Locality	ocality.		No of stakes sown with sandal.	No. of surviving seedlings in March 1931.		Expenditure during 1930—31	Remarks.
					ft. inch.	Rs. a. p.	
$\mathbf{D}_{\mathbf{u}}$ bare	•••	6.0	1,700	354	21 0	52 0 0	Since abandoned.
Anekad	٠	9.0	2,900	2,042	6 0	56 0 0	
Meenkolli	•••	7.0	2,150	964	91 0	59 0 0	

Somwarpet Range.

The following areas were taken up in this Range:—

				_	-
Locality,	Area in acres,	Cost up to the end of March 1931 per acre.	Total No. of sandal plants surviving at the end of March 1931.	Height of tallest plant.	Remarks.
Hudgur	10.0	Rs. a. p.	1,760	ft, inch.	Decidedly promising.

The following areas were sown with sandal, dhall and Erythrina but no ragi crop was cultivated, with the following results:—

Locality.	i		the Marc	ene	l of 1931.	Total No. of sandal plants surviving at the end of March 1931.	Heig tal pla	lest	Remarks,
Banawara Hirikere		:0 :0	Rs. 42 54		p. 0 0	325 1,026	1	inch 0 3	In both areas tree growth was felled. Hirthere shows promise—there are a lot of natural hosts on the ground.

In addition to the methods described above dibbling of sandal was tried $6' \times 6'$ under a light to moderate shade.

Only obnoxious undergrowth, such as lantana was removed but no treegrowth was felled—dhall was sown and Erythrina in open patches where there were no natural hosts.

The following areas were treated in this way: -

Locality.		Area in acres.	Cost the Mare per	end eh 1	of 1931	Total No. of sandal plants surviving at the end of March 1931.	tal	ht of lest int.	Remarks.
•	}		Rs.	a.	p.		ft.	inch.	
Kargode		3	41	0	0	84	1	5	Kargode was not a success and has been redone this year.
Aygoor	•••	21/2	48	0	0	330	1	3	The results at Aygoor were dis- tinctly promising. Removal and uproots of luntana is responsible for the high costs.

This method has the great advantage over any method involving clearing jungle of being cheap (except on lantana areas) and in the event of a failure the forest is left no worse off than before.

The results of the 1929 "kumri" areas are as follows:-

Locality.		Area in acres.	sandal	Height of tallest plant.	Cos during year	the	Remarks
				ft. inch.	Rs. a	. p	
Kargode		5.0	165	7 0	90 0	0	
Banawara	•••	4.0	151	41 0	89 (0	
Hudgur		22.0	2,016	8 0	251 (0	
Gangawara	•••	3.0	63		73 (0	
Kattepura	•••	6.0	1,057	3 5	102 (0	
Hiri kere	,	120	780	3 6	170 (0 (
Kajur	***	5.0	404	6 4	32 (0	

A period in August 1930 without rain caused a great many casualties in all areas.

Dodonea viscosa was tried as a host in the 1930 Hudgur and Kargode areas, but was a failure at Kargode. At Hudgur though slow to start has now come up fairly well.

- 3,200 Erythrina lithosperma cuttings were planted as hosts in the 1928 Hudgur area but all died.
- 3,500 Jatropha cuttings were planted in the 1929 Hirikere kumri and 3,000 in the 1929 Banawara kumri—10% and 80% of these respectively survived.

An area of 16 acres at Ganagur was taken up by the kumri method and sown with sandal, dhall and Erythrina. At the close of the year there was 45% success of sandal.

1929 Ganagur sandal kumri.—This area was heavily browsedthe percentage of surviving sandal is still considerable, but has not been reported.

The fall in the market price of ragi has for the time being rendered the departmental cultivation of ragi as a field crop unprofitable.

Unfortunately it is extremely difficult in North Coorg to induce the local jungle people to take up the ragi cultivation themselves.

- II. Lac experiment.—This has been a bandoned—all efforts having proved unsuccessful and in view of the serious drop in the market price of that commodity.
- III. Teak defoliation experiment.—Observations are still being recorded and reported separately.
- IV. Extermination of reeds (OCHLANDRA) in Ghat forests.— The experiment was continued during the year, but no fresh observations have been reported.
- V. Uprooting climbers below Ghats.—This experiment was started last year and it is too soon to draw any definite conclusions but the regrowth of climbers in this year's monsoon was certainly very noticeably less than in the non-uprooted areas.
- VI. Killing of climbers by the application of Atlas solution.— This experiment has been abandoned as it is found that in the case of the more vigorous climbers the poison kills above but not below the place of application and that fresh shoots are produced below.
- VII. Experiment to see whether digging round sandal and introducing hosts will stimulate the growth.—This experiment was described in last year's report and is being continued. It is too soon for results to be given.
- VIII. Experiment to see whether rubbing of lichen will stimulate the growth of sandal.—It is too early for any conclusion to be arrived at as yet.
- IX. Burning of teak plantations in the second year.—This experiment was carried out during the year in a number of plantations including the Devamachi 1930, Kalhalla (1929 and) 1930, part of the Mallipatna 1929 and the whole of the 1930 kumri. The 1928 and 1929 regeneration areas at Devamach

are the most promising in Coorg of the young areas and the burnt portion of the 1929 has a definitely healthier appearance than the adjoining unburnt portion apart from the more vigorous growth; the difference in the type of weed growth is particularly noticeable.

This experiment will be continued next year under control conditions.

CHAPTER VII.—ADMINISTRATION.

43. Mr. H. G. Hicks, Deputy Conservator of Forests, was in charge of the Direction Division throughout the year and Mr. A. R. Brand, Extra Assistant Conservator of Forests, in charge of the South Division. Mr. C. M. Kushalappa, Extra Assistant Conservator of Forests was reverted to Madras on 20th December 1930 and his place was taken by Mr. H. E. Brown, Extra Assistant Conservator of Forests.

Conduct of the establishment.

- 44. The work and conduct of the Rangers was good. The conduct of the Foresters and forest guards was very satisfactory on the whole. Ten guards retired from service. One Forester and 2 guards died. The services of 3 guards were dispensed with and one guard resigned.
- 45. The health of the subordinates especially of Foresters and guards was not satisfactory.
- 46. The accounts of the two Divisional Offices were test audited during the year by the Accountant General, Madras, and the results are reported to be satisfactory.

CHAPTER VIII.- GENERAL.

47. There were 15 elephants at the beginning of the year, 8 permanent and 7 captures of the previous year. 8 elephants were taken to Manantoddy for sale along with Madras elephants in October 1930. Unfortunately only one was sold for Rs. 525. In addition 4 more were captured, 3 in the North Division and one

in South Coorg Division. It was decided in January 1931 to suspend capturing operations until the elephants already on hand could be disposed of. So far there has been no sign of any renewal of interest in this market. Elephant Droupathy gave birth to a calf named Gowri. Out of the 4 new captures one elephant "Governor" was destroyed as he was suffering from a fractured leg. The year therefore closed with 18 elephants, 8 permanent, 9 captures and one calf as per particulars given below:—

No. Name.	Year of capture,	Hei	gh t ,
1. Amir	1903	7'	$10\frac{1}{2}''$
2. Veeraraja	1905	8′	5"
3. Lalarukh	1905	7'	11"
4. Nakula	1910	7′	11"
5. Menaki	1920	7'	5"
6. Krishna	1922	7'	8"
7. Droupathy	1922	7'	6 "
8. Nurmahal	1926	7'	6"
9. Noel	1929	4'	81"
10. Bhamini	1930	7′	10"
11. Kamini	1930	6'	9"
12. Sujjothi	1930	4'	$9\frac{1}{2}''$
13. Sharada	1930	5'	3"
14. Bojaraja	1930	7'	11"
15. Viceroy	1930	9'	6"
16. Waruna	1930	3'	10"
17. Sugandhi	1930	4'	()"
18. Gowri	1930 (born)	3'	6"

Of the 8 working elephants, 3 elephants were employed in South Division throughout the year, one for 10 months, one for 8 months on timber work, and training new captures. The remaining elephants were employed in the North Division for the whole year. The cost of their feed and keep in South Division amounted to Rs. 4,595 for dragging work and in North Division on 3 elephants Rs. 1,601. The cost of feed and keep of captures was Rs. 1,636 the reduction in expenditure this year being due to supply of ragi grown departmentally, and the cost of capturing operations in both the divisions, Rs. 2,318. The elephants employed on timber dragging turned out work to the value of Rs. 17,223 which the Government would have paid if hired elephants had been employed on the work and in North Division to the value of Rs. 899.

- 48. There were 5 buffaloes till August 1930, when one was destroyed as being very old and unfit for further work. They were chiefly employed on road work on the Kutta-Nallurpala road.
- 49. The feed and keep of the whole stud of livestock amounted to Rs. 14,538 against Rs. 14,298 in the previous year.

Measures for the prevention of denudation of forest growth in catchment areas of streams.

Protective burning of grass hills.

- 50. The following is the review by the Commissioner of Coorg of the work done:—
- "The protective burning was conducted in 56 villages affecting 8 nads. The burning was commenced on the 17th January and ended on 2nd April 1931. The area burnt is 70,276 acres against 55,675 acres last year. Only 12 villagers whose names are given below of Kurchi village rendered assistance in the burning of the grass hills in that village:—
 - 1. Ajjamada Thimmayya.
 - 2. A. G. Somayya.
 - 3. Ajjamada Subbayya.
 - 4. Ajjamada Belliappa,
 - 5. Ajjamada Ponnappa.
 - 6. Ajjamada Somaya.

- 7. Ajjamada Ganapathy.
- 8. Ajjamada Belliappa.
- 9. Bollera Medappa.
- 10. Kyblera Belliappa.
- 11. Ajjamada Subbaya.
- 12. Ajjamada Mandappa.

Patels and villagers concerned took part in the operations. No accidental fires occurred after the operations were closed. Grazing fees have to be recovered from the villagers who did not take part in the operations. As usual the villagers of Maragodu and Hosakeri in Mercaranad want a money reward; the rest are content to have the right of free grazing."

51. The grassy slopes on the Brahmagiri hills were burnt as usual, but the whole of the specified length of fire line was burnt with the co-operation of villagers. Two fires occurred, one on the lower edge of the lower plateau and the other just below Brahmagiri peak and burnt about 50 acres of grass slopes causing no damage to shola growth.

- 52. The stream margins in lands granted for rubber and fibre cultivation were inspected by the Range Officers and found to be in a satisfactory condition
- 53. One hundred and ten acres of swamp in Tithimatti, Nagerhole, Kutumpole, Somwarpet, Fraserpet and Bhagamandla Ranges were granted for wet cultivation under Chief Commissioner's Notification No. 43, dated 16th August 1922, but as usual the area actually cultivated increased by very little.
- 54. A sum of Rs. 1,750 was realised by the disposal of tramway materials at Makut.
- 55. Labour rates were reduced throughout in February 1931 following the fall in the price of food stuffs.
- 56. A break in the south-west monsoon in August 1930 was responsible for many casualties in regeneration—particularly in the sandal plantations in Somwarpet Range. There was considerable rain in the north-east monsoon which resulted in a late fire season but there was a lack of showers in March 1931 so that the forests were extremely inflammable during that month.
- 57. Mr. R. D. Richmond, Chief Conservator of Forests, Madras, attended the abortive sandal sale held in December 1930 and also that held in February 1931.

Mercara,

Dated 7th August 1931.

H. G. HICKS, Chief Forest Officer.

List of Annual Returns to the Progress Report of Forest Administration in Coorg for 1930-31.

Form No	Name of Form.
7	Area of forests.
8	Forest settlements.
9	Demarcation of boundaries.
10	Forest surveys.
11	Progress made in working-plans.
12	Communications and buildings.
13	Breaches of forest rules.
14	Forest tracts protected from fire.
15	Causes of forest fires.
16	Areas closed and open to grazing.
17	Grazing in State forests.
18-A.	Progress in reproduction and afforestation under working-plan or schemes during the year.
18-B.	Plantations not under working-plans during the year.
19	Outturn of timber and fuel,
20	Outturn of minor produce.
21	Account of timber, etc., in depots and sold locally.
22	Abstract of value of timber and stock.
23	Abstract of value of live and dead stock.
24	Summary of Revenue and Expenditure for the year.
24	Supplemental.
26	Outstandings on account of revenue during the year.
27	Outstandings and liabilities of contractors and disbursers during the year

FORM No. 7.

FOREST DEPARTMENT, COORG.

Area of Reserved Forests, Protected Forests, Unclassed or Public Forest Land, and Leased Forests 1930—31.

Division. Re	Banas	Civil district or territory.	Name of Forest.	Area or April	n 1st 1930.	Added du-	Excluded or transferred to other heads.	Area on March 19	031.	No. and date of notification of addition or transfer, &c.	Remarks.
	Range.	Civil di territor		Acres.	Equiva- lent in square nules.	Acres.	Acres.	Acres.	Equiva- lent in square miles.		Ren
irection .	Somwarpet.	Coorg.	Kattepura	. 585.00]		585.00			
North) Div.	Somwarpet.	Coorg.	Mensada Betta	. 275'70)!			275.70			1
North) Div.		١	Malambi (Doddamolte					4,054 70			
			Ganagur and Yedenda.) Nidtha (Bageri, Mavine halla, Kabbe hole pai	3,864-79	·		•••	3,664.79			
			yadayanad (Gadinad, Chic ka Hudgur, Yelakanu					7,348-84			
			aud Horavale.) Jainkal Betta (Bikki hare)	1,561.8				1,561.84			
			Kedamakal Reserve (Part)	13.710 08				13,710 00			
	Fraserpet.	}	Attur (Bende Betta)				•••	5,152.31			
	L'Iddelpeo.	71	Dubare	. 11,333 9				11,333.91			
			Fraserpet Gandadagund Plantation.	i 27.8.	4		•••	27.82]		
] i	Anekad (Cherala)					7,352.91			į
	Bagamandla	1	Fatti Glat	.\ 37,579140				37,579,46	i		
	- againtia	,,	Padinalknad Ghat	48,633.46			.,	48,633 46	1		
		ļ	Kedamakal (Part)	24,565.4			•••	24,565 17	j		Ì
	Mercara.	,,	Mercara East Reserve	. 282:53	!! •••]		282 55	1		!
		"	Kumbarani "	. 11146 50°38	ol			111:56 50:38			
			Knoll " " " " " " " " " " " " " " " " " "	38100				38:00			
			1000	166,328.70				166,328.70	260		İ

1.0

^	
•	и.

South Coorg Tittimatti. Nagerhole. Katumpole.	" "	D 11 11 (D 4)	9,219°30 8,281°35 18,251°77 27,476°00 26,081°85 9,427°00 22,609°00 12,633°84 15,516°12 16,070°03	 	 9,249:30 8,281:35 12,251:77 27,476:00 26,031:85 9,427:00 22,609:00 12,633:84 15,516:12 16,070:03		
			165,546 26	 	 165,546.26	259	ĺ
		Grand Total	331,871.96 or 331,875	 •	 331,874·96 or 331,875	519	

FORM No. 8. FOREST DEPARTMENT, COORG.

Progress made in Forest Settlements during the year 1930-31.

			Arca	i n square n	ailes.	Cost du	ring year.		Government Notifica- tion of settlement.		
Forest Division,	Civil District or Territory.	Nume of Forest.	Finally settled during year. In hand at commencement of year		Taken in hand during year.	In Forest Accounts.	In other Accounts,	Entire cost per square mile of areas finally settled.	No.	Date.	
1	2	3	4	5	6	7	8	9	10	11	
Direction (North) Division. South Coorg	Coorg			Nil		•••			***		
_ [:	Total		Nil				•••	•••	•	

FOREST DEPART
Record of Demarcation and

Division.	Length of boundaries artificially demar- cated during the year.	Length of previously existing boundaries repaired.	Length of pre- viously existing boundaries not repaired.	Total length of artificially marked boundaries at close of the year.
Direction (North) Divn	Miles.	Miles.	Miles. 254 0	Miles.
South Coorg Division		44.4	142.4	187
Total	***	72:4	396.4	469

FORM
FOREST DEPARTStatement of forest areas surveyed and under survey by

			Торос	RAPH	ICAL S	URVE	78.	0.2		
		Sp	ecial St	Ordinary Surveys Forest						
DIVISION.		Prev	io u s.	Of the	year.	(Cost.	Previous.		
		4"=1 M.	2"=1 M.	4"=1M.	2''=1 M.	Incurred during year.	Total to the end of year.	$2''=1 \mathrm{\ M}.$	Smaller scales.	
1		2	3	4	5	6	7	8	9	
	 ,	Sq. M.	Sq. M.	Sq.M.	Sq.M.	Rs.	Rs.	Sq. M.	Sq. M.	
Direction (North) Division South Coorg Division	•••	•••	260 259				20,479	 	 	
Total	••••		519				20,479	.,.	***	

Note.-Columns 2, 3, 4, 5, 8, 9, 10 and 11 should show the work up to date.

No. 9.

MENT, COORG.

Maintenance of Boundaries, 1930—31.

Length of houn- daries still to be		Total length of boundaries at the	Expendit marcation ye	Remarks.	
demarcated at close of the year.	quiring artificial marks.	close of the year.	On new work.	On repairs.	a
Miles. 	Miles. 56 11	Miles. 338 198	Rs.	Rs. 1,095 589	
***	67	536		1,684	

No. 10.

MENT, COORG.

the Survey of India Department during the year 1930—31.

of the year. Of the year.		Boun Sur	DARY VEYS.		rvcyed.		
		Previous. Of the year.		Total area surveyed.	Area remaining to be surreyed.	Total area as per form 7.	REMARKS.
10	11	12	13	14	15	16	17
Eq. M.	Sq. M.	L. M.	L. M.	Sq. M.	Sq. M.	Sq. M.	
•••	***	260 259	 	2 60 2 59	***	260 2 59	
***		519		519		519	

The total added to column 15 should equal the total forest area in column 16.

FOREST DEPART-Progress made in Working

	Are	a under sa	nctioned w	Area not under working plans					
	уевг.			At close	of year.	n.	Plans not unde		
Division,	At commencement of y	Added during year.	Deducted during year.	Aotual area.	Percentage of total forest area (as shown in column 10).	Plans under preparation	Required at present	Notrequired at present.	
1	2	3	4	5	6	7	8	9	
Direction (North)	Sq. M. 260	Sq. M	Sq. M.	Sq. M. 260	Per cent.	Sq. M.	Sq. M.	Sq. M.	
South Coorg	259		,	259	100		•••	•••	
Total	519			519	100				

FOREST DEPART-Communications and

					New	works	under	take	n dui	ingi	he y	ear.			
			Buildi	ıgs.			1	Road	s an	d pai	ths.			Other works	
	E	x pen	ditu r e	on	ed	Cart roads		Bridle paths		Others		े बते	red		v work
Division.	Head-quarter houses	Rest houses	Houses for subordinate establishment	Others	Total expenditure incurred	Length	Cost	Length	Length		Cost	Total length of paths or roads	Total expenditure incurred	Expenditure incurred	Total expenditure on now works
1	2 (a)	2(b)	2 (c)	2 (d)	3	4 (4 (b)	4 (c)	4 (d)	4 (e)	4 (f)	5	6_	7	8
	Rs	Rs.	Rs.	Rs.	Rs.	F.	Rs.	M. F.	Rs.	M.	Rs.	M. F.	Rs.	Rs.	Rs.
Direction (North) Division			2,170	1,272	3,412	•••	,	4-1	435			4-1	435	703	4,580
South Coorg Division		322	4,295	125	4,742			•••	***	140	•••	1-1	7,7 56	641	13,139
Total		322	6,465	1,397	8,184		,.,	4-1	435			5-2	8,191	1,341	17,719

No. 11. MENT, COORG. Plans, 1930-31.

8 and 9).	F	Revisions.			
Total forest area in Form No (Total of columns 5, 7, 8 ar	Due or required.	in progress at end of year.	Revised plans sanctioned during year	Expenditure on working plans during the year.	Remarks.
10	11	(13	14	- 5
Sq. M. 260	Sq. M. 260	Sq. M.	Sq. M.	Rs.	
259	259	140	***	12,620	_
519	519	140	***	12,620	<u> </u>

No. 12.
MENT, COORG.
Buildings during the year 1930—31.

				R	epairs e	executo	ed duri	ng the	year.						
	В	uildings.					Re	ads ar	nd patl	ıs.			Other works.		_
1	Expend	iture on		po	Cart r	oads	Bric patl		Otl	ners	roads	red	red	rred	
B Hend-quarter houses	Rest houses	C Houses for subordinate	(p) Others	Total expenditure incurred	(a) It rength	11 (b)	e) II Cength	Cost	(e) Length	Cost	Total length of paths or	E Total expenditure incurred	Total expenditure incurred	-	Remarks.
Re.	Rs.	Rs.	Rs.	Rs.	M, F.	Rs.	M. F	Rs.	M.	Rs.	M. F.	Rs.	Rs.	Re.	
475	409	1,026	65	1,966	24-7	926	98-1	1,036	12	290	135-0	2,252	ι,307	5,525	
48 4	1,043	1,729	209	3,465	63-7	4,355	79-4	200	12	210	155-3	4,865	690	9,020	
959	1,413	2,755	274	5,431	88-6	5,281	177-5	1,336	24	500	290-3	7,117	1,997	14, 545	

FOREST DEPARTMENT, COORG.

Statement showing register of breaches of Forest Rules during the year 1930-31.

		from					1	Te7	v c	ase	s	of t	he	уe	ar.							-			I	lisp	ose	d c	f d	uri	ing	the	y (ear						close		
		pending	year.	-	forest		:	ized			ized	. 0	ŧ	r L	i		_	- :		.80			C	'nψi	cti	ons	· 4	Leg	nit	tal	s.			Tο	tal	۱.		-		ang at		
Forest Division.		Cases po			Injury to !	by fire.		Unauthor	felling	:	Unauthor	Brazini Brazini	Other				Total			Total cases.			00000			Persons.		Cases.		Dougono	rersons.		-	Cares.	į	Persons.				Cases pending a	7.	Remarks.
	A	В	Al	A	I	s c	A	В	c	A	В	c	A	В	c	A	в	c /	A I	C	A	11	A	В	A	В	A	f	3	A	В	A	В	A	ll A	В	A	11		1	_	
1	2	3	4		5 (3 3	7 8		10	13	12	13	14	15	16	17	18	19 2	20 2	1 22	2	3	24	25	26	27	28	3 2	9	30	31	32	3:1	3	43	5 30	3	7	38	39	40	41
Direction (North) Division				Ī.,	Ī		-		5 2		13	4	1	3		2	21	6	2	1 1	6 5	29	2	21	5	39	, .	-	6*		11		22	1 2	23	5 5	0 5	ົ່ວວັ				*Withdrawn,
South Coorg Division					.	٠.,	١.	. 1	١		2	ļ	2	4		2	.7t		2	7		9		7	ļ	10)				1	.		7	7	2 1	1 1	11	2		2	
Total					.	-		1	3 2		15	4	3	7		4	28	6	4 2	8	5 3	38	2	28	ā	45	,	-	6		12		22	8 3	30	7 6	1 6	3G	2		2	

N. B .- 'A' means cases taken into court.

^{&#}x27;B' means cases disposed of under section 68 of the Indian Forest Act, 1927.

^{&#}x27;C' means undetected cases.

FORM No. 14.

FOREST DEPARTMENT, COORG.

. Area of forest tracts protected from fire during the year 1930-31.

Division.	Forest		Year in which protection com-	,	Area actually protected in* 1929-39.	Area attempted to be protected inf 1930—31.	Failures. 1930—31.	Area actually protected in† 1930-31,	Cost,	Remarks.
1		2	3	1 4	5	6	7	8	9	10
Direction (North) Division	Mercara		1883	Acres. 316	Acres. 315	Acres. 316	Acres.	Acres. 313	Rs. 227	
•	Fraserpet		1876	23,869	23,193	23,869	832	23,037	1,671	
	Somwarpet	•••	1877	2,738	2,727	31,201	1,785	29,416	731	
	Blagamandla	***	1914	500	500	500		500	346	
		Total		27,423	26,735	55,886	2,620	53,266	2 975	
South Coorg Division	Tithimatti	•••	1876-7	35,792	35,590	35,686	225	35,461	1,893‡	Includes Rs. 153 being the value of ragi distributed
	Nagerhole	•••	1878	55,838	55,753	55,838	1,542	54,296	2,574§	to fire patrols as rewards. § Includes Rs. 120 do.
	Kutumpole	•••	1881	***		•••			•••	3 Includes Les. 120 do.
		Total		91,620	91,343	91,524	1,767	89,757	4,467	
	G	Frand Total		1,19,043	1,18,078	1,47,410	4,387	1,43,023	7,442	

^{*}Year previous to that of current porter. †Year dealt with in current report.

Total	South Coorg Division	Direction (North) Division .		Division or Circle,		
<u> </u>	.:	<u>:</u> _		1		
۱ ـ		:	No, of fires.	(A)		
200	296	:	Area burnt in acres.	Fire caused by acciden careleseness in burning	t or the	hrougn lines.
ST.	ы	3	No. of fires.	(B)	-to hm	20000
340	ij	180	Area burnt in acres.	Fires entering the fore	s.	CIUSA
1	-	:	No. of fires.	By workmen employed in the forests, by purchasers of forest	0	
20	20	:	Area burnt in acres.	produce and by Ya cutters.	Owing to carelessness or accident.	
10	:	22	No. of fires.	By villagers, travel-	care	
250	:	250	Area burnt in acres.	By villagers, travel- lers, etc., passing through the forests.	esenes	(C) F3
:	:	:	No. of fires.	To The Province	S 07	ires l
1	:	:	Area burnt in acres-	By Railway Engines.	nocid)egín
:	<u> </u> :	;	No. of fires.	By lightning or by	ent.	ning
:	:	:	Area burnt in acres.	fire-baloons.		insi
:	:	:	No. of fires.	In order to obtain new		de ti
1	!	:	Area burnt in acres.	grass.		ne re
μ.	:		No. of fires.	In order to turn out	By i	SCT VI
80	<u> </u> :	Se	Area burnt in acres.	game or to reduce cover.	neta.	or f
10	:	10	No. of fires.		tions	ire tı
932	:	932	Area burnt in acres.	Maliciously fired.	By intentional firing	Fires beginning inside the reserve or fire traced area.
1	-	13	No. of fires.		77	1.6a.
1,282	20	1,262	Area burnt in acres.	Total,		
16	ဗ	7	No. of fires.			
2565	1387	1178	Area burnt in acres.	Causes unknown.		
36	13		No. of fires.	(A), (I		
4,387	1,767	2,620	Area burnt in acres.	tal B) and C).		

FORM No. 16.

FOREST DEPARTMENT, COORG.

Area closed and open to grazing during the year 1930-31.

Area in square miles.

				Open t	grazing.		
Division,	Closed to a	all animals.	Of all a	nimals.	Of all anim browsers (ca and g	mels, sheer	Remarks.
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	Part of year	Rem
1	2	3	4	5	6	7	8
			Reserved	Forests.			
Direction (North) Division	67	193				193	
South Coorg Division	. 13	246				246	
Total	80	439				439	
			Reserved	Lands (un	DER SEC. 4).		
			! ! !				
Total	***				***	***	
		1	PROTECTED	Forests.			
	· 						
Total	•••			,		.,,	
Grand Total	60	439	•••			439	

FOREST DEPARTMENT, COORG.
Return of grazing in the State Forests of Coorg during the year 1930—31.

	Gra	zing on	рауше	at. N	սահ	er o	f un	imal	8.				Gra	zing fre	e. Num	ber of a	nim	aln.			full
		At full			1.		_			By rig	ht und		:	ement.	Duri othe	ng pleas rwise th	ure	of G	lovernme er settlem	nt or ent.	alue at
Di v ision.	Buffaloes.	Cows & bullocks	Goats & sheep. Camels. Other animals.	Fees received.	Buffaloes.	Goats & sheep.	Camels.	Actual, Fees re-	Valuent ceived.	Buffaloes,	Cows& bullocks	Goats & sheep.	Camels.	Value of fees at full rates.	Buffaloes.	Cows & bullocks.	Goats & sheep.	Camels.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates,
				Rs.				Rs.	Rs.					Rs.					Rs.	Rs.	Rs.
Direction (North) Division	158	2,018	 	616							288			72	1,934	12,316			3,805	3,877	4,493
South Coorg Division	221	940		293				-		10	162			4.1	1,155	2,660			1,108	1,152	1,445
]		
	-												1								
	***************************************							li													
						_															
Total	379	2,958		909	.					10	450			116	3,089	14,976			4,913	5,029	5,938

12

FORM No. 18 A.

Forest Department, Coorg.

Progress in afforestation and regeneration under Working Plans or Schemes during the Forest year 1930-31.

FOREST DEPART-

Progress in Reproduction and afforestation under

Division,	Working Circle and Block.	Period	Area to be regenerated during period.	Method of treatment.	Area on which re- generation was in progress at Commence- ment of year 1st April 1939.
1	2	3	4	5	6
Direction (North) Division.	Northern working circle	20 years.	acres. 4,792	Clear fellings.	158
	Southern working circle	,,		do.	77
	Northern working circle	,,	1,000	Sandal sowing.	171
	Mercará Reserve	17 years.	520	Planting of eucalyptus.	46
	Total		6,312		452
South Coorg Division.	Southern working circle, Mawkal felling scries, blocks 1, 2, 5, 8 and 9.	20 years.	11,446	Clear	£6
	Southern working circle Hatgat felling series, blocks 1, 3, 4, 7, 11 and 12.	33	11,535	felling.	125
	Urti and Sollekofli blocks	**	8,500	Regenera- tion fellings.	
	Total		31,481		211
	Grand Total		87,793		663

No. 18-A.

MENT, COORG.

Working Plans or Schemes during the year 1930-31.

	from .	year.	liture to om com- ment of	date fr	diture die year.	Expen- during	Area on		which re is comple	tion	Area on
Remarks.	Total revenue date of creation.	Revenue during year.	Up-keep.	Creation.	Up-keep.	Greation.	which regeneration is still in progress at close of year 31st March 1931.	Total to 31st March 1931.	During year 1st April 1930 to 31st March 1931.	Previous.	which regeneration commenced during the year April 1st 1930 to March 31st 1931.
18	17	16	15	14	13	12	11	10	9	8	7
Ī	 .		8,722	3,381	555		159	282		282	
			3,558	1,299	14		77				••
		***	9,826	853	335		171	, 56		ŏG	***
			17,913	9,889	717	380	46	106	11	95	11
	•••		40,019	15,422	1,621	380	452	441	11	423	11
		***	32,094	17,724	3, 289	3,060	75	715	- 86	629	75
			27,356	15,071	4,738	2,890	125	737	125	612	125
			13,535	•••	189	•••		1,765		1,765	* ***
-	•••	•	72,985	32,795	8,216	5,950	200	3,217	211	3,006	200
1		***	1,13,004	48,217	9,837	6,330	652	3,661	222	3,439	211

FOREST DEPART-

Plantations not under Working Plans

,			Area in	acres.		Expendi the
Division and Forest.	Method of formation and year of commencement.	At commencement of year 1st April 1930.	Added during the year 1st April 1930 to 81st March 1931.	Excluded during the year 1st April 1930 to 31st March 1931.	On Slat March 1931.	Creation.
1	2	3	4	5	6	7
Direction (North) Division	Regular Plantations 1870—1884 Teak.	Aores. 35	910		25	•••
Northern Working Circle	Do.	87			87	
North Division	Regular Plantations 1870-1884 Sandal.	603			603	
Do.	Taungya Plantations kumries.	2,718	48		2,766	1,735
Mundrote	Regeneration and Improvement fellings of Hopea 1919-20.	100	•••		100	
! !	Artificial cultivation of Sandal by dibbling at stakes and under bushes.	128			128	
	Total Direction Division	3,671	48		3,719	1,735
South Coorg Division	Regular Plantations Teak 1868.	235			235	
Tithimatti and Nager-	Do. Sandal 1880	451			451	
hole Kanges.	Total	686	,		686	
Do. Do.	Taungya Plantation 1891	2,006	66		2,072	1,331
Kutumpole Range.	Artificial cultivation of Aini, Rombax and Bamboo by dibbling and planting.	266	5		271	72
	Planting Teak 1869—70	760			760	
	Clear felling and sowing with Aini and Irul.	5		•••	5	
	Planting Rosewood	5	15		20	
	Planting Andaman Padauk, Honne, Noga, Irupu.	***	27	•••	27	
	Total	1,036	47	***	1,083	72
•	Total South Coorg Division	3,728	113	***	3,841	1,403
	Grand Total of North & South Divisions.	7,399	161	`	7,560	3,138

No. 18-B.

MENT, COORG.

during the year ending 31st March 1931.

	from on.	year.	from exclud-	fuiled e yenr	en off	e from ding expen- ed crops.	expenditur ment inclu on all faile	Total commence diture	ure during year.
Remarks.	Total revenue from dute of creation.	Revenue during year.	Expenditure from commencement exclud- ing failed areas.	Expenditure in fulled areus during the yeur.	Total area written off from start.	Total.	Upkeep.	Creation.	Up-keep.
17	16	15	14	13	12	11	10	9	8
	299		5,687		11	6,953	5,802	1,151	14
·se	2,074		12,303	•••	18	16,004	11,053	4,951	60
umri	2,345		39,852		,,,	39,852	29,992	9,860	177
the B	3,359	(a) 2,146	53,667	•••	144	53,667	42,602	11,065	251
d from		***	476	•••		476	326	150	***
otaine e Kur			784	•••	•••	784	51	733	***
igi o	8,077	2,146	1,12,769		29	1,17,736	89,826	27,910	502
of ra	45,045		33,010			33,010	17,860	15,150	43
lue	3,934		28,832	***	9	28,877	24,153	4,724	37
t va	48,979		61,842		9	61,887	42,013	19,871	80
narke	53,291	(b) 1,047	39,188		1	39,242	28,176	11,066	3,625
Includes Rs. 570 being the market value of ragi obtained from the Kumries. Represents market value of razi obtained from the Kumries.	165		2,599			2,599	2,424	175	186
570 be	3,037		64,734	***	•••	61,734	64,734	Not knowp	121
s Ra.			205		•••	235	2 35		•••
lude			170		101	170	36	134	3
				•••	***			•••	
	3,202		67,708			67,738	67,429	309	310
-	1,05,472	1,047	1,68,738		10	1,68,867	1,37,618	31,249	4,015
-	1,13,549	3,193	2,81,507	.,,	39	2,86,603	2,27,444	59,159	4,517

FORM
FOREST DEPARTOutturn (in cubic feet, solid) of Timber

	Timbe	er in th	e rot	igh;	logs.	Tim		n the	rou	gh;	Sa	wn or	squa r e	timber	r.
Division,	Government,	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.
	c ft	c ft	e ft	c ft	c ft	c ft	c ft	e ft	e ft	c ft	c ft	e ft	c ft	e ft	e ft
										:		I.—R	served	Forest	8.
Direction (North) Divn. South Coorg Division	9,637 95,778	2,130 27,630		Į	11,767 123408		 525	***		 4,492	 1,300				
Total	105415	29 ,7 60			135175	3,967	525		•••	4,492	1,300		•••		1,300
	<u>. </u>								_				! 		
							ļ					IIP	rotected	Forest	s.
Direction (North) Divn South Coorg Division		60,436 23,600	1	.,.	60,436 23,600										
Total		84,036	_		84,036										
				_								 [II.—[nclasse	d Fore	sts.
•								***					Nil.		
Total								.,,					Nil.		
Grand Total	105415	113796			219411	3,967	525		 	4,492	1,300				1,300

No. 19.

MENT, COORG.

and Fuel during the year 1930—31 and Agency of Exploitation.

286 286 110682 30,285 140967 56,135 78,175 124310 275,277	Misce	llaneot	is and	Sandal	wood.		To	al tim	ber.			. I	uel.			
	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Government.	Purchasers.	Free Grantees.	Right holders.	Total.	Total outturn.
286 286 101045 28,155 1292(0 3,300 50,000 54,200 183,400 286 286 110682 30,285 140967 56,135 78,175 134310 275,277 18,150 23,600 78,586 89,200 59,20 137,780 23,600 23,600 21,525 21,525 21,525 45,125 18,150 18,150 18,150 84,036 102186 80,725 86,725 182,911	c ft	c ft	e ft	c ft	e ft	c ft	c ft	c ft	c ft	cft	cft	c ft	e ft	c ft	c ft	e ft
18,150 18,15 18,15 0 60,436 78,5 66 £9,200 59,2: 0 137,780 23,600 21,525 21,525 45,125 18,150 18,150 18,150 84,036 102186 80,725 80,725 182,911	•••		286	1	1		1		1							91,877 183,400
			286		286	110682	30,285	***		140967	56 , 135	78,175			134310	275,277
				i ———						,						
18,150 18,150 18,150 84,036 102186 80,725 80,725 182,911	į								İ		1		1			13 7,7 86 45,125
	18,150				18,150	18,150	84,036			102186		80,725			86,725	182,911
		,	,,,	-		,	•••									,
18,150 286 18,436 128652 114321 243153 56,135 158900 215035 458,188															•••	
	18,150		286		18,436	128632	114321			243153	56,135	158900	***		215035	458,188

FORM No. 20. FOREST DEPARTMENT, COORG.

Outturn of minor forest produce during the year 1930-31.

				Produce	remov	ed or u	tilized				
Description of	By Go me Age		By pur	chasers.		free nts.		ight lers.	Tota	ıl.	ks.
produce.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Remarks.
I.—Reserved Forests.				•							
DIRECTION (NORTH) DIVISION.		Rs.		Rs.		Rs.		Rs.		Rs.	
Bamboos Reeds	900	65	83,060 	1,150	2, 050	29			86,010	1,244	
Minor forest produce in- cluding cardamom Grazing			•••	12,636 616		3, 805		72		12,636 4,493	
								į			
Total	900	65	83,060	14,402	2,050	3,834		72	86,010	18,373	
South Division.				\ ! :							
Bamboos			30,665		50				30,715	192	
Reeds Minor forest produce in-	,		113,480	-	60 canes.	} 2	•••		113,480 & 60	} 1,177	
cluding cardamom Grazing				1,175 293		1,098	•••	41	canes.	1,435	
Total			144,145	1,660	110	1,100		44	144,255	2,804	
Grand total	900	65	227,205	16,062	2,160	1,934		116	230,265	21,177	
IIProtected Forests.											
DIRECTION (NORTH) DIVISION.											
Bamboos			53,200	2 66			***		53,200	266	
Total			53,200	266					51,200	266	
South Division.			:								
Bamboos			20,200	101		.,,	•••	,.,	20,200	101	
Minor forest produce				8		• • • •				8,	
Total "			20,200	109				, ,,	20,200	109	
Grand total			73,400	375			•••		73,400	375	

FORM No. 21.

FOREST DEPARTMENT, COORG.

Account of timber and other produce cut or collected by Government agency and brought to depots, sold locally, or otherwise disposed of, during the year 1930—31.

Name of Division.	Balance at commencement of the year in forests and sale depots.	Roceived during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forests and sule depts.
Coorg. Direction (North) Division. South Division	3,562 17,139	Timber 9,637 101.045	(cubic feet.) 13,199 118,184	7,300 76,841	5,899 41,243
Total, timber	20,701	110,682	131,383	84,141	47,242
	<u> </u>	Clean Sandal	wood (tons).		
Direction (North) Division. South Division	74 . 	363 	437 	(a) 176 	261
Total, clcan sandalwood	74	363	437	176	261
Direction (North) Division South Division	t8 	Rough Sandal 412	470	(b) 402 	68
Total, rough sandalwood	58	412	470	402	68
Direction (North) Division. South Division	***	Fuel (cubic 52,835 3,300	feet). 52,835 3,300	52,835 3,300	
Total, fuel	***	56,135	56,135	55,135	

- (a) Includes 13 tons of dryage.
- (b) Includes 10 ,,

FORM No. 22.

FOREST DEPARTMENT, COORG.

Abstract showing the value of timber and other produce at sale depots for the year 1930-31.

Description of timber	On h	and at coment of t	he year.	On	hand at c			ence in lue.
and other produce.	No.	C. ft.	Value.	No.	C. ft.	Value.	In favour of the year.	Against the y ear.
DIRECTION (NORTH) DIVN. Sandalwood. Goodwood Chips Roughwood	 	Tons. 74 	Rs. -1,03,600 58,000		Tons. 261 68	Rs. 2,61,000 54,400	Rs. 1,57,400	Rs 3,600
Total,		132	1,61,600		329		1,57,400	3,600
South Coord Division Timber.		C. ft.			C. ft.			
Teak logs Biti , Biti , Houne , Matti , Matti round logs Godda Teak poles	26	2,075 397 620 917 1,173 498 61	5,000 500 800 900 900 400 50	445 8 6 	8,659 7,577 229 107 61	21,700 15,200 200 100 	14,400	600 800 900 400
Total	308	5,741	8,850	941	16,633	37,250		2,700

FORM No. 23.

FOREST DEPARTMENT, COORG.

Abstract showing the value of Live and Dead-stock for the year 1930—31.

		[commence- the year.		it close of year.	Differe valu		rks
	of live and		No.	Value.	No.	Value.	In favour of the	Against the	Remarks
	1		2	3	4	5	year.	year.	8
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Ì		Rs.	<b>L</b> ive	Rs.	Rs.	Rs,	
Elephants	•••		15	58,900	18	64,800	5,900		
Buffaloes			5	700	4	560	·	140	
Bullocks	***							***	
То	tal live-stoc	k	20	59,600	22	65,360	5,900	140	
D	Demon				Dead	stock.			
Direction (No Buildings			48	37,574	51	41,016	3,442		
Survey instrum	ents		176	1,622	238	1,936	314		
Tools			1,566	3,497	1,410	3,119		348	
Furniture			560	2,292	571	2,405	113		
Crockery	***		287	291	288	296	5	***	
Tents	***		7	1,450	7	1,450		***	
Miscellaneous	•••		1,140	9,813	1,493	9,975	162	***	
	Tota	ıl	3,784	56,539	4,058	60,227	4,036	318	
South Coe	rg Divisio:	N.							
Buildings			78	83,173	76	82,283		890	
Su <b>r</b> vey instrum	ents		33 <b>4</b>	1,173	363	1,269	96		
Tools			56,371	85,914	52,905	80,815		5,069	
Furniture	***		745	3,913	760	3,901		12	
Crockery			730	716	760	746	30	***	
Tents	***		***						
Miscellaneous	•••		2,246	17,529	3,317	18,124	595	111	
	Tota	մ	60,504	1,92,4.8	58,181	1,87,168	721	5,971	
Total dead-stoe South Coorg	k of North a privisions.	nd	64,288	2,48,957	62,239	2,47,395	4,757	6,319	

#### FORM No. 24.

### COORG FOREST, DIRECTION AND SOUTH DIVISIONS.

Summary of revenue and expenditure for the year 1930-31.

Budget heads.		Direction ( Division	North) o <b>n</b> .	South Co Divisi	org	Total Revenue	
Revenue.							
I.—Timber and other produce remover forests by Government agency		Rs.	Ai P,	Rs.	A. P.	Rs. A	A. P.
a. Timber b. Firewood and charcoal c. Bamboos d. Sandalwood Grass and other minor produ		3,597 5,054 65 1,57,220	0 0	85,898 222 	0 0	89,495 5,276 65 1,57,220	0 0 0 0 0 0
II.—Timber and other produce remo forests by consumers or purel	ved from the					-	
a. Timber b. Firewood and charcoal c. Bamboos d. Grazing and fodder grass e. Other minor produce f. Cardamom g. Other items h. Commutation fees		1,416	0 0 0 0 0 0 0 0 0 0	12,055 691 395 293 987 196	0 0 0 0 0 0 0 0 0 0	27,944 1,673 1,811 909 6,174 7,775	0 (
III.—Drift and waif wood, and configureduce—	scated forest		•	,		***	
IV.—Revenue from forests not mana Government—	ged by			"			
<ul> <li>a. Duty on foreign timber and produce.</li> <li>b. Revenue from shared and produce.</li> </ul>							
V.—Miscellaneous—		-				ļ i	
a. Fines and forfeitures b. Other sources	***	7,736	0 0	7,084	0 0	14,820	0 0
Total	Revenue	2,05,341	0 0	1,07,821	0 0	3,13,162	0 0
	t Refunds	-2,991			0 0+	<b>-3,002</b>	0 0
110	travenue	2,02,350	00	1,07,810	0.0	3,10,160	0 6
*North Division.  R I a. Timber I b. Firewood and charcoal I d. Sandalwood II a. Timber II e. Other minor produce II f. Cardanom  Total	2,406 0 ( 361 0 ( 115 0 (	RV 0		South Divi		Rs. 11 0	0

## FORM No. 24.—cont.

## COORG FOREST, DIRECTION AND SOUTH DIVISIONS.

Summary of revenue and expenditure f r the year 1930-31.

Budget heads.	D	irection (North) Division.	South Coorg Division.	Total Expenditure.
Expendituee.		Rs. A. P.	Rs. A. P.	Rs. A. P.
AConservancy and Works.				
I.—Timber and other produce removed from the forests by Government agency—				
a. Timber b. Firewood and charcoal		604 0 0 3,037 0 0	$26,696  0  0 \\ 123  0  0$	27.300 0 0 3,160 0 0
c. Bamboos		94 0 0	•••	94 0 0
<ul> <li>d. Sandalwood</li> <li>e. Grass and other minor produce</li> </ul>		15,771 0 0	126 0 6	15,897 0 0
II.—Timber and other produce removed from the forests by consumers or purchasers		!		
IIIDrift and waif wood and confiscated forest produce -	1	:		
IV.—Revenue from forests not managed by Gover ment—	n-			
<ul> <li>a. Duty on foreign timber and other forest produce.</li> <li>b. Revenue from shared and private forests</li> </ul>	. !	•••		
V.—Rent of leased forests and payments to share		•••	•••	
holders in forests managed by Government	t			
VI.—Livestock, stores, tools and plant-	į	i		
a. Purchase of cattle		1,150 0 0	1,168 0 0	2,318 0
<ul> <li>b. Feed and keep of cattle</li> <li>c. Purchase of stores, tools and plant</li> </ul>		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	10,618 0 0 526 0 0	14.538 0 790 0
VII.—Communications and buildings—	į			
a. Roads and bridges		2,252 0 0	4,865 0 0	7,117 0
b. Buildings	•••	1,966 0 0	3,165 ú 0	5,431 0
c. Other works	***	1,307 0 0	690 0 0	1,997 0
VIII.—Organization, improvement and extension of forests—				
a. Demarcation		1,095 0 0	<b>5</b> 8 <b>9</b> 0 0	1,681 0
<ol> <li>Cost of forest settlements; compensation for land and rights.</li> </ol>	n	***	***	***
c. Surveys d. Working-plans		***	•••	
e. Sowing and planting		12,438 0 0	19,630 0 0	32,068 0
f. Protection from fire	•••	2,975 0 0 521 0 0	4,194 0 0 20 0 0	7,169 0 511 0
g. Other works	•••	321 0 0	20 00	311 0
IX.—Miscellaneous—				
a. Law charges c. Other charges	:::	3,001 0 0	359 0 0	3,360 0
XSuspense works advance		-166 0 0	-306 0 0	-472 0
	ŀ		·	

#### FORM No. 24.—cont.

#### COORG FOREST, DIRECTION AND SOUTH DIVISIONS.

Summary of revenue and expenditure for the year 1930-31.

Budget heads	Direction North Division.	South Coorg Division.	Total Expenditure.
52 A.—CAPITAL WORKS	Rs. A. P.	Rs. A. P.	Rs. A. P.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
forests by consumers or purchasers—			
III.—Drift and waif wood and confiscated forests produce—			
IV.—Revenue from forests not managed by Government—	1-		
<ul> <li>a. Duty on foreign timber and other forest produce.</li> <li>b. Revenue from shared and private forests</li> </ul>			-
VRent of leased forests and payments to share- holders in forests managed by Government-			
VILive-stock, stores, tools and plant-			
b. Feed and keep of cattle	240 0 0	 35 0 0	 275 0 0
VIICommunications and baildings-			
k D.: 1131	3,442 0 0 703 0 0	7,756 0 0 4,742 0 0 641 0 0	8,191 0 0 8,184 0 0 1,344 0 0
VIII.—Organization, improvement and extension of forests—			
<ul> <li>a. Demarcation</li> <li>b. Cost of forest settlements; compensation for land and rights.</li> </ul>			
d. Working-plans	23 0 0	405 0 0 12,329 0 0	105 0 0 12,352 0 0
f Ductaction from fun	•••		
IX.—Miscellaneous—			
h Othor charge			
Total 52 A.—Capital Works	4,813 0 0	25,908 0 0	30,751 0 0

FORM No. 24-cont.

### COOKG FOREST, DIRECTION AND SOUTH DIVISIONS.

Summary of revenue and expenditure for the year 1930-31.

	Budget heads.		Direction ( Divisi			South C Divisi		Total Expendite	
			Rs.	Δ.	P.	Rs.	A. P.	Rs.	A. P.
Brot	JGHT OVER TOTAL A.—CONSERVANCY AND WORKS.		50,229	0	0	72,763	0 0	1,22,992	0 0
1.—Sa	B.—Establishments,		l						
a.	Conservators		•••			***			
<b>b.</b>	Superior officers		16,531	0	0	8,080	0 0	24,611	0 0
с.	Subordinate forest and depot establishments.		20,408	0	0	28,576	0 0	57,984	0 0
d.	Office establishments	•••	10,904	0	0	8,275	0 0	19,179	0 0
6,	Deputation and other allowances	•	2,252	0	0	2,048	0 0	4,300	0 0
f.	Exchange compensation allowance	•••							
u.—Tı	ravelling Allowances—								
<i>a</i> .	Conservators	•••	]						
<b>b</b> .	Superior Officers	•••	7,630	0	0	7,522	0 0	15,152	0 0
c.	Subordinate forest and depot establishments.			·		, -			
d.	Office establishments	••	ر :						
1II.—Co	ontingencies—								
a.	Stationery		14	0	0	28	0 0	42	0 0
ь.	Carriage of tents and records	,,,	104	0	0	26	0 0	130	0 0
c.	Rents, rates and taxes	***	1,183	0	0	566	0 0	1,749	0 0
e.	Official postage		1,202	0	0	899	0 0	2,101	0 0
f.	Sundries	•••	1,307	6	0	132	0 0	1,439	0 0
Contri	bution to Indian Institute of Science	•••	<b></b> .			•••			٠
Passag	e Contribution	***	600	0	0	•••		600	0 0
Ento	bution to Madras Government on account pmological investigation of spike disease alwood.	of in	2,117	0	0			2,117	0 0
	Total B.—Establishments		73,252	0	0	56,152	0 0	1,29,404	0 0
	Total A and B		1,23,481	0	0	1,28,915	0 0	2,52,396	6 0
	52 A. Capital		4,843	0	0	25,905	0 0	30,751	0 0
	Grand Total of all Expenditure		1,28,324	0	0	1,54,823	0 0	2,83,147	0 0

### FORM No. 24.—(SUPPLEMENTAL.)

#### FOREST DEPARTMENT, COORG DIRECTION DIVISION.

Budget heads.	s 200 s 200 b 5	Lands managed by the Forest Department.	Lands not managed by the Forest Department.	Total as per Form 24.
Revenue.		Rs. A. P.	Rs. A.P.	Rs A. P.
I.—Timber and other produce removed from by Government agency.—	the forests			
c. Bamboos	***	3,597 0 0 5,054 0 0 65 0 0 1,57,220 0 0		8,597 0 0 5,054 0 0 65 0 0 1,57,220 0 0
II.—Timber and other produce removed from the consumers or purchasers—	ne forests by			<b></b>
7 0 1 1 1 1 1 1		780 0 0 390 0 0 1,150 0 0 616 0 0	15,109 0 0 592 0 0 266 0 0	15,889 0 0 982 0 0 1,416 0 0 616 0 0
f. Cardamom g. Other items h. Commutation fees		5,187 0 0 7,579 0 0	 	5,187 0 0 7,579 0 0
III.—Drift and waif wood and confiscated forces IV.—Revenue from forests not managed by Gov	-	•••	•••	•••
<ul> <li>a. Duty on foreign timber and other fores</li> <li>b. Revenue from shared and private fore</li> </ul>	st produce	 	•••	***
V.—Miscellangous—				1
a. Fines and forfeitures b. Other sources		6,769 0 0	967 0 0	7,736 0 0
Total a	revenue Refunds	1,88,407 0 0 -2,991 v 0*	16,934 0 0	2,05,841 0 0 -2,991 0 0
TOTAL NET R	EVENUE	1,85,416 0 0	16,934 0 0	2,02,350 0 0
Refunds Dire	ection Divisio	n	TPa = m	
*R I a. Timber R I b. Firewood and charc R I d. Sandalwood R II a. Timber R II e. Other minor forest R II f. Cardamom	coal produce	23	Rs, a. p.  86 0 0  8 0 0  406 0 0  801 0 0  115 0 0  125 0 0	•

# FORM No. 24,—(SUPPLEMENTAL.)—cont.

#### FOREST DEPARTMENT, COORG DIRECTION DIVISION.

Expenditure.		Budg	et heads.				the Forest	Lands not managed by the Forest Department	Form 24.
A.—Conservancy and Works.  I.—Timber and other produce removed from the forests by Government agency—  a. Timber							Rs. A. P.	Rs. A. P.	Rs. A. P.
1.—Timber and other produce removed from the forests by Government agency—   a. Timber		Expe	NDITURE.						
### According to the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the		A.—Conserv	ancy and	Works.					
b. Firewood and charcoal	I.—Timby	ber and other pr Government age	odace rei ncy—	noved	from the fo	rests			
c. Bamboos d. Sandalwood			1		•••				601 0 0
d. Sandalwood         15,771 0 0        15,771 0         e. Grass and other minor produce	0, r 1	rirewood and cha:	reoai	• • • •					
e. Grass and other minor produce  II.—Timber and other produce removed from the forests by consumers or purchasers	d.	Sandalwood							
Disconsisting of purchasers   Disconsisting of the product				uce		• • • •	1 '		
Disconsisting of purchasers   Disconsisting of the product	** *** *		,						
III.—Drift and waif wood and confiscated forest produce	11.—11m1	oer and other pr	oduce rei			rests			
IV.—Revenue from forests not managed by Government—   a. Duty on foreign timber and other forest produce   b. Revenue from shared and private forests	D)	consumers or pu	i Chasera	• • • •	•••	***	***		•••
IV.—Revenue from forests not managed by Government—   a. Duty on foreign timber and other forest produce       b. Revenue from shared and private forests       V.—Rent of leased forests and payments to share-holders in forests managed by Government       VI.—Live stock, stores, tools and plant—    a. Purchase of cattle       3,920 0   3,920 0     b. Feed and keep of cattle       3,920 0 0   3,920 0     c. Purchase of stores, tools and plant     504 0 0   504 0     VII.—Communications and buildings—    a. Roads and bridges       2,687 0 0   5,408 0 0   5,408 0     b. Buildings         5,408 0 0   5,408 0     c. Other works         2,010 0 0   2,010 0     VIII.—Organization, improvement and extension of forests—    a. Demarcation             a. Demarcation                 b. Cost of forest settlements; compensation for land             a. Demarcation               b. Cost of forest settlements; compensation for land             a. Demarcation                 b. Cost of forest settlements; compensation             c. Surveys                 d. Working-plans                   e. Sowing and planting                   f. Protection from fire                     g. Other works                       IX.—Miscellaneous—    a. Law charges                           c. Other charges	IIIDrift	t a <b>nd waif</b> wood a	nd confisc	ated for	est produce				
a. Duty on foreign timber and other forest produce b. Revenue from shared and private forests									
b. Revenue from shared and private forests  V.—Rent of leased forests and payments to share-holders in forests managed by Government									
V.—Rent of leased forests and payments to share-holders in forests managed by Government							-	1	
VI.—Live stock, stores, tools and plant—	0.	restende itom sna	rea and p	114400 10	T GUND	•••		""	•••
VI.—Live stock, stores, tools and plant—	VRent	of leased forests	and paym	ents to	share-holde	rs in			
a. Purchase of cattle	fo	rests managed by	Governm	ent	•••	•••			
a. Purchase of cattle	NT Time	.4		4			ļ	1	1
b. Feed and keep of cattle 3,920 0 0 3,920 0 c. Purchase of stores, tools and plant							1 150 0 0	ļ	1 150 0 0
c. Purchase of stores, tools and plant									
VII.—Communications and buildings—	c. 1	Purchase of stores	tools and	l plant					504 U 0
a. Roads and bridges 2,687 0 0				-			1		
b. Buildings 5,408 0 0 2,010 0 0 5408 0 2,010 0 0 5408 0 2,010 0 0							0.00= 0.0		0.007.0.0
VIII.—Organization, improvement and extension of forests—	a.	Roads and bridges	3						
VIII.—Organization, improvement and extension of forests—	0.	Buildings	•…•		***				
a, Demarcation	<i>c.</i> \	JULIET MOTES		***	•••	••	2,010 0 0		21010 0 0
a, Demarcation	VIIIOrga	mization, improve	ment and	extensi	on of forests		i		
and rights, c. Surveys d. Working plans	a	Demarcation	***	141	***	•••	1,095 0 0	•	1,095 0 0
c. Surveys d. Working-plans e. Sowing and planting f. Protection from fire g. Other works  1X.—Miscellaneous— a. Law charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other charges c. Other ch	b. (		tlemen <b>ts</b> ;	compe	ensation for	land			•••
d. Working plans         23 0 0       23 0         e. Sowing and planting         12,438 0 0        12,438 0         f. Protection from fire          2,975 0 0        2,975 0       521 0 0        521 0         IX.—Miscellaneous—             3,001 0 0        3,001 0         X.—Suspense work advance           -166 0 0         -166 0									
e. Sowing and planting 12,438 0 0 12,438 0 f. Protection from fire			***				23 0 (		23 0 0
f. Protection from fire g. Other works	e. S	Sowing and planti	ng						12,438 0 0
g. Other works 521 0 0 521 0 1X.—Miscellaneous— a. Law charges 3,001 0 0 3,001 0 X.—Suspense work advance	f. 1	Protection from fi	·e ̃					d	2,975 0 0
a. Law charges 3,001 0 0 3,001 0 0 X.—Suspense work advance	g, (	Other works		•	***		521 0 0		521 0 0
a. Law charges 3,001 0 0 3,001 0 0 X.—Suspense work advance	137 341								
c. Other charges 3,001 0 0 3,001 0 X.—Suspense work advance									
X.—Suspense work advance —166 0 0 —166 0	r. 1	Other charges			***		3,001 0 0		3,001 0 0
A. Suspense work activates				•••	•••	••		ł	) ,
Total AConservancy and Works 55,072 0 0 55,072 0	X.—Susp	ense work advanc	e	•••	414	***	—166 0 0		—166 <b>0</b> 0
Total A. Total and Horas bojora v		Total	ACoree	rugnev	and Works		55.072.0.0		55.072 0 0
		1001	acomse	r vane y	EAIUII DIES	•••	00,014 0 0		0.0,012 0

# FORM No. 21.—(SUPPLEMENTAL.)—cont. FOREST DEPARTMENT, SOUTH COORG DIVISION.

	Budget hea	ds			Lands managed by the Forest Department.	Lands not managed by the Forest Department,	Total as per Form 24.
	Revenue	i,			Rs. A. P.	Rs. A. P.	Rs. A. P
I.—Ti	inber and other produce re by Government agency—	emoved f	rom the fores	ts			
	Timber	***	•••		85,898 0 0	4.,	85,898 0 0
h.	Firewood and charcoal	•	141		222 0 0		222 0 0
	Bamboos	***	***	•	***		
d	Sandalwood	***	***	•	•••		
e.	Grass and other minor pr	roduce	***	•••	***		***
II.—Ti	mber and other produce re by consumers or purchase	emoved fr rs—	om the fore	sts		·	
a.	Timber	•	***	••	6,155 0 0	5,900 0 0	12,055 0 (
b.	Firewood and charcoal	•••	***	•••	476 0 0	215 0 0	691 0
c.	Bamboos		•••	•	294 0 0	101 0 0	395 0
$\widetilde{d}$ .	Grazing and Fodder gru	ss		٠,,	293 0 0		293 0
	Other minor produce	•••	4.,		987 0 0		987 0 0
f,		•••	***		19600		196 0 0
a.	Other items	••.	***				•••
h.		•••	***				
	rift and waif wood and cou		•				<b></b> .
	evenue from forests not m				ļ		
и. <b>b.</b>	Duty on foreign timber Revenue from shared an	and other id private	forest productions	109.			
VM	iscellaneous—						
	Fines and forfeitures			•••	1		
	Other sources		***		6,812 0 0	272 0 0	7,084 0
			otal revenue luct Refunds	•••	1,01,333 0 0 *-11 0 0	6,488 0 0	1,07,821 0 0 -11 0
							-

# FOREST DEPARTMENT, SOUTH COORG DIVISION.

B <b>udg</b> et hea	Lands managed by the Forest Department.	Lands not managed by the Forest Department.	Total as per Form 24.			
				Rs. A. P.	Rs. A. P.	Rs. A. P.
Expenditure.						
A-Conservancy and Worl	¢8.			ļ		! 
I.—Timber and other produce r by Government agency—	emoved	from the	forests			
a. Timber		•••	40.	26,696 0 0		26,696 0 0
b. Firewood and charcoal c. Bamboos		•••	•••	123 0 0	,	123 0 0
d. Sandalwood	***	***		126 0 0	:	126 0 0
e. Grass and other minor pr	oduce	***				120 0 0
II Window and other meduce -	-mana1	from the	Foresta			
II.—Timber and other produce re by consumers or purchaser		trous the	roresta			
•		***		•••		***
IIIDrift and waif wood and conf	iscated	forest prod	uce	•••	•••	
IV Revenue from forests not ma	naged b	v Governm	ont	,	1	
a. Duty on foreign timber:						
b. Revenue from shared and				•••		***
M. Dont of langed forgots and no		to obano l	ייי פול לפי		ì	
V.—Rent of leased forests and pa in forests managed by Gove			loracits		į	
					}	***
VILive stock, stores, tools and	plant—			1 100 0 0		
<ul> <li>a. Purchase of cattle</li> <li>b. Feed and keep of cattle</li> </ul>		***	•••	1,168 0 0 10,618 0 0	•••	1.168 0 0
c. Purchase of stores, tools	and plan	ıt		561 0 0		10,618 0 0 561 0 0
	•					001 0 0
VII. Communications and building a. Roads and bridges	(8			12,621 0 0		11 (01 0 0
b. Buildings	•••	***		8,207 0 0	:::	12,621 0 0 8,207 0 0
c. Other works		•••		1,331 0 0	1	1,331 0 0
WITH Our windless in the second	. 1			Į.	1	·
VIII.—Organization, improvement a a. Demarcation	nu exte	ision of for	esta	589 0 0	l	589 0 0
b. Cost of forest settlements	; comp	ensation fo	r land			000 0 0
and rights	•••	**1		105.0.0	1	
c. Surveys d. Working-plans	***	***	•••	405 <b>0</b> 0 12,32 <b>9 0</b> 0	•••	405 0 <b>0</b> 12,329 <b>0</b> 0
e. Sowing and planting	***	•••		19,630 0 0	:	12,529 0 0 19,630 0 0
f. Protection from fire	•••	•••		4,194 0 0		4,194 0 0
g. Other works	•••	447	•••}	20 0 0		20 0 0
1XMiscellaneous-					1	
a. Law charges			1			***
c. Other charges	•••	•••	•••	359 0 0	***	359 0 0
			1	1	1	
XSuspense work advance		•••		-306 0 0		306 0 0
Total A-Cone	ervone.	and Work	_  -	98,671 0 0		98,671 0 0
1000 A-COIR	wr varie)	with WOLK		00,011 0 0		20,011 0 0

FORM No. 26. FOREST DEPARTMENT, COORG.

Revenue received and outstandings on account of revenue for the year 1930-31.

Division.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at the end of the year.	Bemarks.
division.	R. I. a. Timber b. Firewood and charcoal c. Bamboos d. Sandalwood e. Grass and other minor produce R. II. a. Timber b. Firewood and charcoal c. Bamboos d. Grazing and fodder grass e. Other minor produce f. Cardamom		4,106 0 0 65 0 0 1,57,220 0 0  15,903 0 0 970 0 0 1,304 0 0 5,187 0 0	3,780 0 0 5,400 0 0 65 0 0 1,57,220 0 0  15,907 0 0 988 0 0 1,427 0 0 616 0 0 5,187 0 0	3,597 0 0 5,054 0 0 65 0 0 1,57,220 0 0  15,889 0 0 982 0 0 1,416 0 0 616 0 0 5,187 0 0	Rs. A. P.  183 0 0  346 0 0    18 0 0  6 0 0  11 0 0   31,688 0 0	
	R I a. Timber b. Firewood and	549 0 0 31,761 0 0 35,196 0 0	2,05,870 0 0	2,37,631 0 0	2,05,341 0 0 85,698 0 0		
South Coorg Division.	e Bamboos d Sandalwood e Grass and other minor produce.  R II.a. Timter b. Firewood and charcoal. c. Bamboos d. Grazing and fodder	16 0 0	11,992 0 0 699 0 0	12,657 0 0 701 0 0 516 0 0	12,055 0 0 691 0 0 395 0 0 (a) 28 0 0	602 0 0	(a) Amounts written off.
S	e, Other minor produce f. Cardamom R V. a. Fines & forfeitures b. Other sources	117 0 0 35,996 0 0	1,045 0 0 196 0 0 7,399 0 0	1,045 0 0 196 0 0 7,516 0 0 1,39,177 0 0	987 0 0 196 0 0 7,084 0 0 (b) 9 0 0	58 0 0	(b) Amounts written off.

FORM No. 27.

Statement of outstandings and liabilities on account of contractors and disbursers for the year 1930-31.

Division.	DEPARTMENT DESTOR.			DEPA	RTMENT CREDI	TOR.	Balance due.		,
	At commencement of the year.	Recoveries in cash and value of supplies and work done during the year.	of the	At commencement of the year.	Payments made during the year.	At close of the year.	To Department (Outstandings).	By Department (Liabilities).	Remarks.
1	2	. 3	4	5	6	7	8	9	10
	Rs. A. P.	Re- A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
North Coorg	***	1,01,007 9 8	1,01,007 9 8	1,321 13 7	1,00,540 6 0	1,01,862 3 7	854 9 11		
South Coorg	•••	1,11,636 4 6	1,11,636 4 6	743 7 0	1,11,437 1 0	1,12,180 8 0	514 3 6		
Total		2,12,643 14 2	2,12,643 14 2	2,065 4 7	2,11,977 7 0	2,14,042 11 7	1,398 13 5		