

**Administration report of the
forest circles in the Bombay
Presidency including Sind for
the year 1915-1916**

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ADMINISTRATION REPORT OF THE FOREST CIRCLES IN THE BOMBAY PRESIDENCY, INCLUDING SIND, FOR THE YEAR 1915-1916.

CONSERVATORS IN CHARGE OF CIRCLES DURING THE YEAR:—

Northern Circle.

W. F. D. Fisher, Esquire.

Central Circle.

O. H. L. Napier, Esquire, 1st July 1915 to 21st September 1915 and 2nd November 1915 to 30th June 1916.

D. A. Thomson, Esquire, 22nd September 1915 to 1st November 1915.

Southern Circle.

T. R. Bell, Esquire.

Sind Circle.

E. G. Oliver, Esquire, 1st July 1915 to 13th November 1915 and 15th December 1915 to 14th April 1916.

H. L. Newman, Esquire, 14th November 1915 to 14th December 1915.

G. R. Duxbury, Esquire, 15th April 1916 to 30th June 1916.

CONSTITUTION OF STATE FORESTS.

1.—ALTERATION IN AREA.

Northern Circle.

CHAPTER I.

The changes in area during the year have been unimportant, being 995½ acres in South Násik and 371½ in North Násik disforested from reserved forest for cultivation, etc., and 368 acres being added to protected forest in South Násik, besides a few alterations of negligible magnitudes and the transfer of management of 169 square miles and 107 acres of reserved forest (Kalwan range) of the North Násik to South Násik as per Government Resolution No. 3506 of 24th March 1915.

The resultant totals for the circle are —

Class of forest.	Area on 1st July 1915.		Added during the year.		Excluded during the year.		Area on 30th June 1916.	
	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.
Reserved ..	2,690	228	169	164	171	197	2,688	195
Protected ..	487	581	..	356	..	28	488	269
Leased {	Reserved..	330	595	..	..	..	330	595
	Protected.	325	13	..	..	..	325	13
Total ..	3,834	137	169	520	171	225	3,832	432

Central Circle.

At the close of the year the forest area of the circle stood at 5,436 square miles 431 acres as against 5,475 square miles 23 acres at its commencement. The main cause of the decrease was the disforestation, in the interests of cultivation, of 39 square miles 30 acres of pasture forests already in charge of the Revenue Department in the Ahmednagar and Sholapur Districts. Afforestation during the year comprised an area of 1 square mile 433 acres, consisting of isolated numbers in several districts within the demarcation line. Protected and leased forests remained practically unchanged.

In West Khándesh 54 square miles 115 acres of pasture forest, transferred to the management of the Revenue Department in 1898-99, were now retransferred to the Forest Department, for the purpose of the preservation of the existing tree growth, and of production of grass for grazing and cutting; while in Poona 3 square miles 480 acres of pasture forests were cleared of growth by the Forest Department and handed over to the Revenue Department; the clearance of all such lands in Poona will be completed within the current year. The actual area of forests under Forest Department management thus rose during the year from 3,686 square miles 291 acres to 3,738 square miles 135 acres.

Southern Circle.

An important event of the year was the organization of a 5th Forest Division in Kánara entailing, as a consequence, the amalgamation of the Dhárwár and Bijápur Divisions. Those changes were introduced from 1st February 1916 as per Government Order No. 11396 of 27th October 1915, abolishing the Bijápur Division and inaugurating the Kánara Central Division. The re-adjustments were:—

- (a) the Kánara Central Division was formed out of the Sirsi range of the Kánara Southern Division and the Ankola and Kumta ranges of the Kánara Western Division together with a bit of the Eastern Division;
- (b) the Supa and Gund ranges of the Kánara Northern Division were transferred to the Kánara Western Division;
- (c) the Kalghátgi and Bankápur ranges of the Dhárwár Division were added to the Kánara Northern and Kánara Eastern Divisions, respectively;
- (d) the remaining unorganized portion of the Dhárwár Division was amalgamated with the Bijápur Division, the combined charge being styled the Dhárwár-Bijápur Division.

By these arrangements the Kánara Divisions were reduced to two-thirds of their former size; the changes were effected with a view to the amelioration of the condition of the Kumri Maráthas in Kánara and for the better protection and more intensive management of the valuable forests in Kánara and Dhárwár.

The present report deals with the divisions as they now stand.

The total area of forest, though unaffected by the above readjustments, was reduced during the year by 11 square miles and 541 acres, as shown in the following statement:—

Class of forest.	Area on 1st July 1915.		Added during the year.		Excluded during the year.		Area on 30th June 1916.		Remarks.
	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	
Reserved ..	4,466	513	2	29	..	393	4,456	228	*Changes due to rectifications of errors intimated by the Forest Settlement Officer on a comparison of forest registers with survey papers and on remeasurement of certain areas in Kanara.
	..	..	*	242	*12	163	..	..
Protected ..	133	359	..	..	*1	256	132	103	
Total ..	4,600	232	2	271	14	172	4,588	331	

The real additions to, and the exclusions from, the area were 2 square miles and 29 acres, and 393 acres, respectively. Some scattered waste lands which were fitted for forest were constituted reserves in Belgaum, Dhárwár and Kánara. Disforestsments in Kánara, Dhárwár and Bijápur were in the interests of agriculture.

Sind Circle.

The alterations in area were—

Class of forest.	Area on 1st July 1915.		Added during the year.		Excluded during the year.		Area on 30th June 1916.	
	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.	Sq. m.	Acres.
Reserved ..	1,150	275	37	572	29	66	1,159	141
Protected ..	..	585	..	..	..	..	..	585
Total ..	1,151	220	37	572	29	66	1,160	86

The additions were—

	Sq. m.	acres.
Alluvial accretion ..	35	195
Reservation by notification ..	2	377
Rectification on re-survey ..	..	..
Total ..	37	572

The exclusions were—

	Sq. m.	acres.
Erosions ..	25	180
Disforestsment or transferred ..	3	522
Rectification by re-survey ..	..	4
Total ..	29	66

The eroded area is classified thus—

	Acres.
Growing valuable timber ..	1,858
New alluvium without trees ..	6,133
New alluvium with young growth ..	5,869
Coupes under regeneration ..	613
Blanks ..	1,707
Total ..	16,180

In the previous year the total erosion was 15,070 acres.

The value of the material exploited from eroded areas (*vide* Government Resolution No. 804 of 2nd February 1900) was—

	Acres.	Rs.	a.	p.
Approximate area eroded after exploitation ..	1,715			
Average value per acre as estimated prior to erosion ..		4	11	7
Estimated value of timber before exploitation ..		8,104	8	10
Actual receipts ..		11,108	11	9

One hundred and fifty-three acres containing growth valued at Rs. 420 were eroded before exploitation was possible, the river action being very rapid.

One thousand nine hundred and three acres threatened with erosion were exploited. The resultant material was sold for Rs. 7,180.

Acquisition of kachas adjoining forests—

	Acres.
Kacha claims pending at the end of last year ..	12
New claims made during the year ..	45
Decided in favour of the Forest Department ..	40
Decided against the Forest Department ..	2
Claims withdrawn ..	3
Still undecided ..	12

Two thousand one hundred and seventy acres and 38 gunthas were temporarily alienated to other Departments.

2.—FOREST SETTLEMENTS.

Northern Circle.

Work under this head was limited to small local adjustments by the ex-officio Settlement Officer. All settlements are complete.

Central Circle.

Settlement work consisted of the notification of 33 acres under section 19 of the Forest Act in Sátára and West Khándesh, and of 37 acres under section 4 in Kolába. Rs. 1,760 were spent on the acquisition of these lands which were either for inclusion in forest or for building sites for forest posts.

Outstanding work in the circle consists of the acquisition of lands within the demarcation line in the Poona and Sátára Divisions, a very large question to which attention was drawn in last year's report, and for which Government have ordered that a systematic programme should be framed. The settlement of 25½ square miles of waste lands in West Khándesh, of which Government had approved the afforestation, is now in progress.

Southern Circle.

The progress made in settlement work during the year was:—Notification of 2 square miles and 29 acres under section 19 of the Forest Act and 8 square miles 24 acres under section 4. Final proposals for afforestation of 56,896 acres in Belgáum and those for Kánara, referred to in sub-section 2 of Chapter I of last year's report, were submitted to the respective Collectors. The proposals for the appointment of special Forest Settlement Officers for Kánara and Belgáum, referred to in last year's report, are still under the consideration of Government. Without special officers for this kind of work no real progress is possible.

Sind Circle.

	Acres.
Area awaiting settlement at commencement of the year..	7,772
Area added by notification under section 4 of the Indian Forest Act ..	9
Total ..	7,781
Area actually settled under section 19 of the Indian Forest Act ..	7,108
Balance awaiting settlement ..	673
Expenditure ..	Nil.

The work done was very satisfactory.

3.—DEMARCATIÖN.

Northern Circle.

The only new work done was in South Násik where it is chiefly limited to the erection of intermediate cairns. Satisfactory progress is being made. Elsewhere only current repair and painting of former cairns was carried out, demarcation being complete.

Central Circle.

Expenditure under this head was Rs. 5,174, of which Rs. 2,613 were on 221 miles of new work, and Rs. 2,561 on maintenance of 4,931 miles of already demarcated boundaries. The new work comprised the survey of over 100 miles and the demarcation of 38 miles in the Poona Division; the demarcation of 48 miles in West Khándesh, and of 135 miles in Kolába. Outstanding work consists solely of 162 miles in Kolába, and of 658 in the Akola and Rájur ranges of the Nagar District which form part of the Poona Division. The former it is hoped to complete within the year, while the latter will be pushed on as fast as funds and establishment permit.

Southern Circle.

Expenditure under this head was Rs. 2,743 on 1,068 miles of new work, and Rs. 698 on repairs to 656 miles of already demarcated boundaries. Much of the expenditure on new work was incurred on the following important frontier lines :—

	Line demarcated.	Cost.	Cost per mile.
	Miles.	Rs.	Rs.
The Mysore State frontier line in the Kánara Southern Division.	11½	1,477	131
The Portuguese Territory frontier line in the Kánara Western Division.	14½	856	57
The Sávantwádi State frontier line in the Belgaum Division.	5	245	49

The expenditure on the Mysore frontier line was very heavy on account of the hilly and precipitous nature of the country and the difficulty of securing labour in the unhealthy tracts. Only 3 miles now remain to be demarcated. Betta demarcation was continued in the Sirsi and Siddápur Tálukas; 1,026 miles were demarcated at a cost of Rs. 270. The work in Siddápur is not yet finished.

In the Kánara W. D., 14 miles of the Goa frontier line were completely demarcated and a further 15 miles were surveyed. When this surveyed line is cut next year, there will remain about 20 miles still to be surveyed and cut. Scarcity of labour prevented the surveying and line cutting work from proceeding simultaneously. The line surveyed in the Supa Range this year has been given out on contract for cutting.

In the Belgaum Division, besides the 5 miles of the Sávantwádi State frontier line, 6 miles of internal lines were cleared at a cost of Rs. 24. Old lines were cleared, cairns repaired and R. F. stones erected in the Khánápúr and Gokák ranges.

In the Kánara Northern Division demarcation work is complete.

In the Kánara Eastern Division about 300 miles of old lines were cleared. About 4 miles of 132 feet strips were demarcated around cultivated lands in six villages of Yellápur Range. The Divisional Forest Officer reports, as last year, that the people have no use for these strips, and that the Government Orders regarding it, which were issued 7 years ago, might well be revised in the light of the experience of the local officers.

In the Kánara Central Division old lines were systematically gone over and cleared. Betta demarcation in Sirsi was completed very shortly after the creation of the Division.

In the Dhárwár-Bijápur Division 3 miles of line were newly demarcated at a cost of Rs. 24, and some old lines were gone over and cleared departmentally at a cost of Rs. 30. About 290 miles of line between the forest and cultivations in the Bijápur sub-division were cleared by the cultivators concerned on the concession of removing for their own use wood and thorns cut on the line. About 630 miles remain still to be cleared and this work may still take a couple of years to complete.

Sind Circle.

Internal Boundaries.—The forests are divided into half-mile squares by rides 20 feet wide. Eighty-nine and a half miles of new compartment lines were cut during the year. This important work received most attention in Jerruck. Two thousand three hundred and six and a half miles of previously cut rides were kept clear by free labour valued at Rs. 4,712.

One hundred and nineteen thousand one hundred and forty-six acres remain round which rides have still to be cut. Much of this area at present contains young growth and the work here will not be taken in hand until the stock is more advanced.

External Boundaries.—Thirty-four miles and 860 feet were demarcated by 396 new boundary marks round newly afforested areas. Eighteen thousand seven hundred and thirty-one old boundary marks on 2,045 miles 4,665 feet of line were repaired free of cost.

4.—FOREST SURVEYS.

Northern Circle.

None were carried out.

Central Circle.

None were undertaken by the Survey of India.

The total expenditure on the "Constitution of State Forests" was Rs. 6,934 as against Rs. 4,834 in 1914-15.

Southern Circle.

No survey was carried out in this circle during the year.

The total expenditure on the "Constitution of State Forests" was Rs. 6,630 during the year as against Rs. 5,692 last year.

Sind Circles.

The work done by the Working Plans Assistant and his staff and the surveyors attached to each division is given below separately :—

By whom.	Division.	River course surveyed.	Forest boundaries surveyed and checked.	No. of test trees measured.	Measurement of compartment lines.	No. of maps prepared.	No. of coupes marked and their area.	Levelling of bunds and drainage projects.
		Miles. chains.	Miles. chains.		Miles. chains.		No. Acres.	Miles ft.
Working Plans Assistant and his staff.	Sukkur ...	6 16	49 39	327	119 25	.....	.....	.....
	Larkana ...	45 34	463 41	1,063	456 3	64	14 = 1,893	1 350
Divisional surveyors.	Sukkur ...	87 0	27 0	.....	29 0	19	.....	.....
	Hyderabad...	106 0	463 41	1,063	456 3	167	24 = 1,321	.....
	Jerruck ...	75 0	129	.....	12 0	43	8 = 978	14 0

The survey of river frontages and marking of coupes was carried out as usual by the Range Forest Officers, the number of miles of river frontage surveyed being 71 and that of coupes demarcated and laid out being 132. Range Forest Officers in the Larkana and Hyderabad Divisions also prepared 105 tracings.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

1.—REGULATION AND MANAGEMENT.

(a) Preparation and Control of Regular Working Plans.

Northern Circle.

Preparation.—A working plan for the South Dangs forests was completed by the Divisional Forest Officer during the year and, after approval by the Collector of Surat, the Conservator of Forests, Northern Circle, and the Commissioner, Northern Division, has been sent to the press for printing.

The working plan of the Eastern Mahals (Dohad and Jhalod of Panch Mahals) was examined and discussed by the Conservator and the Divisional Forest Officer and a revision decided upon involving the introduction of clear fellings in the place of coppice with standards. Owing to various urgent circumstances, the revision has been given effect to, in anticipation of Government sanction. The working plan report under preparation by the then Divisional Forest Officer has not yet been received. It is hoped the plan of the western mahals will be taken in hand in the coming season.

Good progress was made in the revision of working plans of the three Thana divisions in spite of two changes of the officer in charge. The preliminary report will be ready shortly and will be considered by the Inspector-General of Forests on the ground in the coming season, thus enabling its introduction, it is hoped, in 1917-18.

An attempt is to be made to take the plans of the forests of the Násik Divisions in hand in the coming season if the reduced staff of the Imperial officers can cope with the work.

The above efforts when completed will have dealt with all the forests of the circle except those of Mándvi and Central Dángs of the Surat Division, the plan for North Dángs of that division having been sanctioned last year.

Control.—Prescriptions under existing working plans were given effect to as far as possible as formulated in the respective plans of operations. There was no material variation from them except all possible reduction in capital expenditure on communications and buildings owing to necessity for economy on account of the war.

Central Circle.

During the year working plans for the following areas received the sanction of Government :—

	Sq. miles.
The Mulshi evergreen forests in the Poona Division ..	38
The Lonávla and Ambegáon teak and sub-ghat forests in the same division ..	2
The Trans-Purna babul reserves in the East Khándesh Division	4
Total ..	44

The Working Plans Officer was employed during the fair season on the collection of data for a plan for the teak forests in the Jávli, Wái and Sátára ranges of the Sátára Division, an area of 97 square miles. The plan is now under preparation. The Divisional Forest Officer, Poona, continued his work of the revision of the teak and babul plans of his division, a work necessitated by the transference to the Revenue Department a few years back of large areas covered by both original plans; the area under the revised plans will be 589 square miles, and both are practically completed so far as writing and mapping are concerned, while work according to the new prescriptions has already commenced.

The revised plan of the East Khándesh Sátputa forests, 400 square miles, referred to in last year's report, is still incomplete, the delay being solely due to the difficulty in reconciling the silvicultural necessities of the forests with the privileges and practices of the surrounding population. It is hoped however that the matter will be satisfactorily settled before long, and that the new provisions may come into force in 1917.

Sixty-two per cent. of the forest area of the circle is now under organized working, and for the remaining 38 per cent. plans are in preparation for roughly one-eighth part, while for seven-eighths plans are not yet a matter of any urgency. Revision is still of more importance than new work, and will be pressed on.

The prescriptions of sanctioned plans were on the whole carried out. Minor deviations as usual resulted from such causes as shortage of labour and inaccessibility of coupes; to which were added financial stringency and lack of demand for any but the most valuable material.

Southern Circle.

Preparation.—The following working plans were sanctioned during the year :—

- (1) The Chandavar fuel plan—coppice with standards—in Kánara S. D.—for the supply of fuel to the Kumta town.—Area 13 square miles, cost Rs. 1,837 or Rs. 141 per square mile.
- (2) A revised plan for Block VII-A—in Kánara N. D.—Teak Pole—coppice with standards.—Area 7 square miles, cost Rs. 790 or Rs. 113 per square mile.
- (3) A revised plan for the Nagargali high forests (Block XIX) in the Belgaum Division—Improvement felling system.—Area 14 square miles: cost Rs. 12-8 expended on a few photos illustrative of the plan. This plan was compiled by Mr. Hodgson, Divisional Forest Officer, Belgaum, in the course of his ordinary duties with no extra cost, for which he was granted an honorarium of Rs. 2,000 by Government.

The following plans were completed during the year :—

- (1) Gokak working plan—submitted for Government sanction ;
- (2) Revised Khánápur fuel plan—ready for submission ;
- (3) Kirwatti teak pole plan—sent to Press ;
- (4) Kalghatgi range plan, and
- (5) Bankápur and Hangal range forest plan—approved by the Collector ;
- (6) Revised plan for Blocks VIII, IX and XX of Kánara N. D.—provisionally approved in Government Order No. 806 of 22nd January 1916, was sent to press.

The following plans are in course of preparation :—

- (1) Revised plan for Block XII—Yellápur slopes in Kánara C. D.—Area 28 square miles, cost during the year Rs. 5,805 or Rs. 208 per square mile.
- (2) Revised plan for Mundgod high forest—Blocks XXII, XXIII and portions of Blocks XVI, XVIII and XXI.—Area 157 square miles, cost during the year Rs. 5,390 or Rs. 35 per square mile.
- (3) Revised plan for the Mundgod teak pole area.—Ten square miles, cost during the year Rs. 414 or Rs. 41 per square mile.
- (4) The Honáwar Bhátka fuel plan.
- (5) Revised Golihalli Godoli teak pole plan.
- (6) Belgaum range plan.

Nos. 1 and 2 of the plans completed during the year and Nos. 5 and 6 of the plans under preparation were compiled by Mr. Hodgson, Divisional Forest Officer, Belgaum, and the rest by Mr. Miller, Divisional Forest Officer, Working Plans.

The field work done by the Working Plans party during the year was entirely confined to Kánara E. D. and a portion of Kánara C. D.

Control.—The work under high forest plans in Kánara N. D. is up to date ; that under the Dhárwár plan is a little in arrears, some coupes remaining unsold for want of demand. In Kánara E. D. the work in two out of the four plans is 1 to 3 years behindhand due to difficulties of labour and transport, and the Divisional Forest Officer is strongly in favour of a light railway (a scheme for a line is presumably under the consideration of Government) that would tap the forests of Kánara E. D. and C. D. On account of cattle disease and plague some work remained in arrears in Kánara C. D. In Kánara S. D., Belgaum and Dhárwár-Bijápur Divisions the work is almost up to date. In Kánara W. D. the Gund working plan fellings are six years in arrears, and there are still heavy arrears of work remaining in the old fellings undertaken before that, in the shape of some thousands of logs in jungle depôts, and even trees not yet cut in the jungles. These arrears are chiefly due to difficulties of transport, and it is hoped they may soon be reduced by improving the bed of the Kaneri river and opening another outlet from the Gund plateau to relieve congestion on the Hologadda slide. Mr. Haines, Executive Engineer, Dhárwár District, who was deputed to the Forest Department during the year on the work of improving transport facilities, made a preliminary examination of the bed of the Kálinadi river above Kádra with a view to facilitating the floatage for logs. In the Kálinadi slopes working circle, there are still some logs to be removed and the main fellings are a year behindhand. The improvement fellings prescribed in the working plan have never been begun owing to scarcity of money and labour. This is serious but unavoidable.

Sind Circle.

Excepting new kachas and recent reservations, all forests in Sind have been organised under regular working plans. These are under process of revision. The prescriptions of the revised working plan were carried out in Jerruck. In Hyderabad, where the plan has been finished this year and forwarded to Government for sanction, the revised prescriptions were introduced in advance except in the Miani Range.

The field work of the revision of the Lárkána working plan was completed by the 31st March 1916 and in addition to valuable re-survey work of the external boundaries and compartment lines of the forest and of the course of the Indus, a detailed examination of compartments was made with a view to the preparation of stock maps. The total cost of the field work of the revision inclusive of the pay of the Working Plans Assistant and his staff amounted to Rs. 6,800 or Rs. 29-5-8 per square mile. In April and May the work of revision of the Sukkur working plan was started.

(b) *Preliminary Working Plan Reports.*

Northern Circle.

There were none.

Central Circle.

The only one submitted was that for the forests of the Sátára Division mentioned above.

Southern Circle.

Remarks on these have been included above.

Sind Circle.

Nil.

(c) *Plans of Operations.*

Northern Circle.

See above under "Control."

Central Circle.

These were prepared in all divisions and carried out with a few minor and unimportant exceptions, and subject to some reductions of funds by Government.

Southern Circle.

These were prepared in all divisions and carried out as far as possible ; some of the unremunerative works, such as buildings and wells, were postponed with a view to economy in expenditure during the year.

Sind Circle.

Plans of operations were submitted for each division and duly carried out with minor and unimportant modifications. Some dead wood was worked out in every division.

2.—COMMUNICATIONS AND BUILDINGS.

(a) *Roads and Bridges.*

Northern Circle.

New road work was confined to the Dángs of the Surat Division where immediate return will be realised by permitting the progress of working plans both sanctioned and prepared.

The following work was executed :—

	Rs.
Mahal-Dulda road, 2½ miles,	.. 2,000
Pandwa-Borkhal road, 1½ miles	.. 2,500
Pandwa-Holbari road, 2 miles	.. 4,500
Waghai-Malegaon road, 4½ miles	.. 1,500
Galkund-Pandwa road, 5 miles	..
Total (15½ miles)	.. 10,500
And on repairs over 127 miles	.. 5,055.

A considerable amount of alignment for new roads was also carried out in this (Surat Dángs) and Peint of the South Násik Division.

A sum of Rs. 2,360 was spent on the repairs of unmetalled tracks in other divisions and a sum (annual) of Rs. 1,100 was paid to the Public Works Department as a contribution towards the up-keep of the Harsul-Goldari road in the South Násik Division.

The Divisional Forest Officer, South Násik, has called attention to the prospective advantage of developing the two Peint ranges comparing their potential value to that of the Dángs. The facts noted are recognised, as in the adjoining maháls of Mokháda and Talasari of the Thána District, but for realization it requires as a preliminary the prime factor accorded to the Dangs, *viz.*, a full-time officer of special ability with a fairly free hand and suitable powers, or we shall merely accentuate the present evil of robbing the forests of capital. When such officer, funds and other essentials indicated are available, the development of a very valuable property can be commenced.

Central Circle.

Owing to financial considerations expenditure under this head was considerably reduced, and only the most urgent works were taken in hand. Two hundred and ninety-three miles of roads and paths were repaired at a cost of Rs. 5,034, while 18 miles of new roads and paths were constructed at a cost of Rs. 3,243. The total expenditure was Rs. 8,277 as against Rs. 17,435 in 1914-15.

In North Khándesh, metalling was continued of the Wasardi-Bhurki road, 3 miles long, and which was commenced in 1912-13; and cutting and levelling of an extension of one mile to Kodit was completed. The total cost was Rs. 778. The Hisala-Bhoiti road, commenced in 1913-14, was extended by one mile at a cost of Rs. 792; its value will be evidenced during the next four years, for it taps important coupes now due for working. In the Akrani communication has been much improved by the realignment, broadening and repair of 109 miles of bridle tracks costing Rs. 724, the alignment being, wherever possible, made with a view to the eventual conversion of the tracks into fair weather roads. Already there are indications of carts being introduced into this hitherto cartless area, but only for use within the area itself. The difficulties of ascent to it are such that it must be many years before there can be cart traffic between it and the plains, and bridle tracks for the present must remain the sole means of communication.

In this connection reference may be made to the road aligned by the Public Works Department to connect Dhádgaon *via* Kothar with Taloda. From the forest point of view such a road, passing through forests of small value, can be of little use, whereas a road connecting Dhádgaon with Sháháda, though slightly longer than the former, would, it is believed, be easier of construction, and would pass through really valuable forest which cannot now be touched for lack of good means of communication with the plain. It is suggested therefore that reconsideration of the scheme by the Public Works Department is very desirable, a view held also by the Collector, who writes: "The Collector is in full agreement with Mr. Starte in his remarks on the Kothar-Dhádgaon road; there is nothing in the circumstances of the Akrani to justify the heavy expenditure which this road will necessitate. It has been advocated chiefly as facilitating the transport of liquor from the Dhulia distillery, and so leading to the abolition of the distillery at Dhádgaon. It does not appear to the Collector that 'the game is worth the candle'."

In West Khándesh Rs. 798 were spent on new roads and on repairs to existing roads.

In East Khándesh no new work was undertaken; Rs. 1,220 were spent on improving alignments and on repairs. The Collector writes: "The need for providing roads is still acute; until communications are opened out, there is no hope of improved revenue or even of more close supervision." With this view the Conservator is in full agreement; the revised working plan contains many valuable suggestions from Mr. Copleston, and effect will be given to them as soon as funds and personnel, now reduced by the permanent Divisional Forest Officer having gone on military duty, admit.

In Poona $1\frac{1}{2}$ miles of the ghat crest bridle path near Lonávla was converted into a cart track, making the total length of road now accessible in this way up to eight miles. Other work consisted of repairs only to bridle paths in the Poona District itself and in the Akola and Rajur ranges of the Nagar District, a work which much facilitates the removal of minor forest produce by pack animals, and which will in time open up a trade in charcoal from forests which are now untouched.

In Sátára repairs to the Vang valley and Koyna valley roads cost Rs. 1,947. New work on the latter consisted of further alignment by the Forest Department and of measuring of the lands traversed by the road by a Circle Inspector lent by the Collector. The future of this road needs serious consideration; at present work is stopped for want of funds, and in the opinion of the Conservator this is a matter for little regret, for as a Forest Department scheme it seems to him to have been ill-advised from its commencement. The Public Works Department has a project for a metalled road up the valley, but the Forest Department has neither the funds nor the technical knowledge to follow their alignment in this region of excessive rainfall, and perforce must take the line of least resistance with any track that it constructs—this involving endless crossings of the river. While an even more important consideration is that in this valley, denuded as it is by kumri cultivation and with the forests situated on inaccessible hill tops or up side valley remote from the main road, there is little, if any, forest material which can hope to pay the cost of extraction. At present the Conservator inclines to recommend to Government the definite abandonment of the road as a Forest Department work, but defers doing so until he has visited the lower end of the valley, which he will do in November with the Divisional Forest Officer. A more feasible scheme than the road would seem to be for the upper half of the valley a bridle path connecting with the main road near Pratápgadh, and which would facilitate the export of minor produce, such as hirda, fuel and charcoal, which alone the forests are capable of yielding; for the lower half of the valley, where there is some good timber though no teak, the utilization of the river itself for floating.

Speaking generally it is bad policy to spend money on a road with no prospect of a return, and to starve other forest areas which if opened up by good communications would prove immediately remunerative.

In Kolába repairs to two existing roads cost Rs. 85.

Southern Circle.

The expenditure under this head was Rs. 39,616 against Rs. 48,538 last year. Of this Rs. 12,846 were spent on new works and the rest on repairs. The most important items were:—

Kánara N.D.—Repairs to about 70 miles of roads. The District Local Board handed over the Haliyál-Kavalwad road (12 miles) to the Forest Department. Thirteen miles of cycle paths were made. Nothing further could be done with the proposed light railway from Bhistenhatti to Dandeli, no money being available for the survey of the line.

Kánara E. D.—Special repairs to 7 miles and current repairs to about 100 miles of road. Three wooden bridges were built on the Bilki-Chipgeri road and one on the Chipgeri-Bhidesgaon road. Fourteen miles of cycle paths were repaired.

Kánara C. D.—No new work was undertaken. A small wooden culvert was constructed on the Hattikeri-Gule road.

Kánara S. D.—The Nagarbastikeri-Gersi road (1 mile) and Chittar-Hadikal road (1 mile) were continued. The incomplete bridges on the Haldipur-Hebbankeri and Chittar-Hadikal roads were completed. Eight miles of old roads were also repaired.

Kánara W. D.—The Hattikeri-Gule road extension (before transfer to Kánara C. D.)— $2\frac{1}{2}$ miles—Santgal-Markal road— $1\frac{1}{2}$ miles—(also before the transfer) and $1\frac{1}{2}$ miles of Kadra-Shivpur road were newly made. Five miles of cycle paths were also constructed. Existing roads were repaired. Rs. 257, including temporary establishment, were spent in blasting rocks in the bed of the Káneri nalla to make a waterway for logs from the north of Gund range to the Kálinadi river.

Belgaum.—No new roads were undertaken. Existing roads were repaired. Rs. 6,253 were spent on the completion of bridges on the local fund roads. Thirty-two miles of cycle paths were made. The development of the future revenue of this division depends chiefly on these roads and better protection from fires.

Dhárwár-Bijápur.—Existing roads were repaired.

The usual contribution of Rs. 5,000 was paid by each of the Kánara N. and W. Divisions for repairs of local board roads.

Sind Circle.

The 20-feet rides through the forest are available as roads and used as such. They were repaired where necessary free of cost in all divisions.

(b) Buildings.

Northern Circle.

In Surat (North and Central Dáangs) the following buildings were constructed :—

	Rs.
Songad depôt ..	1,000
Addition to Ahwa Hospital ..	500
Godad utara ..	500
Total of new works ..	2,000
Repairs in the rest of the district ..	5,139
New buildings in other districts ..	2,193
Repairs to buildings in other districts ..	1,431
Grand total for new works ..	4,193
Grand total for repairs ..	6,570
	10,763

Central Circle.

New work was almost at a stand-still for lack of funds. One guards' post was built in the Sátára Division; elsewhere posts commenced in the previous year were completed, and all necessary repairs carried out. The total expenditure was Rs. 4,290 as against Rs. 20,689 in 1914-15.

Southern Circle.

Rs. 16,566 were spent under this head, of which Rs. 12,439 were incurred on new works and Rs. 4,127 on repairs to existing buildings on all divisions.

Rest Houses.—The old rest house at Nagargali (Belgaum) was pulled down and a new one constructed. The new rest houses at Katur (Kánara E. D.), Pattanpar (Kánara W. D.) and Shirolí and Parle (Belgaum) were completed.

Head Quarter Houses.—A new range office at Sirsi (Kánara C. D.), clerks' quarters at Khánápur (Belgaum) were constructed, and the range office at Kadrá (Kánara W. D.) was completed.

Houses for Subordinate Establishment.—A náka at Sirsi (old Kánara S. D.) was newly built; houses at Ramanguli (old Kánara W. D.) and Makarwalli (Dhárwár-Bijápur) were partly constructed; quarters at Chaudalli and Amatgar (Kánara E. D.), Tavag, Kanbargi and Katgali (Belgaum) were finished. A house was bought at Tambur (Kánara E. D.) for Rs. 155 for the use of forester and guards.

A good many buildings, though urgently required, had to be postponed for the sake of economy.

Sind Circle.

Rs. 879 were spent on new buildings as under :—

Sukkur.—

	Rs.
Purchase of 6,334 square feet of land for Range Forest Officer's quarters at Rohri and cost of demarcation ..	206
Construction of pucca brick floor in Ranger's quarters at Mirpur ..	192
Minor purchases ..	23

Larkana.—

Construction of guards' house at Gajidero ..	182
Purchase of land for Kamaldero office and quarters ..	200
Purchase of Kacha bricks and timber for Bakri house ..	76

Total.. 879

Repairs to existing buildings cost Rs. 2,316.

The Public Works Department spent Rs. 273 on repairs to buildings in Sukkur.

(c) *Miscellaneous.*

Northern Circle.

Sinking of five wells	Rs. 538
Repairs to wells and compounds and wire fences	588

Central Circle.

One well in West Khándesh was completed, and two deepened in Sátára, at a cost of Rs. 299.

Southern Circle.

The expenditure under this head was Rs. 1,613. A new well was sunk at Bhátka (Kánara S. D.) at a cost of Rs. 110. The remaining expenditure was on repairs to existing wells and tanks, clearing compounds, fencing rest houses and other buildings. The telephone connections in Yellapur-Kirwatti (Kánara E. D.) and Tavargatti-Dandeli (Kánara N. D.) were maintained.

Under Government Order No. 611 of 19th January 1916 an Engineer was deputed to survey the bed of the Kálinadi river. The work was commenced during the year, but it was not possible to make much headway.

Sind Circle.

New minor irrigation works were only undertaken by the Department in the Jerruck Division where excavation of two karias in Budka forest cost Rs. 75.

Repairs to existing works cost Rs. 2,326.

The Public Works Department constructed the following sluices during the year :—

Construction of a sluice in the Choi loop to irrigate Mohromari forest	Rs. 2,818
2 sluices ex-Korai wah for Hingoro forest	363
Conversion of 7 submerged sluices ex-Masuwah into open sluices for Wasir forest.	1,357
Forest sluice ex-Choi branch mile 3	182

Total .. 4,720

3.—PROTECTION OF FORESTS.

(a) *General Protection.*

Northern Circle.

Statement of Offences by nature and treatment and comparison with former years.

Division.	A Cases taken into Court.				B Cases compounded.				C Cases undetected.				Total.				Grand Total.	
	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.		
Panch Maháls	1915-16...	5	2	10	...	7	571	853	76	43	275	1	6	55	848	864	82	1,849
	1914-15...	8	11	15	3	4	516	395	21	106	242	2	...	118	769	412	24	1,323
Surat ...	1915-16...	4	2	...	...	4	19	20	8	4	1	...	2	12	22	20	10	64
	1914-15...	31	...	1	2	5	25	28	7	3	6	...	1	39	31	29	10	109
North Thána	1915-16...	1	13	1	1	4	142	197	31	57	135	...	2	62	290	198	84	594
	1914-15...	1	5	1	...	3	92	168	26	60	102	...	2	64	199	169	28	460
Central Thána	1915-16...	6	2	7	1	1	209	235	31	53	82	...	1	60	293	242	33	628
	1914-15...	23	5	5	...	1	218	223	19	86	140	1	...	110	363	229	19	721
South Thána	1915-16...	1	11	12	4	5	236	834	89	70	190	3	...	76	437	349	43	906
	1914-15...	2	14	12	3	12	223	306	45	71	205	2	3	85	442	320	51	898
North Násik...	1915-16...	2	10	5	1	4	335	499	65	31	86	...	1	37	331	504	67	969
	1914-15...	...	8	16	5	4	331	392	37	13	75	...	...	17	464	403	42	931
South Násik...	1915-16...	1	17	17	5	7	404	341	57	60	98	...	...	68	519	358	62	1,007
	1914-15...	8	22	20	1	17	470	405	70	64	135	...	10	89	627	425	90	1,231
Total of 1915-16 ...	20	57	52	12	22	1,916	2,479	307	318	317	4	12	370	2,790	2,535	331	6,026	
Total of 1914-15 ...	73	65	70	14	46	1,925	1,917	234	403	305	5	16	522	2,895	1,992	264	5,873	
Average of the past three years.	58	82	65	13	38	2,294	2,060	245	362	343	7	24	458	3,319	2,123	223	6,153	

There was a general absence of serious crime. In Dohad of Panch Maháls, Tansa catchment of South Thána and Dindori of South Násik incendiarism of the forests is undoubtedly practised, but the reasons are for small local gains, such as clearing the forests for early grazing, hunting and local quarrels over grass, giving no reason to suspect any local grievance against forest regulations.

One extensive unauthorized felling by a jagirdari contractor in the Dángs has come to light. The case is pending.

The total number of offences shows an increase of 353 over the past year, but is 157 less than the average of the past three years.

The chief increase is in the Panch Maháls of 526 cases, due mainly to the influx of cattle from Káthiáwár and North Gujarát where scarcity existed, the owners of which showed themselves lawless and turbulent. North Thána showed an increase of 124, due to more complete reporting of illicit fellings, though the Divisional Forest Officer says only a small percentage of these cases are even now reported.

On the other hand, South Násik shows a decrease of 224 cases, doubtless largely due to slackness in reporting, though some decrease in grazing cases in Dindori is due to greater grazing facilities given. The Divisional Forest Officer, South Thána, draws attention to the decrease in cases reported in Salsette as entirely due to slackness on the part of the Range Forest Officer. Suitable steps have been taken.

There was a decrease in cases taken into Court from 222 of the last year to 141 in the year under report. This was chiefly due to 27 extra cases last year in the Dángs during the Bhil unrest and 17 fewer cases this year under "Fire" in Central Thána, which the Divisional Forest Officer accounts for by the reduction in the number of fires from 110 to 60. In North Násik there were 11 fewer cases of illicit grazing taken into Court which the Divisional Forest Officer explains as due to the success of the prosecutions in the last year resulting in less crime.

The number of cases compounded increased by 612, chiefly due to the increased grazing offences in the Panch Maháls already alluded to.

Communal punishments were usefully employed, except that in Igatpuri range of the South Násik District it is reported that the doubling of grazing fees for bad protection had no effect, and the quadrupling of the fee is recommended.

Increasing value of forest produce and the yearly development of exploitation is rendering protection more difficult and all duties more exacting, so that the staff in the absence of any automatic scale of increase, or any increase for many years, has become quite inadequate to efficiently protect its charge. Six new ranges and twelve new rangerships are urgently required to avoid increasingly serious loss of capital. Proposals are before Government to effect this increase in efficiency without incurring present extra expenditure.

Illicit Fellings.

As noted last year mere figures are no index to the state of protection.

Panch Maháls.—There was a general increase in cases reported, East Dohad maintaining its character of exceptional badness. The vicinity of Native States on all frontiers renders protection in this district always difficult. The increase in the present year has already been noted as chiefly due to general dislocation of circumstances by scarcity.

The revision in the working plans should aid protection, economise labour, and be at once financially profitable while improving future capital.

Surat.—One serious case of unauthorised felling by a contractor has been referred to under "General Protection." Otherwise the protection was good and calls for no comment.

North Thána.—The Divisional Forest Officer reports as follows:—

"The increase in the total number of offences is mainly due to illicit fellings of valuable material, such as teak and tiwas. Notwithstanding this increase the work of the protective establishment was far from satisfactory and only a small percentage of offences were reported. In some grounds, for instance in Veoji and Boisar rounds, the round officers and guards rarely reported any offences though illicit fellings of teak poles were common.

This constant nibbling all along the coastal forests from the north of Umbergaon to the south of Máhim Taluka and in the vicinity of the Vaitarna river from Manor westwards greatly reduces the sale value of the coupes, in many cases by two-thirds or more.

In one closed coupe near Girgaon (Umbergaon range) during the past 4 or 5 years 176 teak shoots had been cut illicitly and no report made by the protective staff. In another instance near Manor 600 stumps of teak illicitly cut during the past five years or so were found on an area of 15 acres. This means that a good teak forest is practically destroyed. In some cases to avoid attracting attention by the stokers of the axe the thieves felled the trees with the saw and the stumps were burnt or uprooted to prevent detection.

With a view to improving forest protection the rangers' charges are being reduced and the number of ranges increased, but adequate staff to hold these charges is lacking."

Central Thána.—A decrease of 70 cases of illicit fellings is recorded, the Divisional Forest Officer remarking :—

"The decrease is certainly not due to any better protection or stricter supervision and there must have been a few cases which were either not reported or not detected. Owing to the transfer of the permanent Range Forest Officer and the delay of three months in the arrival of his successor, the staff must have got a little slack in detecting offences."

Put shortly it is the lack of adequate staff which is felt everywhere.

South Thána shows a considerable decrease in one range, which is entirely due to the ranger's slackness.

North and South Násik.—There was some decrease due to other reasons than better protection.

Special measures to improve supply and thus reduce Unauthorised fellings.

Tahal Cutting.—General efforts to maintain this on an economical basis were satisfactorily continued.

Special Coupes.—The sale dépôt system involving supply from special coupes was maintained and increased; though results are not marked at present and the system is rather costly, it will be maintained until found ineffectual.

Plantations for Firewood.—Seed from the Philippines of *Leucaena glauca* was not received; another application will be made. Good progress in Casuarina plantations in North Thána was made.

Central Circle.

The following table classifies the number of offences reported during the year as compared with those of the 3 previous years :—

Division.	A Cases taken into Court.				B Cases compounded and warned.				C Cases undetected.				Total.				Grand Total.	
	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorized felling.	Grazing without permission.	Other offences.	1915-1916.	1914-1915.
East Khándesh.	3	43	16	13	2	315	267	95	24	109	2	4	29	367	285	112	793	796
West ..	8	4	5	3	2	171	357	17	45	75	5	1	55	250	367	91	693	904
North ..	1	8	5	5	14	194	145	88	27	96	3	4	42	298	153	97	590	605
Poona ...	3	24	35	7	27	694	788	78	111	132	5	1	141	850	828	86	1,905	2,125
Sátára ...	9	6	13	14	354	445	57	43	66	...	...	1	68	426	458	71	1,021	1,225
Kolába ...	6	150	10	48	5	332	324	104	33	249	5	8	43	731	339	160	1,273	1,546
Total...	30	225	84	79	64	1,960	2,326	449	222	727	20	19	376	2,923	2,430	547	6,275	7,201
Average of past three years.	52	251	116	52	52	2,577	2,225	549	227	787	12	9	402	3,609	2,353	610	6,975	...

The total shows a decrease of 926 as compared with 1914-15, the decreases being under the heads of "Fires" (53), and "Fellings" (932), with increases of 3 and 56 under "Grazings" and "Other offences" respectively. Comparing the figures with the average of those of the three preceding years, the total decrease is 700, with an increase of 77 under "Grazing", and decreases of 26, 687 and 63, under respectively "Fires", "Fellings" and "Other offences".

Fires, felling and grazing offences are dealt with in detail later, and it will suffice to mention here that the first named decreased in the three Khándesh Divisions and Kolába, but rose in Poona and Sátára; the second decreased in every division, while the third decreased in West Khándesh and Sátára, but rose, though to trifling extents, in East Khándesh, North Khándesh, Poona and Kolába. The increase under other offences was mainly due to the detection of a large number of cases of encroachment on the forest boundary in Kolába.

Cases taken into Court numbered 428 as against 434 in 1914-15, the only noticeable variations being a decrease in Sátára, where the proper policy was more followed than perhaps had previously been the case of only dealing in this way with really serious offences, and an increase in East Khándesh consequent, it is reported, on refusal of offenders in many cases to compound.

Of the 425 cases disposed of during the year by prosecution, 400 or 94·6 per cent. involving 878 persons resulted in convictions, 25 or 5·4 per cent. involving 46 persons in acquittals: In two divisions, North and West Khándesh, the percentages were 100, in Poona 96·8, in Kolába 92·6 and in Sátára 90·8, all testifying to the care with which prosecutions were instituted and conducted. Punishments awarded are reported to have been generally adequate, except in one instance in Sátára in which the Divisional Forest Officer was compelled to represent to the District Magistrate that misplaced clemency towards offenders, apparently in the face of clear evidence of their guilt, and an unsympathetic attitude towards the Forest Department were making good forest protection an impossibility.

The number of cases compounded fell from 5,061 to 4,230; those which were disposed of by simple warning rose from 520 to 569; and in 1,098, as against 1,186 in the previous year, no offenders could be traced. The amount of compensation taken was Rs. 31,973, or an average of Rs. 3·5 per head from 9,056 persons.

The Central Circle being within the jurisdiction of two Commissioners, for convenience of review offences may be summarized as below:—

	Divisions in the Central Division :— East, West and North Khándesh, Poona and Sátára.			Divisions in the Southern Division :— Kolába.		
	1914-15.	1915-16.	+ or —	1914-15.	1915-16.	+ or —
	No.	No.		No.	No.	
Total offences ..	5,655	5,002	— 653	1,546	1,273	— 273
Fires ..	317	333	+ 16	112	43	— 69
Fellings ..	2,791	2,191	— 600	1,063	731	— 332
Grazing ..	2,158	2,091	— 67	269	339	+ 70
Other offences ..	389	387	— 2	102	160	+ 58
Cases taken into Court.	218	214	— 4	216	214	— 2
Cases disposed of ..	209	208	— 1	228	217	— 11
Percentage of convictions.	94·2	95·6	+ 1·4	89	94·9	+ 5·9
Cases compounded ..	4,371	3,776	— 595	690	454	— 236
Compensation taken ..	Rs. 26,517	Rs. 30,356	Rs. + 3,839	Rs. 2,569	Rs. 1,617	Rs. — 952
	No.	No.	No.	No.	No.	No.
Cases warned ..	276	258	— 18	244	311	+ 67
Offenders not traced ..	790	754	— 36	396	294	— 102

Communal rewards and punishments were freely resorted to, and with generally good effect, but steady persistence in the policy for many years will be required to make the public realize that the proper protection of the forests is entirely in their own interests, for so far it is too often the case that an improvement in one year is followed by a lapse in the next, the continuance of the reward being taken as a matter of course rather than as an obligation for continued good behaviour.

In the Poona Division eight villages in Akola had their grazing fees enhanced by the Collector of Nagar for persistent thefts, while an improved attitude towards the forests led to the removal of the Javle-Baleshwar punitive police post. In Kolaba for similar offences 6 villages were punished by enhancement of fees, or suspension of privileges, in one case permanent suspension. As a preventive measure, the system started some years back in Kolaba of working several coupes for the special supply of fuel to the coast towns and villages has had good results. Provision is made for their requirements in fuel and timber for agricultural implements at fixed prices, and they no longer have to depend on the illicit trade in such material that formerly wrought havoc in the forests. The improvement in protection is patent to the eye, and is evidenced by the decreasing number of felling offences. In the year under report this decrease was 332 for the division, and the system is being extended as occasion demands.

Southern Circle.

The following statement shows the number and classification of forest offences reported during the year as compared with those of the previous year and with the average of the past three years:—

Nature of offence.	Taken into Court.			Compounded.			Undetected.			Total.		
	1915-16.	1914-15.	Average of past 3 years.	1915-16.	1914-15.	Average of past 3 years.	1915-16.	1914-15.	Average of past 3 years.	1915-16.	1914-15.	Average of past 3 years.
I.—Injury by fire ...	28	26	26	68	60	75	880	610	602	976	696	703
II.—Unauthorized felling ...	57	142	159	2,455	2,513	2,605	376	531	525	2,838	3,166	3,239
III.—Unauthorized grazing ...	21	65	57	1,323	1,407	1,376	19	19	14	1,357	1,491	1,447
IV.—Other offences ...	5	10	12	302	316	334	9	12	12	316	338	358
Total ...	111	243	254	4,148	4,296	4,390	1,278	1,173	1,154	5,537	5,711	5,797

The total number of offences were less than those of the previous year and the average of the past three years by 174 and 260, respectively.

In all the divisions there was an increase in the number of fires and decreases under the other three classes of offences. The number of offences reported represents only a fraction of those committed, which is the reason for decrease to some extent; to a certain extent the decrease is also due to better protection of forest. Subordinates found guilty of neglect in reporting offences are duly punished, those vigilant in detection being, on the other hand, duly rewarded. Forest villagers are similarly rewarded for good protection of forests and punished for neglect or mischief. The joint responsibility for the protection of forests, thus placed on the forest villagers on the one hand and on the protective staff of the Department on the other is productive of good results.

The result of cases tried by Courts are compared in the following statement:—

Division.	1915-16.		1914-15.		Percentage of acquittals.	
	Convictions.	Acquittals.	Convictions.	Acquittals.	1915-16.	1914-15.
Kánara, N. D. ..	13	2	7	4	13.3	36.4
Kánara, E. D. ..	4	4	8	2	50.	20.
Kánara, C. D. ..	8	4	..	..	33.3	..
Kánara, S. D. ..	36	17	91	24	32.1	20.9
Kánara, W. D. ..	6	5	18	12	45.4	40.
Belgaum ..	16	3	23	8	15.8	25.8
Dhárwár-Bijápur ..	21	3	22	3	12.5	12.
			60	12		16.7
Ratnágiri ..	1	..	2	..	..	..
Total..	105	38	231	65	26.6	22.

A correct comparison between the two years' figures is not possible, since the figures of 1914-15 pertain to the old divisions and those of 1915-16 pertain to the divisions as reconstituted on 1st February 1916. There is, on the whole, a slight increase in the percentage of acquittals, which may be ascribed to want of care and experience in legal matters on the part of the prosecuting officials. In one case of acquittal in Kánara W. D. the Third Class Magistrate gave a wrong finding and neglected to call an obvious witness whose evidence would have procured a conviction. For this he was reprimanded by the District Magistrate. This officer again drew the attention of subordinate Magistrates to the necessity of appraising damage to the forests at its proper value.

There were four important cases during the year, 1 in Kánara E. D., 1 in Kánara S. D. and 2 in the Dhárwár-Bijápur Division. In Kánara E. D. there was a good deal of looting of small timber near the Dhárwár frontier. One serious case was detected and 38 offenders were convicted by Mr. Desai, the Mahálkari of Mundgod, and fined Rs. 770 in all. The forest guard, patil and some others were afterwards convicted of giving and taking bribes in connection with this case, and sentenced to imprisonment and fines. In Kánara S. D. there was a serious fraud detected in connection with house-building timber. A forester and a guard were prosecuted for taking bribes to hush up the case, the offender being allowed to stand as a witness for the prosecution. The guard was convicted and sentenced to 7½ months' imprisonment and Rs. 100 fine; the forester was discharged by the Sub-Divisional Magistrate, Kánara S. D., but was dismissed departmentally. In Dhárwár-Bijápur the kulkarni of Nandikeshwar, Táluka Badámi, was prosecuted and convicted for abusing the authority given to issue forest passes but was finally acquitted by the High Court. The people of Chimalgi in the same táluka assaulted the beat guard, as he tried to catch them in the act of smuggling forest produce; in this case the accused were sentenced under section 41 of the Forest Act for illicit removal of forest produce, and were sentenced to different terms of imprisonment for the assault. In the assault case sanction was also given by the Sub-Divisional Magistrate for the prosecution of a witness who gave false evidence to favour the accused.

The number of cases compounded and the compensation received are compared in the following statement :—

1915-16.		1914-15.		Average of past 3 years.	
No. of cases.	Compensation.	No. of cases.	Compensation.	No. of cases.	Compensation.
3,809	Rs. 21,397	3,951	Rs. 21,381	3,763	Rs. 19,713

Offenders in 334 cases were let off with simple warning.

Sind Circle.

The classification of forest offences detected during the year is given in the following prescribed form :—

Division.	Cases taken into Court.				Cases compounded.				Cases undetected.				Total.				Grand Total.
	Fires.	Unauthorized fel-lings.	Illicit grazing.	Other offences.	Fires.	Unauthorized fel-lings.	Illicit grazing.	Other offences.	Fires.	Unauthorized fel-lings.	Illicit grazing.	Other offences.	Fires.	Unauthorized fel-lings.	Illicit grazing.	Other offences.	
Sukkur	2	57	39	19	...	685	1,110	...	53	347	...	...	55	1,089	1,149	19	2,312
Larkana ... ..	...	6	8	1	...	104	217	14	47	33	...	...	47	142	220	15	424
Hyderabad ... ..	...	14	...	2	...	216	1,122	8	7	4	...	...	7	234	1,129	10	1,373
Jerruck	6	20	11	...	1	148	250	1	51	9	...	...	58	177	261	1	497
Total of 1915-16 ...	8	97	53	22	1	1,153	2,699	23	158	392	...	...	167	1,543	2,753	45	4,506
Total of 1914-15 ...	...	68	14	23	...	838	1,851	72	46	363	...	7	46	1,260	1,865	57	3,937
Average of past three years.	4	67	16	16	2	686	2,352	33	116	269	...	4	121	1,015	2,368	53	3,907

The total of cases is greater by 1,369 than that of 1914-15 and 1,049 more than the average of the past 3 years.

Cases compounded rose to 3,718 from 2,639 while the amount of compensation accepted was Rs. 12,919 as compared with Rs. 8,886. The average amount accepted per case was Rs. 3-7-7 as against Rs. 3-5-10.

Under cases compounded there is an increase of 315 under unauthorised fellings, almost entirely in the Sukkur Division where the staff have shown vigilance owing almost entirely to the Divisional Forest Officer's own energy. Illicit grazing cases have risen by 848. The abnormally low inundation and the absence of rain in the hills affected the supply of grass and grazing and caused an extraordinary influx of cattle into forests, the hill tribes often trying to evade the payment of the usual fees and to graze in closed compartments. Undetected cases rose from 416 to 550, the principal increase being due to fires lighted largely to obtain early grazing.

In 153 cases offenders were warned and discharged. There were 78 such cases in the previous year.

The offences taken into Court are detailed below:—

Pending from last year	..	30
Cases of the year	..	180
		Total .. 210

Of these 154 were decided during the year as against 102 in the previous year, one was compounded and one was withdrawn, leaving 54 pending at the close of the year. Of the 154 cases 135 resulted in conviction and 19 in acquittal, the percentage of acquittal being 12.34 as against 14.70 in the previous year. The percentages of acquittals in Sukkur, Larkana, Hyderabad and Jerruck Divisions were 13.7, 20, 7.69, 6.9 as compared with 18.9, 16.6, 3.84, and 5.9 in the previous year.

Eight fire cases were taken to Court during the year. The results were as follows:—

No. of cases.	Division.	Result.	Remarks.
2	Sukkur	(i) Acquittal.	(ii) Case pending.
6	Jerruck	(i) One month's imprisonment. (ii) 21 days' imprisonment. (iii) 15 days' imprisonment and Rs. 25 compensation. (iv) 3 months' rigorous imprisonment. (v) 2 months' rigorous imprisonment.	(vi) One case pending.

There were 14 prosecutions laid for assault and obstruction of forest guards in the execution of their duty. In these 4 convictions were obtained, 1 acquittal, and 9 are pending (8 of these in the Hyderabad Division). In the Larkana Division one assault resulted in the death of the guard; but the evidence being insufficient to convict on a charge of murder, only a month's imprisonment was inflicted on the chief offender.

(b) Protection from Fire.

Northern Circle.

Prescribed Form No. 15 shows the number of fires and their origins.

On the whole fire protection was satisfactory, the only material increase was in North Nasik and there the area burnt was mostly hill tops and grass lands.

Panch Mahals.—As already noted, the fires and area burnt were only half the usual figures due to local scarcity.

Surat.—Protection was good.

North Thana.—The number of fires and area burnt were about the average. The presence of the Divisional Forest Officer in South Mahim prevented the area burnt being greater owing to that officer taking steps personally to make the villagers render assistance in extinguishing fires.

Central Thána showed a large decrease in the number of fires and area burnt, the reason being given as the disappearance of dead bamboos. Probably the presence of bamboo seedlings also rendered the forests less inflammable, and early rain contributed to the same result.

South Thána figures were practically the same as last year. The Divisional Forest Officer writes as follows :—

“Results are exactly the same this year. Out of a total of 11,625 acres burnt, 7,277 of these were in Shahápur range.

In order to try and find out the causes of these fires undersigned camped in the Tansa forests during the Shimga holidays, about which time most of the fires occur.

The number of fires and the mysterious way in which they originated were very extraordinary. On one day three different fires started from the heart of the forest within a mile of undersigned's camp, and nearly every day a new fire broke out in a fresh place.

On one occasion the report of a gun was heard quite close, but in no case could any offender be found.

The fire guards (local Thákurs) always promptly reported the fires and went for assistance, but declared they never met anyone in the forest before or after a fire.

The report of the gun and the fact that the forests were clearly being ignited in a systematic and thorough manner pointed to wilful incendiarism, and facts have since come to light which help to solve the matter. The local Thákurs, some of whom have been employed for years as fire guards, are the culprits themselves. Hence the reason why no offender is ever caught. The forests it seems have been regularly burnt and shikarred for years either by or under the protection of the fire guards and their friends.

In the light of this knowledge undersigned hopes to be able to take steps next season to improve matters. The harm that has been done in Tansa is very great. Hundreds and possibly thousands of standing teak trees are burnt to the ground every year.”

South Násik shows some reduction in the number of fires but a considerable increase in area burnt. Out of a total of 68 fires, 61 occurred in grass kurans of Dindori, Násik and Igatpuri and, as the Divisional Forest Officer remarks, “must be due wholly or partly to malice and enmity among the grass contractors and villagers.” Only 7 fires (burning 1,962 acres) occurred in forest proper.

North Násik shows a large increase in the number of fires and area burnt, but the Divisional Forest Officer explains that the area burnt is chiefly hill tops and other areas without value.

The following statement required by Government Resolution No. 248 of 12th January 1904, shows the area protected :—

Division.	Total forest area of the division in charge of the Forest Department.	Extent of valuable forest for which continuous protection from fire is desirable.	Proportion of valuable forest which has been continuously protected from fire for 5 years.	Extent of forest naturally immune from fire.	Extent of forest burnt.		
					Open forest.	Closed forest.	Total.
	Acres.	Acres.	Acres. Per cent.	Acres.	Acres.	Acres.	Acres.
Panch Maháls ..	2,12,200	2,12,200	1,61,367 or 75.9	..	4,026	848	4,874
Surat ..	4,63,507	4,63,507	4,56,094 or 98.0	..	32	1,062	1,094
North Thána ..	2,14,149	2,14,149	2,02,079 or 94.3	..	2,496	1,444	3,940
Central Thána ..	2,38,886	2,36,335	2,08,585 or 88.3	1,500	1,501	1,240	2,741
South Thána ..	2,18,333	2,08,356	1,75,676 or 84.3	4,356	5,019	6,606	11,625
North Násik ..	3,42,745	2,37,672	2,08,249 or 87.2	..	3,655	5,349	9,004
South Násik ..	3,94,224	3,13,160	2,81,436 or 89.9	49,920	2,191	3,107	5,298
Total ..	20,84,044	18,85,379	16,93,486 or 89.8	55,776	18,920	19,656	38,576

Central Circle.

The number of fires decreased by 33 (from 465 to 432), and the area burnt by 30,122 acres (from 184,593 to 155,471), a state of affairs which still leaves much room for improvement. Separating the figures for the Southern and Central Revenue divisions, the former shows 47 fires burning 833 acres in Kolába, as against 112 burning 1,565 in 1914-15, the latter 385 burning 154,638 acres as against 353 burning 184,028, the majority of the area burned as usual being in Khándesh.

Poona and Sátára call for few comments, for comparatively speaking their forests contain little grass, while there is keen desire on the part of the public to utilize to the full what grass there is. In Poona it may be noted that the increased number of fires (146 as against 88), and the increased area burnt (4,964 acres as against 2,691), mostly occurred in forest lands permanently or temporarily leased to the Military Department, and were in all probability deliberately caused by the villagers, who also withheld in such cases the assistance which, in areas in charge of the Forest Department, they as a rule readily give. The erroneous impression that Government property can be destroyed with impunity, in whose-so-ever charge it may be, is being adequately dealt with by the Collector. In Sátára also there was a small increase in the number of fires and area burned, the latter for want of ready assistance from villagers for which punitive measures have been imposed.

The case of the three Khándesh divisions is very different, and it must be admitted that the fire problem here is still far from solution, though progress has undoubtedly been made within the last ten years. The difficulties arise, partly from natural factors such as immense areas of practically uninhabited country, covered with highly inflammable grass, partly from the careless habits of a less civilized people, partly from a system of administration which has hitherto allowed the unrestricted access to the forests, at their most inflammable time, of privilege-holders under the Tapti Code and permit-holders from the non-privileged villages of the Tapti plain. This system it is hoped to change, when a corresponding improvement in fire protection may be hoped for. With the example of the Surat Dangs before one, it cannot be said that the Khándesh problem is incapable of solution.

East Khandesh.—The number of fires was 72 as in the previous year, but the area burnt rose from 44,100 acres to 70,244. As usual the Division far exceeds all others in one unsatisfactory feature, *viz.*, bad work by some subordinates and the number of fires caused by carelessness in burning fire lines, there being no less than 17 cases of this, with a resulting area burned of 24,181 acres. The lack of continuity in administration, of which this division for the last seven years has been the victim, and to which the recent transfer to the Indian Army Reserve of officers of Mr. Dalley has again added, is undoubtedly also responsible to a large extent for this unsatisfactory feature, for with constant changes in personnel and no knowledge of either staff or people by superior officers, work inevitably suffers. Since September 1909, the division has changed hands 15 times, 7 different officers have held charge, and none for a longer period than 14 months continuously. Under such conditions progress is hardly to be expected. And when it is pointed out that the East Khándesh Satpuda forests are practically uninhabited, are situated on most difficult country, are almost waterless in the hot season, that the grass grows several feet high, and that help in burning lines or in extinguishing fires has to be sought from villagers living some miles away in the plains who, being non-forest villagers, give help with reluctance, it will be seen that successful protection is a matter of difficulty. The Divisional Forest Officer in the case of one fire worked for 4 days almost continuously.

Reference was made above to a contemplated change in the system of working the forests; this applies particularly to East Khándesh, for which a revised working plan will shortly be submitted to Government. In it stress is laid on the yearly destruction of forest growth which is going on, and on the impossibility of effecting any improvement unless fires can be kept out, which can never be the case until people, living miles from the forest, and having no interest whatever in their protection, are prevented from wandering in them at will in search of grass and fuel at the most dangerous time of the year. The plan, while providing for all the legi-

timate necessities of the public, will curtail to some extent the license hitherto enjoyed by privileged and non-privileged villagers, but will at the same time enable the Forest Department to work at fire protection with some reasonable hope of progress; and as such it is hoped that the measures proposed will meet with Government approval. Rewards to deserving villagers by the Conservator, and punishments to those that failed to help, have been freely resorted to in the past few years, and with some effect, but nothing but a change in system as indicated above, and the creation of In-Forest Settlements which will provide the necessary labour, can be of much avail.

North Khándesh showed a considerable improvement on last year, the number of fires falling from 71 to 42, and the area burnt from 103,901 acres to 61,261, the larger portion of which was fortunately in inexploitable areas. This is a division where under systematic measures there has been a very marked improvement, for prior to 1909 the forests were as a rule burned from end to end, whereas in the year under report the percentage of failure in the area sought to be protected was 11·02, and has been as low as 5·03 in 1911-12, 1·71 in 1912-13, and 9·11 in 1913-14. Personal influence and continuity of administration under two Divisional Officers only and the fact that the forests are not so much resorted to for grass by outsiders make the problem easier than in East Khándesh, but the drunken Bhil in his peregrinations from village to village at Holi time is an ever present danger, and a fire once started on the inaccessible cliffs in Taloda, Sháháda and the Akráni has almost to be left to burn itself out. Such fires accounted for the greater part of the area burned in 1915-16. For good assistance numerous free grants of money and wood were given to Akráni patils and others and 10 villages were given free grazing; while for the reverse 4 villages had their privileges altogether suspended and 11 had to pay double grazing fees.

West Khándesh.—Here also there is steady improvement, the result of system, strenuous supervision, and communal punishment and reward, while it is interesting to record that the large Deomogra reserve, the most valuable area in the division, though inhabited and surrounded by Bhils, has mainly through the personal influence of a Bhil round forester; remained practically untouched by fires for many years, with most evident benefit to the forest growth. The Bhil therefore is not an insuperable obstacle to progress. The number of fires in the division fell from 78 to 57, the area burnt from 31,572 acres to 17,174, and the percentage of failure in areas under special measures from 14·4 to 6·79.

For the whole circle the area under special protection was 2,392,455 acres, and the cost was Rs. 18,468; 2,236,984 acres or 93·5 per cent. were saved. Of the 155,471 acres burnt 22·2 per cent. was closed forest; the remainder open.

The statement required by Government Resolution No. 248 of 12th January 1904 is given below, details in column 4 being omitted: Without exact maps being kept, showing each year the site of every fire that occurs, it is an impossibility to say what areas have, or have not, been continuously protected. Such maps are not kept, and hence any figures would be valueless.

Division.	Total forest area of the division in charge of the Forest Department.	Extent of valuable forest for which continuous protection from fire is desirable.	Proportion of valuable forest which has been continuously protected from fire for 7 years.	Extent of forest naturally immune from fire.	Extent of forest burnt during the year.		
					Open forest.	Closed forest.	Total.
	Acres.	Acres.		Acres.	Acres.	Acres.	Acres.
East Khándesh .	4,88,615	3,52,898		..	50,774	19,460	70,234
West Khándesh .	3,81,360	2,06,107		..	11,413	5,761	17,174
North Khándesh.	5,55,766	5,55,766		..	55,963	5,298	61,261
Poona ..	3,66,897	2,19,090		1,01,752	761	4,203	4,964
Sátára ..	3,30,490	2,29,953		1,00,569	420	585	1,005
Kolába ..	2,69,327	2,69,327		5,553	595	238	833
Total ..	23,92,455	18,33,141		2,07,874	1,19,926	35,545	1,55,471

Form No. 15 analyses the origins of fires. Of the total of 432, 134 were from causes unknown, 164 were due to carelessness of workmen or travellers in the forests, 10 originated from railway engines, 23 from faulty departmental work, 42 came from outside forests, generally from ráb burning, while 59 are said to have been malicious or intentional, though direct evidence of the same is generally wanting, as indeed it is in most cases of fire, whether accidental or intentional. In 30 cases only was there sufficient evidence to warrant the prosecution of offenders.

Southern Circle.

The system of fire protection remained the same as in previous years. The following statement shows the areas over which protection from fire was attempted, the areas successfully protected, the cost per square mile and the percentage of success as compared with that of 1914-15:—

Division (as readjusted on 1st February 1916).	Area attempted to be protected.		Area burnt.		Area actually protected.		Percentage of success.		Cost.		Cost per square mile protected.	
	1915-16.	1914-15.	1915-16.	1914-15.	1915-16.	1914-15.	1915-16.	1914-15.	1915-16.	1914-15.	1915-16.	1914-15.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.
Kánara, N. D. ...	259,478	356,533	74,181	11,998	185,297	344,535	71.5	96.6	3,426	4,850	11.8	9
Do. E. D. ...	410,023	417,788	45,201	6,001	364,822	411,787	90.	98.6	4,662	5,451	8.2	8.5
Do. C. D. ...	182,397	...	24,405	...	157,992	...	86.6	...	889	...	8.6	...
Do. S. D. ...	453,080	14,517	3,253	58	449,827	14,459	99.3	99.6	508	473	.8	20.5
Do. W. D. ...	535,823	199,815	23,100	618	512,723	199,197	95.7	99.7	1,493	2,027	1.8	6.5
Belgaum ...	401,370	400,397	22,256	3,951	379,114	396,436	94.5	99.01	6,030	5,677	10.2	9.2
Dhárwár-Bijápúr..	51,616	{ 143,395 1,4032	8,640	{ 10,160 433	42,976	{ 113,235 13,600	83.3	{ 92.9 96.9	528	{ 2,117 207	7.9	{ 10.2 9.9
Ratnágiri ...	12,054	12,052	1	10	12,053	12,043	100.	99.9	28	30	1.5	1.6
Total ...	2,305,841 or 3,603 Sq. m.	1,558,529 or 2,435 Sq. m.	201,037	33,238	2,104,804 or 3,288 Sq. m.	1,525,291 or 2,383 Sq. m.	91.3	97.9	17,564	20,832	5.3	8.7

The figures for 1914-15 in the above statement refer to the old divisions and those for 1915-16 refer to the new divisions and a comparison between them would not be accurate; the total figures for the circle, however, give an approximate idea of the work done and the results attained. The area in which protection was attempted during the year was 3,603 square miles against 2,435 square miles during 1914-15, or an increase of about 50 per cent. Of the area under protection 3,288 square miles were successfully protected as against 2,383 during the preceding year.

In Kánara the year was the worst for fires in the last 10 years, and this was all the more disappointing as the previous year had been the most successful ever known. The causes assigned are an exceptionally dry-hot weather and the large numbers of dead bamboos. These causes, added to the continued apathy of the villagers, made the conflagrations unusually extensive. The damage was specially great in the teak forests round Tamange and Gund, where material for thousands of sleeper pieces has been entirely wiped out. The danger from dead bamboos will continue for several years to come.

In Belgaum fire protection was satisfactory in the Gokak, Belgaum and Khánápúr west ranges, but was extremely bad in the Khánápúr central and east ranges, where large areas were maliciously burnt resulting in enormous damage. With a view to remedy matters and secure the co-operation of the villagers the Divisional Forest Officer has made a special report to the Collector and it is hoped the matter will receive due attention.

In Dhárwár-Bijápúr also the area burnt was larger than in the previous year on account of the hot weather. In Dhárwár forest boundary lines are cleared by villagers under circular orders of the Collector since the year 1907: the Collector of Bijápúr has been requested by the Divisional Forest Officer to introduce similar practice in Bijápúr. Co-operation of villagers is the most important factor in fire protection.

The policy of rewarding villagers for good protection or punishing them communely for bad cases was continued during the year as under :—

Division.	Number of villages.			
	Rewarded with free or concession grazing for good general protection.		Punished for bad protection by enhanced grazing fees.	
	1915-16.	1914-15.	1915-16.	1914-15.
Kánara, N. D. ..	58	58	21	24
Do: E. D. ..	63	86	70	32
Do. S. D. ..	..	..	19	18
Do. W. D. ..	6	1	80	11
Belgaum ..	77	94	239	124
Dharwár-Bijápur ..	14	14	37	37
Total ..	218	253	466	246

Besides the above communal awards, patils and other villagers in Belgaum and Kánara were rewarded with turbans, ornamented coats, etc., for assistance rendered in general protection of forests.

In Kánara E. D. one forester was reduced, one guard dismissed and several were fined for slackness in fire protection. In Kánara W. D. one forester and one guard were fined.

Form No. 15 shows the number and origin of fires; the causes shown therein are more or less speculative. The total number reported during the year was 976 as against 696 during the preceding year. Of the cases reported only 9·8 per cent. were detected, and 2·8 per cent. prosecuted. Details are given in the following statement :—

Division.	Total number of fire offences.	Number of detected cases.		Percentage of detected cases.	Result of prosecutions.
		Pro-secuted.	Com-pounded.		
Kánara, N. D. ..	179	9	14	12·8	Conviction was obtained in 5 cases, 1 case was acquitted, and 3 were pending at the close of the year.
Do. E. D. ..	135	3	14	12·6	In one case the offender was fined Rs. 25; 2 cases were acquitted.
Do. C. D. ..	167	1	10	6·6	Pending.
Do. S. D. ..	88	3	11	15·9	In one, the offenders were acquitted and 2 cases were pending at the close of the year.
Do. W. D. ..	136	2	3	3·7	In one case the offender was sentenced to 15 days' rigorous imprisonment, another case was pending. Out of the 5 cases pending at the opening of the year 2 were written off as the offenders could not be traced. Two were acquitted and in one the convicted offender was fined Rs. 1.
Belgaum ..	185	10	14	13·0	In one case the offender was sentenced to 6 weeks' rigorous imprisonment. In one case the offender was sentenced to 2 months' simple imprisonment. Eight cases were pending; of the 3 cases pending at the opening of the year 2 were acquitted and in 1 the offender was sentenced to 1 month's rigorous imprisonment.
Dhárwár-Bijápur ..	85	..	2	2·4	The 1 case pending at the opening of the year was withdrawn, the offender having absconded. As the Magistrate did not keep the man in custody, he was warned by the Sub-Divisional Magistrate.
Ratnágiri ..	1	..	..	....
Total ..	976	28 or 2·8 per cent.	68 or 7 per cent.	9·8	

The statement showing areas enjoying continuous immunity from fire for a period of 7 years, prescribed in Government Resolution No. 248 of 12th January 1904, is not given here, as it was found that the areas shown annually in previous years' reports had been calculated on a wrong basis. It is hoped that correct figures will be available in the next annual Report.

Sind Circle.

The results of the year and last year are as under :—

Division.	Fires originating in departmental fire conservancy operations.		Fires crossing outer fire traces.		Fires due to carelessness or accident by outsiders or to unknown causes.		Fires originating from intention or malice.		Totals for 1915-16.		Totals for 1914-15.	
	No.	Area burnt.	No.	Area burnt.	No.	Area burnt.	No.	Area burnt.	No.	Area burnt.	No.	Area burnt.
		Acres.		Acres.		Acres.		Acres.		Acres.		Acres.
Sukkur ... ..	..	..	4	349	47	2,730	4	565	55	3,644	9	88
Larkana .. ..	..	..	..	..	47	1,247	..	..	47	1,247	13	360
Hyderabad .. ..	..	..	..	..	7	242	..	..	7	242	1	29
Jerruck	3	80	..	..	21	446	30	792	54	1,318	23	569
Total for 1915-16 ..	3	80	4	349	122	4,665	34	1,357	163	6,451	..	..
Total for 1914-15 ..	3	100	1	1	27	519	15	426	..	..	46	1,046

The year was a bad one for fires, the total number having risen from 46 to 163, and the area burnt from 1,046 to 6,451 acres as compared with the year previous.

The large number of fires was due to a very low inundation during the year which resulted in the growth of large clumps of dry sar and kanh grasses which on poor soil become dry and easily ignitable; and maldars were not slow to perceive that there would be an advantage to their cattle in its removal. In consequence of the failure of the rains in the hills distressed graziers from Kohistan and from Cutch swarmed into the forests of lower Sind and remained there until June, firing the grass now and then in the hope of obtaining a little green fodder.

New fire tracing work done has been recorded in the Jerruck Division where 22 miles were cleared at a cost of Rs. 27 per 50-foot trace and Rs. 60 per mile for those 100 feet in width. Other new work was done over 16 miles on traces varying in width from 30 to 100 feet with the gratuitous assistance of Zamindars and cattle owners. In Larkana 11½ miles of new boundary lines of forest recently added were cleared at a cost of Rs. 222. In all divisions forests have been divided into half mile squares and these lines were kept clear without expense. A fire tracing scheme has been ordered to be submitted in October for each division detailing the work for the ensuing working season.

Concessions in the shape of free grazing and small free grants of timber have been made to persons who have rendered active assistance in fire operations.

Fire watchers were entertained in the Mulchand, Tatta and Shah Bunder ranges of the Jerruck Division.

The statement required by Government Resolution No. 248, dated 12th January 1904, regarding areas enjoying continuous immunity from fires for a period of seven years, is given below from 1909-1910 (*vide* Government Resolution No. 4081 of 22nd April 1908).

Division.	Total forest area.	Area of valuable forest for which continuous protection from fire is desirable.	Proportion of valuable forest which has been continuously protected from fire for 7 years.		Extent of forest naturally immune from fire.	Extent of forest burnt during the year.		
						Open.	Closed.	Total.
	Acres.	Acres.	Acres.	Per cent.		Acres.	Acres.	Acres.
Sukkur ..	291,315	291,315	259,731	or 89.1	Newly formed kachas.	2,477	1,167	3,644
Larkana ..	148,275	148,275	144,565	or 97.4		1,240	7	1,247
Hyderabad ..	156,476	156,476	154,894	or 98.9		157	85	242
Jerruck ..	146,420	102,783	84,232	or 81.9		1,314	4	1,318
Total ..	742,486	698,849	643,422	or 92.06		5,188	1,263	6,451

(c) Protection from Cattle.

Northern Circle.

The following statement shows the number and kind of animals impounded from open and closed forests respectively compared with previous years :—

Division.	Cows and bullocks.		Buffaloes.		Goats.		Sheep.		Other animals.		Total.		Grand total for 1915-16.	Grand total for 1914-15.
	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.		
Panch Mahals ...	390	11,818	229	3,552	4,076	2,401	323	248	69	155	5,087	18,174	23,261	10,765
Surat ...	129	87	55	23	122	...	...	...	...	...	306	110	416	558
North Thana ...	14	1,423	...	231	934	375	...	...	...	...	948	2,039	2,987	2,636
Central Thana ...	292	1,712	55	166	438	141	...	...	...	...	785	2,019	2,804	3,533
South Thana ...	76	2,031	...	434	179	764	...	...	...	...	255	3,229	3,484	3,470
North Nasik ...	...	4,138	...	50	4,735	3,730	2,864	965	...	65	7,599	8,938	16,537	20,897
South Nasik ...	382	6,766	8	554	2,062	1,088	370	253	...	1	2,822	8,562	11,484	10,176
Total, 1915-16 ...	1,283	27,985	347	5,010	12,546	8,499	3,557	1,466	69	211	17,802	43,171	60,973	...
Total, 1914-15 ...	1,242	22,343	186	3,876	14,329	4,167	3,997	1,746	10	138	19,764	32,270	...	52,034
Average of the past three years ...	1,367	21,869	340	3,543	12,930	4,182	5,342	2,714	46	126	20,025	35,766	55,791	...

The total increase is entirely explained by the increase in the Panch Mahals, accounted for below :—

Panch Mahals.—The number of cases of illicit grazing and the number of cattle affected were both double last year's figures. The reason seems two-fold, viz., an influx of large numbers of cattle from the surrounding areas of scarcity coupled with the necessity of protecting the local grass crop which had to be reaped for fodder. While the excess impoundings must be regretted, the fodder rendered available (estimated at 100 lakhs pounds) for the ensuing hot weather was most important. This will be the more evident when it is remembered that unless reaped, the greater portion of such fodder is absolutely lost. To give the utmost possible relief all forests except two coupes (instead of ten) out of thirty in each block were thrown open to grazing in the month of March.

Surat.—Impoundings were normally few.

North Thana.—Impoundings were normal and comparatively few. Only 14 animals other than goats were impounded from closed forest and 45 per cent. of the total cattle impounded were goats.

Central Thana.—Impoundings showed a material reduction. The Divisional Forest Officer fears that this reduction does not denote improved protection and there is every reason to know that grazing rules do not press hardly on the

people. There is some reason to think that figures of former years were inflated by rewards given for grazing offences detected. This system was objectionable and has been stopped where it existed. The total number of cattle impounded was only 5 per cent. of the number given free grazing, 15 per cent. being goats.

South Thána.—While the total number of cattle impounded was the same as last year, there was a marked decrease in Salssette due to slackness. The Divisional Forest Officer remarks of other ranges that greater attention to cultural operations has stimulated guards to take more trouble to protect their forests. This is very satisfactory.

South Násik.—The figures for impoundings for the year call for little comment except that slight increases in Násik, Sinnar and South Peint ranges were largely off-set by a considerable reduction in the Dindori range, the latter factor being due to some modification of grazing arrangements in the village of Wani.

North Násik.—The number of animals impounded showed a material decrease due, it is stated, to greater facilities given to the people. More than 75 per cent. of the animals impounded were sheep and goats. Only sheep and goats were impounded from open forest. 20 per cent. fewer cows, bullocks and buffaloes were impounded from closed forests, while the number of goats impounded from closed forest rose 75 per cent. These facts go to show that the incidence of impounding is satisfactory.

Central Circle.

Of the total forest area of 5,437 square miles, 624 were closed to all animals throughout the year, 121 for part of the year, the former representing areas under regeneration, the latter the areas in Poona and East Khándesh which are primarily worked for fodder, and in which grazing is allowed in the hot weather after removal of the grass crop and when pasturage is so badly needed. 2,993 square miles of forest proper were open throughout the year for grazing of horned cattle, while sheep and goats were allowed solely in 1,699 square miles of pasture forests.

The following statement compares the numbers and kinds of cattle impounded from open and closed forest respectively, the total impoundings for the jurisdiction of the Commissioner, C. D., being 46,820 of which 14,491 were from open forest and 32,329 from closed, as against 46,025, 18,287 and 27,738 in 1914-15. For the circle the noticeable point is that while impoundings of horned cattle have increased by 6,715, those of sheep and goats have decreased by 5,505. The net increase for the year, including all animals, is 1,355; impoundings of horned cattle found grazing in open forest without a permit took place only when the owners refused to pay the fees. Each division receives separate comment below:—

Statement of Impoundings.

Division.	Cows and bullocks.		Buffaloes.		Goats.		Sheep.		Other animals.		Total.		Grand total.
	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	
East Khándesh ...	933	6,296	84	1,043	1,483	309	663	656	84	13	3,245	8,315	11,560
West Khándesh ...	...	5,825	...	609	1,671	30	883	870	13	145	2,566	7,479	10,045
North Khándesh ...	116	6,850	57	603	440	...	...	...	...	18	612	7,470	8,082
Poona ...	948	4,569	198	1,077	2,603	670	1,118	286	20	73	4,837	6,575	11,562
Sátara ...	100	1,980	...	250	822	17	2,259	137	...	6	3,131	2,390	5,521
Kolaba ...	36	2,339	2	470	683	182	25	...	...	4	751	2,995	3,746
Total, 1915-16 ...	2131	27,859	341	4,050	7,706	1,208	4,947	1,949	117	258	15,242	35,324	50,566
Total, 1914-15 ...	811	23,380	63	3,412	10,047	2,505	8,198	665	48	183	19,167	30,044	49,211
Average of past three years.	1,809	22,704	164	3,589	9,973	3,805	8,699	1,286	196	254	20,841	31,639	52,480

East Khándesh.—Impoundings of horned cattle both in open and closed forest increased, a result which is partly attributable to contractors of areas sold for grass-

cutting seeking to minimize the losses that a poor grass season undoubtedly caused them by the deliberate admission of cattle on payment into the areas in their charge.

West Khándesh.—Showed a decrease all round.

North Khándesh.—Showed an increase of 2,706, mostly in horned cattle, the result partly of a deficiency of grass in open forest owing to the poor rainfall leading to trespass in closed forest, partly to a large influx of cattle into the division, partly to areas due for closure under working plan being nearer to villages than previously.

Poona.—Sheep and goat trespass largely decreased, but impoundings of horned cattle from open forest increased from 430 to 1,146, the offenders being not so much forest villagers as inhabitants of alienated villages or of the Bhór State, who deliberately preferred to have their cattle impounded rather than pay the forest fees. The Collector of Nagar in reviewing the divisional report noted that impoundings in Akola were still heavy, but added that he had satisfied himself that the plantations in which the trespass took place were reasonably planned and that their conservancy must be rigidly insisted on.

The Poona Division exhibits to a notable degree the persistent attempts that are made by the people to evade the Government grazing dues, no less than 11,683 cattle being paid for after the prescribed date, and then only on their being caught in the forests and taken to the villages. This habit entails endless extra work on the staff, and it would be a good thing to check it by an order from Government that such attempted evasion would entail the levy of a double fee.

Sátára.—The total impoundings decreased by 2,906, the result mainly of the heavy punishments inflicted in 1914-15 for sheep and goat trespass and the consequent diminution of this class of offences. Nevertheless it is to be feared that many such offences go undetected, and the only remedy is to raise pound fees till the graziers realize that it is more to their advantage to avoid forest areas altogether than to risk their animals being impounded. The scanty Sátára forests can ill afford the destruction caused by these animals.

Kolába.—Showed a small increase due to new blocks coming under working, thus creating fresh centres of closure.

Southern Circle.

The details of area open and closed to grazing are given in Form No. 16. An abstract is given below :—

Year.	Closed to all animals for whole year.	Closed to all animals for part of year.	Open to all animals (except browsers for whole year).	Open to all animals including browsers for whole year.
	Per cent.	Per cent.	Per cent.	Per cent.
1915-16 ..	15·3	0·3	78·8	5·6
1914-15 ..	16·7	0·8	76·5	6·0

The number of cattle that grazed in the forests during the year and in the preceding two years are compared in the following statement :—

Year.	Horned cattle.	Sheep and goats.	Other animals.	Total.
1915-16 ..	468,991	6,328	704	476,023
1914-15 ..	462,441	2,135	739	465,315
1913-14 ..	434,899	2,182	400	437,481

The following table prescribed in Government Resolution No. 4081 of 22nd April 1908 gives the comparative details of cattle impounded for illicit grazing:—

Division.	Cows and bullocks.		Buffaloes.		Goats.		Sheep.		Other animals.		Total.		Total open and closed for 1915-16.	Total open and closed for 1914-15.
	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.		
Kánara, N. D. ...	24	1,207	6	554	...	84	...	10	...	...	30	1,945	1,975	1,766
Do. E. D. ...	...	691	...	228	...	57	...	...	...	...	...	986	986	930
Do. C. D. ...	...	98	...	7	202	28	...	...	...	...	202	131	333	...
Do. S. D. ...	28	79	7	40	323	...	1	...	...	...	364	119	483	338
Do. W. D. ...	...	229	...	179	...	22	...	...	...	...	...	430	430	215
Belgaum ...	122	2,735	78	1,463	...	116	...	688	...	...	200	5,003	5,203	6,332
Dhárwar-Bijápur...	126	1,113	18	270	...	2,055	...	222	...	19	144	3,679	3,823	7,248
Ratnágiri ...	...	41	...	...	...	...	...	...	...	...	...	41	41	90
Total, 1915-16 ...	300	6,283	109	2,741	530	2,370	1	920	...	19	940	12,333	13,273	...
Total, 1914-15 ...	482	8,298	127	3,223	172	2,803	...	1,692	4	48	785	16,064	...	16,849
Average of past three years.	454	7,154	156	2,537	560	4,199	199	1,344	5	25	1,373	15,056	...	...

It is satisfactory to note that impoundings have on the whole decreased in all divisions, which shows that people are beginning to learn that cattle are not to be grazed in closed areas or without payment of grazing fees in open areas. The only increase over last year's figure, noticeable under "Goats", impounded in open areas of Kánara Central and Southern Divisions, is ascribed to ignorance of grazing rules on the part of people in some cases and in a few others to their obstinacy in grazing goats in contravention of rules. It is hoped that a few judicious prosecutions will reduce the offences of illicit grazing.

Sind Circle.

Ninety-four per cent. of the forest area was open to the grazing of cattle except goats and camels. The latter animals were admitted to 621 square miles or 54 per cent.

Impoundings.

Sukkur and Hyderabad showed a decrease owing to more cattle having been registered by the maldars who found the yearly grazing fees much cheaper than those levied under the bi-monthly system. In Lárkána and Jerruck there was an increase in impoundings. In Lárkána many cattle without passes were found in the closed forests, while in Jerruck, where subordinates appear smarter in grazing collections, the increase in impoundings was almost entirely from cattle with passes for open forest which had been driven into closed forest. The cattle pounds mentioned as sanctioned last year to impound gormal wild cattle were introduced.

The Divisional Forest Officer, Sukkur, reports that no animal was impounded in the gormal pounds of the A'bad range, and the Rohri Ranger attempted nothing.

The Divisional Forest Officer, Lárkána, reports that 15 cows and 20 asses were impounded in Dosu forest semi-wild cattle pound; 16 cows and 4 asses in the Amrote forest gormal pound. No animal was impounded in Madeji forest.

The Divisional Forest Officer, Hyderabad, reports that gormal pounds were opened in Hala and Sakrand ranges. In all 8 cows were caught in such pounds during the year.

The success of the scheme will depend on a thorough campaign, to impound a few animals now and then will do no good.

The animals impounded during the year compared with those of the preceding year are shown in the subjoined table as required by Government Resolution No. 4081 dated 22nd April 1908, Revenue Department.

Division.	Cows and bullocks.		Buffaloes.		Sheep.		Goats.		Camels.		Other animals.		Total.		Total of open and closed.	
	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	Open.	Closed.	1914-15.	1915-16.
Sukkur ...	304	1,813	138	627	3	6	2,181	1,322	392	284	97	34	3,115	4,086	7,997	7,201
Larkana ...	190	745	160	294	...	133	336	1,708	29	483	14	22	729	3,384	3,039	4,113
Hyderabad ...	305	533	118	574	...	24	159	692	61	96	24	211	667	2,129	3,637	2,796
Jerruck ...	776	459	179	94	1	203	120	914	55	1,092	50	105	1,181	2,867	2,627	4,048
Total, 1915-16.	1,575	3,549	595	1,569	4	366	2,796	4,636	537	1,954	185	373	5,692	12,466	...	18,158
Total, 1914-15.	1,150	3,424	459	2,457	84	31	4,071	3,671	741	904	58	250	6,563	10,737	17,300	...

Newly exploited coupes were fenced with the waste branch wood. The total length of new fences put up was 266½ miles. Repairs to existing fences were made on 668½ miles. This work was done free of cost with the help of maldars and coupe contractors.

(d) *Protection against injuries from natural causes.*

Northern Circle.

Creepers were cut as part of the duties of the staff.

Central Circle.

In Poona Rs. 108 were spent on eradication of prickly pear, and a small amount on similar work in Sátara. The construction of "Táls" to check erosion received attention in the former division, 1½ running miles being constructed at a cost of Rs. 75, while in 4 villages the work was undertaken free of cost by the villagers, benefit thus accruing both to the forest and to the occupied lands adjoining.

Southern Circle.

Defoliating insects (*Eupterote castanea* and *Hybloea puera*) attacked the teak over a considerable area in Kánara Northern and Eastern Divisions in the month of October. In the teak nurseries of the Kulgi range, the grub of the rhinoceros beetle (*Oryctes rhinoceros*) attacked the seedlings and destroyed many. The grubs of these beetles were collected and destroyed as soon as they appeared. Elephants and pigs in the former division and bison and other wild animals in the latter did some damage to nurseries and plantations. Elephants are on the increase and not only damage forest growth but are dangerous to man. One wood-cutter was killed and since the close of the year a forester and a guard have been injured by the wild elephants. The Divisional Forest Officer, E. D., Kánara, reports that wild animals like to sit in the weeded nurseries which are comparatively free from ticks, and states that if they persist in doing so, sharp stakes will have to be driven into the ground to make things less comfortable for them. In Kánara, S. D., many casuarina trees under 5 years of age in the Kasarkod plantation died for want of sufficient moisture in the soil in the hot weather, and these were replaced by new seedlings from the nursery. In Bijápur prickly pear is spreading to such an extent that it has made the exploitation of some of the coupes difficult. Though the plant is a recognised cattle food in times of fodder famine, it is in ordinary years little used by people for fodder. Its eradication at Government expense is prohibitive; some of it along the demarcation lines was removed by guards and, in a few places, by villagers without cost to Government. *Lantana* is said to be spreading in the Haliyal teak pole area in Kánara, N. D., and in parts of Dhárwár. The Divisional Forest Officer, Dhárwár-Bijápur, reports that cutting of stems by guards makes matters worse by causing a larger number of coppice shoots. The floods of the Krishna and other rivers of Bijápur as usual cause some damage in kurans along their banks and the Divisional Forest Officer reports that planting of Zili (*Sesbania Aegyptiaca*) has been undertaken along the river banks with a view to minimise damage by erosion.

Sind Circle.

Frost was severe in Lower Sind and most of the seedlings in young plantations and sowing suffered. In Hyderabad big trees were affected upto a certain height and babul blossom and foliage suffered, also the mango crop in the Hyderabad forest gardens. The defoliating caterpillar did less damage than usual. In upper Sind owing to the low inundation rats increased and did considerable damage by gnawing the base of seedlings and young saplings.

4.—SYLVICULTURE.

(a) *Natural Reproduction.*

Northern Circle.

(i) *From seed.*—With the exception of South Násik all divisions report satisfactory germination of seed. The future of the seedlings depends almost entirely on early recognition and attention by being freed from surrounding growth of grass and weeds, and where the locality is dry and exposed subsequent shelter from the sun is also required. Probably earlier recognition in the Násik District would prove that reasonable germination occurs there also. Satisfactory progress in the tending of natural seedlings is being made, but lack of establishment and inefficiency of the individuals is a great handicap.

(ii) *By coppice.*—This is everywhere satisfactory, but future tending is most essential to success. Working plans are being revised largely to provide for this and for the tending of young seed produced saplings. We must be prepared for considerable extra outlay on establishment and works if our forests are to have the attention they deserve.

Central Circle.

The year was generally favourable for production and germination of seed, but successful reproduction by seed depends less on this factor than on subsequent ones, the difficulty being not so much to obtain a plentiful crop of seedlings as to protect those seedlings during the first year of their existence against drought, fire and grazing. Of the myriads that cover the ground after the first rains, few survive if left to themselves, except of course in the moister regions, while elsewhere even if fire and cattle be kept out, the hot-weather drought has fatal results. Fires and drought are the great obstacles in Khándesh, cattle and drought in Poona and Sátára. The system of mulching and shading natural seedlings in areas closed for regeneration, first introduced by Mr. Copleston in Kánara, has been adopted in the Central Circle and promises to give most valuable results. To give one instance only, it may be recorded that of 10,000 seedlings so treated in the Poona Division 70 per cent. survived the hot weather.

Southern Circle.

(i) *From seed.*—It was a good seed year for teak, matti, honni, sissum and other forest trees, probably one of the best in the last 10 years. As a result of this, matti and honni seedlings particularly are coming up in great numbers; teak seed often lies dormant for a year or two. In the Dhárwár District, though *Lantana* has been found to be a pest in many respects, the ground covered by it is favourable for sandalwood growth; sandalwood seedlings are found to come up in larger numbers under *Lantana* than elsewhere.

(ii) *By coppice.*—Regeneration by coppice shoots in past fellings was also good, though fires were a great hindrance and caused much damage, particularly in Belgaum. The Divisional Forest Officer, Kánara, N. D., reports the following interesting observation on the effect of fire noticed in two coupes of different ages in the same block:—

“Both coupes contained a rank growth of grass, but in the coupe where the coppice was older and stood about 12 feet high it was not damaged to any extent, while in the coupe with younger coppice about 5 to 6 feet in height a good many of the shoots were ruined and much damage was done. Moreover, in the former coupe where a number of teak seedlings and transplants had been tended and were about a foot high the plants had been burnt but

the roots had thrown up fresh shoots. These shoots, two months after the fire occurred (in the beginning of June), were as high as the original plants, and much more vigorous and healthy."

Mr. Dodgson is being asked to experiment with regard to this and submit a further report on the subject.

Sind Circle.

The area flooded during the year under report was only 271,093 acres against 568,856 in the previous year. In Upper Sind natural reproduction by coppice of bahan (*Populus euphratica*) and kandi (*Prosopis spicigera*) was good and babul (*Acacia arabica*) germinated well in flooded areas. The monsoon rain was very scanty and in Lower Sind owing to the deficiency of inundation water natural regeneration by seed was very poor. Severe frost in February did not improve matters but the young tree growth of recent years in many instances survived these unfavourable conditions, and there was no serious loss.

(b) Artificial Reproduction.

Northern Circle.

Sowing.—This was confined to a few babul areas and results were satisfactory.

Plantations.—The only systematic plantations are those for casuarina along the coast, operations of the year lying chiefly in North Thána. Results which had not been very successful up to date promise to be better in future as the result of the experience and personal effort of the present Divisional Forest Officer, North Thána.

Central Circle.

Regular Plantations.—Under this head may be included babul and casuarina forests, both of which depend for regeneration on artificial means. In East Khándesh 55 acres of exploited coupes were ploughed and broad-casted with seed, with generally successful results; in Poona 181 acres. In the Kolába casuarina forests, 17,577 seedlings, reared in nurseries, were planted out, the majority in the coupes just felled, the remainder to replace casualties in older coupes; results are very satisfactory, though the working plan anticipation that no watering of the young plants would be required was not in all cases fulfilled. The area of these useful forests is unfortunately small, 108 acres only.

Cultural Operations.—The more or less haphazard system of the past of sowings and dibblings by guards has now been largely dropped, as showing few tangible results, and in its place efforts are concentrated on the mulching of natural seedlings in closed areas, on agriculture-cum-forestry, and on sowings in selected areas. The first named has already been dealt with; the second was in force in West Khándesh 330 acres, and in Poona 411 acres. Moderate results are reported from the former, the Bhil being an indifferent cultivator in his own interests, and apt to be still more so in Government interests; reports from the latter are much more satisfactory, and the area under this system is likely to show a considerable increase judging from the demand for land on these terms in the Akola range. Sowings in selected areas were carried out to a small extent in all divisions, and with great energy in Poona under the continuous interest shown in this matter by Mr. Thomson during his four years' charge of the division; that his and his subordinates' efforts have met with success is evinced by a remark by the Collector of Nagar, that, "I inspected many of the agriculture-cum-forestry plots in the Akola range this year with Mr. Gupchup (Ranger), including certain nala lands under reclamation by Thákurs, and I must congratulate the department on the progress being made."

Speaking generally, there is more scope for cultural operations and artificial regeneration in the Deccan divisions with their denuded and over-grazed hills than in Khándesh where fire protection is the main object to be attained, or in Kolaba where the climate naturally favours tree growth.

The expenditure during the year was on "Regular Plantations" Rs. 926, on "Cultural Operations" Rs. 2,868.

Southern Circle.

Regular Plantations.—The casuarina plantations on the Kánara and Ratnágiri Coast were extended by 39 and 2 acres, respectively, at a total cost of Rs. 3,214. The condition of the plantations is reported to be excellent in Kodibag and good in all other places, except Harwada, Gangawali and Arge where it is not altogether satisfactory principally because of the unsuitability of the underlying soil.

Cultural Operations.—*Kánara, N. D.*—About 2,50,000 natural teak seedlings were tended by weeding and mulching and the results are said to be most encouraging. Dibbling was done in the Kulgi range and was satisfactory. About 85,000 teak were transplanted from local nurseries with satisfactory results.

Kánara, E. D.—Much work was done in the teak pole area, where about 1,65,000 teak seedlings were tended in the coupes felled last year. Many of these were left where found, and were weeded, earthed up and sheltered; others were picked out from thick clumps of seedlings or from roadsides and fire lines and planted where needed, and similarly tended. In the High Forest areas, also large numbers of teak seedlings about 53,000 were planted in all Ranges. Teak, honni and matti seed was dibbled in patches where dead bamboos, chips and other dry material had been burnt, and seedlings came up well in such patches.

Kánara, C. D.—About 58,000 teak and 1,40,000 matti seedlings were planted in felled areas and 68 bags of teak and 300 bags of junglewood seeds were sown in various forests.

Kánara, S. D.—The casuarina coupe cut in 1914-15 was planted up with casuarina seedlings. No other work was undertaken.

Kánara, W. D.—Attempts were made to introduce some teak into areas where it was absent; about 2,500 seedlings were thus planted at various places in Kadra range and 4,000 more were left for future planting. In High Forest Block XXVI, about 19,560 seedlings were planted. The Divisional Forest Officer, Mr. Marjoribanks, states that most of this work is due to an excellent nursery at Shivpur. In Supa range 1,425 matti, 500 kindal and 700 honni plants were raised by guards and planted in felled fuel areas. In Gund range some 225 teak plants were transplanted from nurseries.

Belgaum.—Plants were obtained from nurseries and from natural seedlings and put out where necessary. Seed was also sown; teak broad-casted near Golihalli 2 years ago produced many plants this year. Harda dibbled in during the past 2 years in Uchwade coupes resulted in numerous strong harda plants during the year.

Dhárwár-Bijápur.—In Dhárwár range teak and other junglewood seeds were sown in 1,000 pits made by guards; nim and sandalwood seeds were also sown in 40 pits in the Mandihal naka compound. About 1,000 nim seedlings were raised in Doni forests. In Kod range $1\frac{1}{2}$ maunds of teak and junglewood seeds were sown at various places. In Hangal range, 7 bags of teak, sandalwood, matti, etc., were sown in felled coupes and other areas.

In the babul areas of Bágalkot a few sandalwood and shendi palm seedlings were raised by local guards. The latter were also sown along sides of nallas. Sandalwood seed is reported to have germinated more freely in Kolhar than elsewhere. The seedlings of teak and sissum transplanted in Mamdapur coupe thrived well. Seeds of teak, sissum, shivani, bamboo, etc., were obtained from outside and sown in the babul areas. The agriculture-cum-forestry operations tried in the Mamdapur coupe No. 12 are reported to have failed owing to excessive rain, thereby entailing loss to cultivators. As a result of the year's operations there were only a few sickly looking babul seedlings, and Government got a paltry revenue of Rs. 6 as price of their share of the poor cereal crop. A similar operation in the Kolhar survey No. 368 previously exploited is reported to have been successful. The seedling crop of babul is here most satisfactory and the Government share of the value of the cereal crop was Rs. 64. Agriculture-cum-forestry is said to be not sufficiently popular in all the babul areas of Bijápur and departmental operations have therefore been undertaken by the Divisional Forest Officer in Chickgulbal coupe No. 5 of Bagalkot range with a view to advertise the system.

Ratnágiri.—The nurseries at Dapoli, Dahmapur and Tondávli were maintained with due care and about 2,555, 50 and 2,000 seedlings were grown in them, and about 1,600, 60 and 1,200 from the respective nurseries were transplanted in the plantations attached thereto.

Sind Circle.

The "Regular Plantations" in Sind are those of tali (*Dalbergia Sisoo*). There were 298 acres under "Regular Plantation" at the commencement of the year, 3 acres were added and nothing abandoned, so the total at the close of the year was 301 acres.

In Kot-Sultan plantation of Sukkur Division tali (*Dalbergia Sisoo*) cuttings were put out to replace casualties and most did well. Crooked growth was cut back and the stools coppiced well. Thinnings were also carried out. The Zerkale plantation was well irrigated by a kasi from the Sher wah, some of the tali trees here were partly uprooted owing to excess water but were kept upright with supports and are now well established. Kandi and babul seed was sown in blanks but the resultant seedlings suffered much from frost. In Lárkána 3 acres were added altogether to the existing tali plantations in Madeji, Amrote and Bhour. In Khatro tali plantation of Jerruck Division seed was sown in nursery beds and 600 seedlings transplanted in Khathar forest, the majority thrive well. Tali crops of previous years were pruned: these had been planted too far apart.

The old established gardens were maintained as under:—

<i>Sukkur Division.</i>		Rs.
Rahuja at a cost of	...	1,169
<i>Hyderabad Division.</i>		
Miani bungalow garden	}	1,317
„ monument „		
„ mango „		
Total ..		2,486

Cultural Operations.—One thousand two hundred and seventy-five acres were treated under the system of forestry with agriculture, the assessment (amounting to Rs. 3,218) being credited to the Revenue and Public Works Departments by book transfer; this is for land which gets water from Public Works Department canals. Results were reported fair in Sukkur, Lárkána and Hyderabad. In Jerruck the work was confined to Khathar forest owing to the low inundation. Here in addition to the area mentioned in last year's report 137 acres of blanks have been given out for cultural operations for a period of 3 years from June 1915. Some of this land was poor and germination of both cereals and forest crops has partially failed, but about 70 per cent. has given good results in the strip sowings of the first year which were made on slightly raised bunds. In six months some seedlings showed a height growth of 3 feet and were rarely less than 18 inches. Babul was associated with nim (*Melia Azadirachta*) and ber (*Zizyphus Jujuba*) in this case.

The other system of cultural operations adopted is the broad-casting of seed on blanks and exploited coupes which receive flood water. Under this system 1,455 maunds of babul and kandi seed were sown throughout the circle over an area of 5,093 acres. Results were satisfactory. A little nim seed was sown under this system in Hyderabad and Sukkur but failed to germinate in the latter division.

(c) Operations for the improvement of growing stock.

Northern Circle.

These at present are not provided for under the working plans to the extent required, and are limited to the tending of seedlings and coppice referred to under "Natural and Artificial Regeneration." Even these efforts are restricted by the shortcomings in the staff and lack of funds. The revised working plans provide adequate staff and operations, the future depends on the realization of those proposals.

Central Circle.

These consisted as usual of creeper cutting by guards' labour.

Southern Circle.

In Kánara Northern Division climbers were cut and teak saplings were freed from interfering growth. Trees were also marked for felling in the Haliyal and Sambrani ranges, according to the prescriptions of the working plans for improving the growing stock.

In Kánara Eastern Division, though the operations had to be curtailed for lack of funds, 3,000 junglewood trees and 7,000 inferior teak trees were cut back; 3,000 obstructing branches, 58,000 bamboos and 29,000 creepers were cut; and 20,000 teak seedlings and saplings were freed from suppressing growth.

In Kánara Southern Division teak trees were freed from interfering growth, and creepers and inferior trees were cut. Standards in closed coupes were freed from inferior growth.

In Kánara Western Division thinning, cleaning and pruning operations were carried out in the casuarina plantations at Kodibag and Chitkule and in the teak plantations at Kadra and Sulgeri. In Gund range, 3,265 natural teak seedlings were mulched round with grass and loose earth, and 1,330 teak saplings were freed from interfering growth. In Kadra 330 badly grown teak trees were cut back. The Divisional Forest Officer, Mr. Marjoribanks, states that his subordinates have been taught to realise the importance of silvicultural work.

In the Belgaum Division thousands of teak and junglewood seedlings were freed from interfering growth; creepers were cut and badly grown trees were marked for improvement fellings in accordance with the provisions of the working plans.

In the Dhárwár-Bijápur Division valuable trees including sandalwood were freed from creepers and interfering growth; weeding and soil mulching were applied to seedlings raised in Bagalkot range.

Sind Circle.

Cutting of kamo creeper was carried out in Lárkána, Hyderabad and on a larger scale in Jerruck Divisions.

(d) Experiments.**Northern Circle.**

None were undertaken.

Central Circle.

In the three Khándesh divisions attempts to cultivate and propagate lac were continued, but with no results that can be considered satisfactory. Infection of fresh tree is a matter of no difficulty, but it is labour thrown away, for the new brood is almost invariably destroyed by black ants, and no measures to defeat these pests have so far been found to be of use. The development of what gave hopes of being a valuable industry has been entirely thwarted.

In Poona the question of hirda seed germination received further attention; removal of the outer, dried up, fleshy covering appears to have a good effect.

In Sátára the Mahableshwar orchards produced a fair crop of pears, but hardly of a quality to justify the expenditure of much money or labour on the continuance of the experiment. Elsewhere in the district the orchards are complete failures and will be abandoned.

Southern Circle.

The teak and jamba paving blocks sent to the Bombay Municipality for trial, as stated in the last year's report, are reported to have been put down on the streets in the 1915 dry season and the experiment is being watched.

The Forest Economist, Dehra-Dun, has timber pieces of different species seasoning under different methods in the Dandeli range in Kánara N. D. and at Kodibag in Kánara W. D. The final results of the experiments will be known after two years.

A minor experiment undertaken by Mr. Marjoribanks in Kánara W. D. was the collection of "lurrs" on various species of trees, which are being sent for trial in veneering work.

Sind Circle.

Seed of bamboo (*Dendrocalamus strictus*) was sown in the Jerruck, Sukkur and Lárkána Divisions and that of *Bambusa arundinacea* in Hyderabad. The seed germinated but after past experience its development on a commercial scale is not likely in Sind. Ber was introduced into felled coupes in the Katiar range of Jerruck Division and is worth persevering with. Experiments were also made with a view to sow tali direct into felled coupes which have carefully regulated flow irrigation. Most of the present existing tali plantations are mechanically watered at great expense.

Attempts to assist in the further propagation of the lac insect were made in Hyderabad and Jerruck Divisions but were attended with little success. Lac has however appeared naturally and prospects are hopeful.

5.—EXPLOITATION.

(a) System of Management.

(i) Major Forest Produce.

Northern Circle.

Statement by area of various systems of exploitation in force with percentages by divisions and for the circle :—

Division.	Method of clear felling by compartment.		Uniform Method.		Group Method.		Selection Method.		Simple Coppice.		Coppice with standards.		Method of Improvement.		Unworkable area and area not under Working Plan.	
	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.	Area in square miles.	Percentage of total area under the sylvicultural system.
Panch Mahals ...	...	...	...	...	...	...	...	...	...	...	278	83.7	26	7.9	28	8.4
Surat ...	...	...	...	...	...	...	...	...	...	...	68	9.3	159	22.0	497	68.7
North Thána ...	...	...	...	...	...	...	*25	7.4	...	...	307	91.7	...	...	3	0.9
Central Thána ...	...	...	...	...	...	...	*13	3.6	...	...	356	95.4	...	...	4	1.0
South Thána ...	...	...	...	...	...	...	3	0.8	...	...	326	95.6	...	...	12	3.6
North Násik ...	4	1.0	...	...	...	...	...	...	...	...	175	32.5	47	8.7	309	56.2
South Násik ...	...	...	...	...	...	...	217	35.0	...	...	278	45.0	...	...	121	20.0
Total ...	4	*1	...	...	...	...	258	7.9	...	...	1,788	54.9	232	7.2	974	29.9

* Prescribed by working plan but found unworkable pending improved communications.

Clear Fellings.—This system was limited to babul coupes in the North Násik Division. 10 coupes were exploited.

Selection Fellings.—This system is prescribed by working plans for the forests of Mokhada and Talasari Maháls of North and Central Thána respectively, but exploitation is found impossible pending improved communications for which both staff and funds are lacking. A small subsidiary selection felling was made in the Tulshi forests of South Thána under the existing plan. Forty-nine coupes in the below ghat forests of the South Násik Division were worked under this system. Even here the system is not satisfactory but the best makeshift pending better communications, buildings, and staff. It is a valuable property deteriorating for lack of funds.

Coppice with Standards.—This has been the favourite system up to date common to all divisions but proving unsatisfactory in many ways is likely to be superseded by clear fellings. The revisions of existing plans are in hand and the work is being pressed on. A considerable increase in staff and works will be well repaid if sanctioned.

Improvement Fellings.—The working plans of the Dángs prescribe this system and it appears justified as a preliminary to high forest clear fellings. It is also applied to the anjan forest of North Násik.

Central Circle.

Clear fellings were undertaken in babul and casuarina forests only, 22 babul coupes aggregating 235 acres being felled in Poona and East Khándesh and 1

coupe of 1 acre only of casuarina in Kolába. In addition, the babul growth in the forests of 45 villages of the Poona Division was sold, standing prior to transfer of the lands to the Revenue Department; the price realized on this was Rs. 24,782.

Improvement fellings comprising mainly a system of selection of over-mature and unsound trees were carried out in the Satpuda forests of East and North Khándesh, in the Umarpata, Deomogra and Dhulia and Pimpalner forests of West Khándesh, on the Mahableshwar and Matheran plateaus of Sátára and Kolába, and in the Akola and Lonavla forests of the Poona Division. The selection system, pure and simple, is nowhere in force in the circle.

Coppice fellings took place in the teak forests of Poona, Sátára and Kolába, and in the Edlabad range in East Khándesh, though in the last named, owing to the denuded state of the forests and the poor demand for material, the fellings are more nearly improvement than true coppice fellings.

Of the total organized areas of the circle amounting to 2,301 square miles, working plans prescribe for 33 square miles the system of clear fellings, for 1,516 that of improvement fellings and for 752 that of coppice with standards.

Unregulated fellings in forests consisted solely of material for free grants in all divisions, and of clearance of rides at Mahableshwar; outside forests, of the sale of royalty trees in occupied lands in all divisions and of reserved trees in unassessed Government waste, the latter wholly in West Khándesh.

Southern Circle.

The systems of management remained unchanged during the year.

Clear Fellings.—These were made in the coast plantations of Kánara on an area of about 16 acres realising Rs. 129 per acre, and in babul forest of Bijápur, where a coupe of 21 acres fetched Rs. 60 per acre.

Selection Fellings.—These were undertaken in accordance with the provisions of the sanctioned working plans as shown below:—

Division.	No. of trees cut.		
	Teak.	Blackwood.	Junglewood.
Organized area.			
Kánara Northern Division ..	4,986	453	2,277
Kánara Eastern do. ..	2,997	..	1,270
Kánara Central do. ..	63	..	211
Kánara Western do. ..	1,330	16	36
Total ..	9,376	469	3,794
Unorganized area.			
Dhárwár-Bijápur Division ..	125	..	..
Total of 1915-16 ..	9,501	469	3,794
Total of 1914-15 ..	7,815	540	1,760

Improvement Fellings.—These were carried out as under:—

Division.	No. of trees cut.		
	Teak.	Blackwood.	Junglewood.
Kánara Northern Division ..	3,703	750	572
Kánara Eastern do. ..	6,887	..	..
Kánara Western do. ..	731	..	1
Total for 1915-16 ..	11,321	750	573
Total for 1914-15 ..	5,347	..	320

Coppice Fellings.—This is the system most generally in use in all the divisions of this circle; 12,601 acres were worked during the year against 11,004 acres in 1914-15 :—

Division.	Area in acres.	Revenue per acre.		Quality.
		1915-16.	1914-15.	
Organized area.				
		Rs.	Rs.	
Kánara Northern Division ..	682	118	188	Teak poles, timber and fuel.
Kánara Eastern do. ..	1,123	20	21	Teak poles and fuel.
Kánara Central do. ..	348	22	..	Timber and fuel. .
Kánara Western do. ..	857	25	37	Logs, poles and fuel.
Belgaum }	119	202	325	Logs, poles and fuel.
	2,329	85	92	Railway fuel.
Dhárwár-Bijápur ..	375	64	100	Logs, poles and fuel.
Total 1915-16 ..	5,833	65	..	
Total 1914-15 ..	5,804	..	89	
Unorganized area.				
Kánara Southern Division ..	364	17	16	Timber and fuel.
Kánara Western do. ..	1,002	8	..	Railway fuel.
Belgaum ..	3,691	4	4	Local fuel.
Dhárwár-Bijápur ..	1,711	22	22	Poles and fuel.
Total 1915-16 ..	6,768	10	..	
Total 1914-15 ..	5,200	..	7	

The drop in value per acre on the whole is ascribed to dislocation of business caused by war and consequent want of bidders for standing coupes.

Unregulated Fellings.—In Kánara C. D. and Dhárwár-Bijápur 252 jungle-wood trees were exploited in various jungles and fetched Rs. 2,348. In Kánara Eastern, Central and Southern Divisions, and in the Belgaum and Dhárwár-Bijápur Divisions dead sandalwood trees exploited from various jungles were converted into billets amounting in all to 118 khandies of good heartwood, which realised a revenue of Rs. 30,675. Seven hundred and sixty-three sandalwood trees were also sold standing to be worked by purchasers.

Sind Circle.

Clear Fellings.—Sixteen thousand, six hundred and ninety-one acres of forest were exploited under this system in accordance with the provisions of the working plans as compared with 15,082 acres during the previous year. After exploitation whatever branchwood is left is burnt wherever feasible and advisable, and the soil either ploughed up and resown with babul and kandi seed broadcasted, or sowings are made in drills.

The system is not strictly one of clear fellings. Under the revised working plans a few standards are reserved from the young stock in the coupe, and in Upper Sind the coppice of bahañ and kandi stools is carefully preserved.

Improvement Fellings.—The removal of fallen and dead trees was carried out over an area of 4,392 acres as compared with 14,205 acres in 1914-15. In Jerruck thinnings were carried out in Khokhar, Khathar and Malirri forests, the operations extending over 285 acres and the material realising Rs. 1,100.

Unregulated Fellings.—Under this head come clearance of trees from erosion strips, and various other cuttings to provide wood for free grants and to meet emergent indents from the Public Works Department. The area of erosion strips cleared was 1,902 acres against 5,208 acres in the previous year.

ii) *Minor Forest Produce.*

Northern Circle.

This is worked without fixed plan as public demand requires, consistently with the well-being of the forests.

Central Circle.

This is disposed of as occasion demands, by departmental collection and sale, or by farming the right of collection, or on permit. Under the first method mhowra seed and hirda form the main item, yielding respectively Rs. 6,094 and Rs. 12,484; under the two latter, hirda yielded Rs. 10,379, and grass and grazing Rs. 2,45,516. Other minor products, silk cotton, rosha grass, leaves, pods and fruits, bamboos, earth and stone, brought the total revenue realized to Rs. 2,97,384 as against Rs. 3,00,104 in 1914-15.

Southern Circle.

Form No. 20 gives the details. The systems of collection of revenue for minor produce remained as before: bamboos, quarry produce and grazing are sold on permits; other minor product farms are sold by auction usually for a term of one year. The total revenue from this source was Rs. 1,89,089 against Rs. 1,64,776 during 1914-15.

Sind Circle.

Details are given in Form No. 20.

Lac, fish, babul, bahan and kandi pods, sar and kanh grass were farmed out to contractors. Other grass is either allowed free or sold on permits at fixed rates. Lac appeared naturally during the year and contracts were sold early in the year in the Hyderabad and Miani ranges for Rs. 525 and in Katiar range of the Jerruck Division for Rs. 120. Prices realised after the close of the year under report are much better.

(b) *Agency of Exploitation.*

(i) *Departmental Agency.*

Northern Circle.

This was confined to the North Dangs: 99,526 cubic feet were removed and sold at the railway sale dépôt 25 miles distant for Rs. 1,20,278-8-0.

Central Circle.

In the case of timber and fuel, departmental extraction is little resorted to, most coupes being sold standing to contractors; the only notable exceptions being those in which, owing to their inaccessibility or paucity of growth, purchasers do not come forward, and also the coupes that are worked for the fuel supply of Mahableshwar and Matheran. At Mahableshwar Rs. 4,076 were spent on the extraction of 93,541 cubic feet of firewood, the resulting price being Rs. 7,435; at Matheran 15,207 maunds were extracted, the cost being Rs. 3,309 and the revenue Rs. 5,308. In Poona 1,08,772 cubic feet from dead and fallen trees, the results of floods and erosion in the riverain babul forests, were departmentally cut and sold for Rs. 8,114.

As regards minor products, the hirda crop in the Rajur and Akola ranges of the Poona Division had perforce to be collected departmentally, no other system being possible in a locality where the hirda trees in occupied lands so largely outnumber those in forests, where the villagers themselves carry on such a large trade in the fruits, and where no contractor will purchase the forest hirda on the trees for fear of its finding its way to the villagers' dépôts rather than to his. The share system of collection is adopted under which each forest village by agreement contributes a fixed quantity free of charge, all balance over and above such quantity being at its disposal, but the system throws much work on the Forest Department in keeping the villagers to their agreements, and in the subsequent transport

of the hirda to central depôts where it can be sold to Bombay merchants. With great difficulty and only after much personal exertion by the Divisional Forest Officer was a satisfactory sale effected of the 1915-16 crop and of that which had remained unsold from the previous year. The net profit on the operation was Rs. 4,318.

For much the same reasons mhowra seed has to be collected departmentally in North and West Khândesh. In the former division the crop was poor and the net profit was Rs. 624 as against a loss of Rs. 305 in 1914-15; in the latter it was good, the profit being Rs. 2,679 as against Rs. 167.

The total value of produce removed by departmental agency was Rs. 43,440 as against Rs. 26,342 in 1914-15.

Southern Circle.

The following table shows the work done by departmental agency :—

Produce.	Average of three preceding years.						1915-16.					
	Balance.	Exploited during the year.	Total.	Disposed of during the year.	Cost.	Re-ceipts.	Balance.	Exploited during the year.	Total.	Disposed of during the year.	Cost.	Re-ceipts.
<i>Major.</i>	C. ft.	C. ft.	C. ft.	C. ft.	Rs.	Rs.	C. ft.	C. ft.	C. ft.	C. ft.	Rs.	Rs.
Timber. ...	671,944	1,325,481	1,897,425	1,001,470	3,84,415	10,77,721	593,570	980,423	1,573,993	834,249	4,55,403	11,02,064
Fuel ...	875,166	3,571,933	4,447,119	3,567,788	1,22,745	2,44,423	557,095	3,660,641	4,317,736	3,437,478	1,22,340	2,34,711
Sandalwood, Value	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	Rs.		
	92	88,539	88,631	38,546	2,292	38,546	55	88,711	88,766	86,761	2,449	36,761
<i>Minor.</i>	Number.	Number.	Number.	Number.			Number.	Number.	Number.	Number.		
Bamboos ...	...	981	981	981	34	49	...	...	...	...	...	...
Grass & other minor produce	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	Rs.		
	653	11,541	12,194	11,481	2,740	11,549	181	1,125	1,306	796	959	796

The quantity of timber exploited during 1915-16 was 980,423 cubic feet against 893,126 cubic feet in 1914-15, an increase of 87,297 cubic feet. The percentage of timber exploited departmentally to the total outturn was 55 against 53 in the previous three years. The comparison with the preceding three years as shown in the above table is not of much value on account of the inaccuracies explained in the last two reports. There is no question that a very much greater outturn ought to be made from the Gund, Kadra and Supa ranges of Kánara W. D. Great difficulty is, however, experienced in getting contractors to take up new works in other than a careless and speculative fashion. Personal supervision and a determination to carry the work through in proper time are wanting. The advance of cash is the chief attraction. On the other hand, the employment of workmen directly under departmental control cannot be greatly extended until the supervising staff and communications are improved. This matter is under the consideration of Government and a scheme of improved communications is being drawn up.

The quantity of fuel exploited departmentally during the year was 3,660,641 cubic feet against 3,212,110 cubic feet in the previous year, an increase of 448,531 cubic feet. The percentage of fuel extracted by Government agency to the total outturn was 31 against 34 in 1914-15.

The outturn of sandalwood depends more or less on the number of mature or dead trees available for extraction. The quantity extracted during the year was more than in the previous year, the prices realized being Rs. 30,675 against Rs. 28,963.

In the Belgaum Division grass was cut, baled and carted to Belgaum for sale at a total cost of Rs. 802; for want of demand some quantity remained unsold at the close of the year. Experiments in ensilage were continued at a cost of Rs. 155. Grass from one of the silos was given free for Government buffaloes at the Tavargatti Saw Mill and the remaining was sold for Rs. 76.

The following table shows the work done by the two saw mills in Kánara N. D.

Material.				Outturn.		
				1915-16.	1914-15.	1913-14.
5 feet teak sleepers	..	Number		7,472	18,128	10,170
6 " rejected	..	"		....	954	1,162
7 " rejected	..	"		144	213	721
7 " rejected	..	"		....	22	....
2½ " Bridge sleepers	..	"		200	....	....
Planks	..	"		....	10	565
Scantlings	..	C. ft.		2,118	5,612	2,615
Battens	..	"		16,065	9,293	11,658
Felloes	..	"		6,655	11,917	5,669
Spokes	..	Number		....	140	175
Teak paving blocks	..	"		....	291	....
Junglewood paving blocks	..	"		....	18,700	....
Tramway sleepers	..	"		....	20,300	....
Junglewood sleepers	..	"		....	....	3,920
						5,000

The outturn of 1915-16 was not so satisfactory as in previous years for the following reasons.

(a) One mill was closed down for repairs for three months;

(b) both mills were moved during the year.

The value of the year's outturn is estimated to be Rs. 57,360, the charges being Rs. 49,987; the net income from both mills was Rs. 7,373. With more favourable conditions in the new sites and with closer supervision, it is hoped that the next annual account will show better results.

In Kanara E. D. a contractor's saw mill, which has been standing idle at Kirwatti for some years, resumed work this year and is reported to be useful to the Department. In the six months during which the mill was working the output was as follows:—

6 feet teak sleepers	..	..	No.	10,966
7 do. do.	..	..	"	258
Teak planks, cubic feet	..	..	"	1,400
Do. scantlings do.	..	..	"	200
Do. battens, running feet	..	..	"	1,00,000

For sleepers the contractor gets the usual wages fixed in his contract agreement; for planks, scantlings and battens he is paid a $\frac{5}{8}$ share on the sale price of the material, the remaining $\frac{3}{8}$ share going to the Department. Government gets this $\frac{3}{8}$ share on the material which would have been wasted in the jungle without the help of the mill. The value of the material in the present instance is over Rs. 4,000 and the Government share is Rs. 1,500.

The work of the two Government elephants in the Gund range of Kánara N. D. is reported to have been satisfactory during the year, the profit on the working being estimated at Rs. 1,200 against the loss of Rs. 600 in the previous year. On 1st May 1916 the animals with the Gund range forests were transferred to Kánara W. D. and, at the close of the year, they were sold for cost price, viz., Rs. 6,500, to the contractor to whom the departmental work in Gund had been transferred in the early part of the year; the sale was reported to Government, *vide* Government Order No. 6,933 of 13th July 1916.

The Government buffaloes in Kánara N. D. worked at a loss this year. The Divisional Forest Officer reports that some of the animals have become old and unfit for work. This is probably true and others will have to be purchased. These carts are not popular with the officers as they entail a good deal of supervision and bother, but they are undoubtedly useful and necessary.

The cart dépôt (established in the year 1915 as per Government Resolution No. 2198 of 9th March 1914) is independent of the above establishment and continues to work as reported to Government shortly after the close of the year.

Sind Circle.

Departmental operations were confined to the supply of fuel to Government steamers of the Indus. The quantity supplied was 181,404 cubic feet and the value Rs. 4,794. The expenditure incurred was Rs. 3,908. The amount of wood required was considerably lessened by the absence of some of the Government steamers on other duty.

(ii) Purchasers.**Northern Circle.**

This agency was the usual one in vogue in all divisions. All major and minor forest produce excepting that abovementioned and that removed by privilege holders or free-grantees is thus disposed of (to contractor). For quantities, see the statement under “(c) Outturn and Sources of Forest Produce.”

Central Circle.

By this agency is removed the greater part of the produce of the circle. Two hundred and thirty-three coupes in all divisions were sold as against 246 in 1914-15, the deficit being due to a few failing to attract offers on account of inaccessibility or inferior growth; the resulting revenue was Rs. 2,32,849 as against Rs. 2,36,113. Two coupes were sold for extraction of dead wood in West Khándesh, and a large quantity of the same was removed on permit in East Khándesh.

One hundred and twenty-three thousand, seven hundred and sixty-eight royalty trees standing in revenue lands were sold to occupants or purchasers for Rs. 1,00,661 as against 124,362 for Rs. 1,25,911 in 1914-15; this is a source of revenue that cannot be indefinitely counted on, for the number of teak in occupied lands still remaining to be disposed of is now comparatively small, and the major part of the income is derived from the clearance of waste lands in West Khándesh which are needed for cultivation.

Under “Minor Produce” grass and grazing is the chief item, the revenue falling from Rs. 2,57,860 to Rs. 2,45,516; grass sales decreased by Rs. 20,361 in East Khándesh, the natural, though merely temporary, result of periodic changes of the areas in the plains ranges sold for grass cutting; but both in Poona and Sátára there was a substantial increase as a result of the tendency which villagers are showing to make the most of this product by cutting and storing it rather than adopt the wasteful method of grazing, a satisfactory tendency which will receive every encouragement. Grazing fees increased by Rs. 5,740, 868,069 animals being paid for as against 800,839. Free grazing was enjoyed by 66,700 animals.

Bamboo revenue declined from Rs. 13,041 to Rs. 8,301; that for hirda and shikekai increased by Rs. 8,599; Roshá grass receipts fell by Rs. 3,192 and the net results of removal of all kinds of minor produce by purchasers amounted to Rs. 2,77,861 as against Rs. 2,94,296 in 1914-15.

Southern Circle.

Value of produce removed by purchasers was—

Produce.	Average of past three years.		1915-16.	
	Quantity.	Value.	Quantity.	Value.
Major.	C. ft.	Rs.	C. ft.	Rs.
Timber ..	758,878	2,47,058	747,698	2,83,536
Fuel ..	5,478,497	89,159	7,914,493	96,113
Total ..	6,237,375	3,36,217	8,662,191	3,79,649
Minor.	Number.		Number.	
Bamboos ..	4,859,878	53,396	2,233,369	47,943
Grass and grazing ..	....	68,965	....	71,028
Other minor produce ..	....	55,690	....	70,118
Total ..	....	1,78,051	....	1,89,089
Grand total ..	....	5,14,268	....	5,68,738

The increase in the amount and value of the major produce removed is due to the larger number of coupes sold during the year. The number and value of bamboos decreased, as the clumps in most of the accessible localities have seeded and people have to go further for good culms. The grazing revenue is a varying item being enhanced or remitted according to bad or good forest protection. The receipts under "Other Minor Produce" show an increase owing to the recovery of instalments postponed last year owing to bad trade conditions.

Sind Circle.

Receipts from the sale of coupes and dead wood are shown below :—

Division.	Description of area exploited.	Acreage.	Value realized.
			Rs.
Sukkur	{ Coupes	7,063	} 99,655
	{ Dead wood	952	
Lárkána	{ Coupes	3,360	} 24,391
	{ Dead and fallen trees	70	
Hyderabad	{ Coupes	2,477	} 68,956
	{ Burnt area	810	
Jerruck	{ Dead wood	2,361	} 60,111
	{ Coupes	3,643	
Total, 1915-16 ..	.....	20,736	2,53,113
Total, 1914-15 ..	.....	20,055	1,76,435

There has been a satisfactory increase in receipts under this head to which all divisions contributed except Jerruck. The dead wood has now been largely worked out of the forests and there was little available in Lárkána and none in Jerruck Division.

The revenue realised by the sale of fuel under the permit system was Rs. 6,704 against Rs. 7,265 of the previous year. There were decreases in Sukkur and in Hyderabad at the Matiarí Ghat, and an increase at Tatta in Jerruck. The system is necessary in some cases for the very poor, but the forests undoubtedly suffer where it is carried out on any large scale.

Grazing.—The grazing fee collection was as under :—

Division.	1914-15.	1915-16.
	Rs.	Rs.
Sukkur	10,415	13,136
Lárkána	6,833	6,797
Hyderabad	14,700	14,815
Jerruck	9,194	11,435
Total	41,142	46,183

There was an increase in all divisions except Lárkána. The cause of the large increase in Jerruck has been already mentioned, but apart from the great influx of herdsmen owing to scarcity of grass outside forests, grazing collection depends largely on the Rangers' personal efforts under the new rules.

Minor Forest Produce.—The revenue derived from minor forest produce farmed out, and from assessment levied on lands leased out for cultivation is detailed below and compared with last year's results.

Produce.	1914-15.	1915-16.
	Rs.	Rs.
Lac	35	645
Babul pods	21,488	24,284
Grasses	3,674	3,888
Fishery	5,995	4,341
Cultivation	9,088	13,325
Total	40,280	46,483

(iii) *Rights and Privileges.***Northern Circle.**

These remained as before with the exception of a few instances of easements in the matters of local grazing and loppings for manure. There were no serious complaints. Full details are to be found under Forms 19 and 20 and the statement under “(c) Outturn and Sources of Forest Produce.”

Central Circle.

The value of the produce removed under this head was—

	Rs.
Timber ..	165
Fuel ..	10,666
Grass and grazing ..	27,688
Minor produce ..	4,659
Total ..	43,178

the major part representing privileges in Khândesh enjoyed under the Tapti Codes. In addition Rs. 6,692 were paid in cash as khoti shares on the forest revenue in the Kolába Division.

Southern Circle.

Right-holders do not exist in this circle, and there are no means of recording with any accuracy the value of produce removed under privileges. The villagers remove what they want without obtaining any formal permit from the Department. The abuse of these privileges is common and must go on as long as the villagers are not required, under the existing rules, to obtain privilege-permits before entering a forest; it is at the same time doubtful whether if any such check were introduced the present establishment could efficiently cope with the increase of work involved. The estimated quantity removed and its value are practically the same as in the previous year.

Produce.	1915-16.	
	Quantity.	Value.
	C. ft.	Rs.
Major.		
Timber ..	300,000	72,000
Firewood ..	3,041,686	6,46,353
Minor.		
Bamboos ...	3,000,000	15,000
Grazing ..	....	3,00,387
Minor Produce ..	....	1,80,000

Sind Circle.

The extent and value of forest produce and grazing enjoyed free under privileges amounted to—

Grazing ..	10,896 animals	.. Value Rs. 3,891
Firewood ..	18,282 cubic feet	.. ” ” 169

(iv) *Free Grants.***Northern Circle.**

Free grants of a value of Rs. 4,883 were given compared to Rs. 14,540 in the previous year. The difference was chiefly due to an abnormal grant on account of a large fire at Badlapur in South Thana in 1914-15.

Central Circle.

Timber and produce of all descriptions to the value of Rs. 5,008 as against Rs. 6,212 in 1914-15 was granted free to deserving persons, in several cases as a reward for help in fire protection, in others for rebuilding of houses, temples and schools, and in one division in the form of stones for the building of tals and wells.

Southern Circle.

THE FOLLOWING statement shows the quantity and value of produce granted free during 1915-16 as compared with the average of the past 3 years :—

Produce.					Average of past three years.		1915-16.	
					Quantity.	Value.	Quantity.	Value.
<i>Major.</i>					C. ft.	Rs.	C. ft.	Rs.
Timber					31,962	8,569	26,160	9,368
Fuel					25,460	329	42,190	244
Total ..					57,422	8,898	68,350	9,612
<i>Minor.</i>					Number.		Number.	
Bamboos					63,834	455	30,472	185
Grazing .. .. .					....	4,064	....	4,136
Other minor produce .. .. .					....	1,211	....	1,809
Total ..					....	5,730	....	6,130
Grand total ..					....	14,628	....	15,742

In Kánara free grants of timber and minor produce were more liberally given on account of good fire protection in the preceding year. A large free grant of timber worth Rs. 648 was made to a Roman Catholic church at Honáwar in Kánara S. D. In Belgaum free grants were curtailed to some extent on account of forest fire. Free grants under other heads were normal.

Sind Circle.

Are shown below :—

Produce.		Extent.	Value.	
			1914-15.	1915-16.
			Rs.	Rs.
Grazing ..	7,048 animals	..	529	1,960
Minor produce ..	686 bundles	..	91	42
Timber—firewood ..	7672.78 cubic feet	..	764	597

In addition to the above free grazing was allowed to forest contractors to the value of Rs. 2,853.

In the Jerruck Division 5,321 animals belonging to poor graziers from Kutch and Kohistan were allowed to graze free, this concession being valued at Rs. 1,329.

(c) Outturn and Sources of Forest Produce.

Northern Circle.

The outturn from all sources of forest produce during the year 1915-16, compared with that of the previous year, was as follows :—

Agency of exploitation.		Material.							
		Timber.		Fuel.		Total wood.		Bamboos.	Grass and grazing.
		Cubic feet in solid.	Value in Rupees.	Cubic feet in solid.	Value in Rupees.	Cubic feet in solid.	Value in Rupees.	Value in Rupees.	Value in Rupees.
Government	1915-16	89,250	1,57,529	88,744	5,023	187,994	1,62,552	...	68,120
	1914-15	141,989	1,08,186	120,060	901	262,049	1,09,086	49	...
Purchasers	1915-16	2,639,965	11,91,533	5,441,809	11,755	8,081,774	12,03,288	34,427	1,02,887
	1914-15	2,464,604	12,33,133	3,725,834	11,033	6,190,438	12,44,166	36,860	93,378
Free grantees	1915-16	8,729	2,466	80	2	8,809	2,468	...	...
	1914-15	52,398	14,540	...	...	52,398	14,540	30	6
Privilege holders.	1915-16	76,220	2,23,660	7,631,903	2,54,641	7,698,123	4,93,301	5,048	2,96,780
	1914-15	76,220	2,23,660	6,913,572	2,51,000	6,989,792	4,79,660	6,360	3,07,009
Total for 1915-16		2,814,157	15,80,188	13,162,536	2,61,421	15,976,693	18,61,609	39,475	4,67,787
Total for 1914-15		2,735,204	15,54,519	10,759,466	2,62,933	13,494,670	18,47,452	43,319	4,00,392

The number of cattle for which grazing was allowed is estimated at—
 Free 416,342.
 On fee 457,642.

Central Circle.

The outturn from all sources of forest produce is compared with that of the previous year in the following statement:—

Agency of exploitation.	Material.									
	Timber.		Fuel.		Total wood.		Bamboos.		Grass & grazing.	Minor produce.
	Cubic ft. solid.	Value.	Cubic ft. solid.	Value.	Cubic ft. solid.	Value.	Number.	Value.	Value.	Value.
Government	1914-15	Rs. 28,685	Rs. 2,941	Rs. 274,734	Rs. 18,093	Rs. 303,419	100	Rs. 7	Rs. 24	Rs. 5,277
	1915-16	7,147	1,387	286,283	22,504	293,430	1,567	94	26	19,403
Purchasers	1914-15	1,049,855	3,26,670	3,086,546	66,895	4,136,401	1,415,567	13,041	2,57,861	23,894
	1915-16	750,773	3,09,469	3,008,501	70,934	3,759,274	843,634	8,301	2,45,516	24,044
Free grantees	1914-15	13,307	2,154	850	21	14,167	1,600	18	3,793	287
	1915-16	19,804	3,266	29,091	903	48,895	10,000	85	...	669
Privilege-holders	1914-15	3,951	214	604,383	15,523	608,334	4,050	17	22,335	6,519
	1915-16	1,427	165	502,913	10,666	504,340	...	...	27,688	4,559
Total	1914-15	1,095,798	3,31,979	3,966,523	1,00,532	5,062,321	4,32,511	1,421,317	2,83,952	35,977
	1915-16	779,151	3,14,287	3,826,788	1,05,007	4,605,939	4,19,294	855,201	2,73,230	48,775

Southern Circle.

The outturn from all sources of forest produce during the year 1915-16 is compared with that of the preceding year in the following statement:—

Agency of exploitation.	Timber.		Fuel.		Total wood.		Bamboos.		Sandal-wood Value.	Minor forest produce value.	Grazing Value.
	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.			
		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Government	980,423	11,02,064	3,660,641	2,34,711	4,641,064	13,36,775	...	...	36,761	...	796
Purchasers	747,698	2,53,536	7,914,493	96,113	8,662,191	3,79,649	2,233,369	47,943	...	70,118	71,023
Free-grantees	26,160	9,368	42,190	244	68,350	9,612	30,472	185	...	1,809	4,135
Privilege-holders	300,000	72,000	3,041,686	6,46,353	3,341,686	7,18,353	3,000,000	15,000	...	1,80,000	3,00,387
Total of 1915-16	2,054,281	14,66,968	14,659,010	9,77,421	16,719,291	24,44,389	5,263,841	63,128	36,761	2,51,927	3,76,347
Total of 1914-15	1,998,891	13,41,633	12,480,902	10,03,802	14,480,793	23,45,435	8,233,250	71,760	28,963	2,26,410	3,76,135

The number of cattle for which grazing was allowed is estimated at—

Free .. 33,085
On fee .. 442,938

Total .. 476,023

The total expenditure incurred under "Management of State Forests" was Rs. 7,28,850 against Rs. 6,80,407 in the previous year.

Sind Circle.

The outturn from all sources of forest produce is compared with that of 1914-15 in the following statement:—

Agency of exploitation.	Material removed.								
	Timber.		Fuel.		Total wood.		Minor produce.	Grazing.	Total.
	C. ft.	Value.	C. ft.	Value.	C. ft.	Value.			
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Government	4,554	1,136	286,264	5,304	290,818	6,440	740	...	7,180
Purchasers	202,802	65,489	15,710,966	1,96,130	15,913,768	2,61,819	33,646	40,183	3,41,448
Free grantees	7,673	597	...	...	7,673	597	42	4,812	5,452
Privilege-holders	...	...	18,282	169	18,282	169	...	3,891	4,060
Total of 1915-16	215,029	67,222	16,015,512	2,01,603	16,230,541	2,68,825	34,428	54,887	3,58,140
Total of 1914-15	187,800	74,393	11,705,521	2,43,126	11,843,321	3,17,519	27,175	49,553	3,84,247

The quantity and value of material removed by the Public Works Department from the areas temporarily alienated to it along bunds and canal banks were as follows:—

Material.	Quantity.	Value.
Timber pieces ..	10,494	Rs. 1,049
Branch wood bundles ..	540	" 19
Earth .. cubic feet	9,991,672	" 2,441
Total ..		3,509

CHAPTER III.

FINANCIAL RESULTS.

Northern Circle.

The following statement compares results of the year with those of 1914-15 and with the average of the past five years:—

Head.	1915-16.	1914-15.	Average of five preceding years.
	Rs.	Rs.	Rs.
Revenue ..	16,57,003 —68,120	15,68,776 1,400	15,77,916 Famine Fodder.
Expenditure {	15,88,883	15,67,376	
	A .. 3,55,694	2,21,664	3,10,125
	—1,53,330	—69	Famine Fodder.
	B .. 2,02,364	2,21,595	
	4,08,045	4,15,537	4,07,058
Total Expenditure ..	7,63,739 6,10,409	6,37,201 6,37,132	7,17,183
Surplus ..	8,93,264 9,78,474	9,31,575 9,30,244	8,60,733

N. B.—The above figures include the following on account of royalties on forest produce from lands outside forests:—

Revenue ..	Rs. 1,55,831
Expenditure ..	" 5,574

Classification of Revenue and Expenditure of the year 1915-16:—

I.—REVENUE.

Particulars.	Receipts.	Percentage.
	Rs.	
Major produce ..	13,65,840	82.4
Minor produce ..	2,91,163	17.6
Famine Fodder ..	—68,120	
	2,23,043	
Total ..	16,57,003 15,88,883	100

II.—EXPENDITURE A.

	Rs.	Percentage.
Extension and constitution.	3,269	0·9
Improvement ..	77,636	22·1
Exploitation ..	2,74,789	77·0
Famine Fodder ..	1,53,330	
	1,21,459	
Total ..	3,55,694 or 2,02,364 net	100

III.—EXPENDITURE B.

Particulars.	Charges.	Percentage.
	Rs.	
Administration ..	43,743	10·7
Executive ..	1,57,322	38·5
Protective ..	2,06,980	50·8
Total ..	4,08,045	100

Figures of the various divisions compared with figures of the last year are as follows :—

Division.	Year.	Receipts.	Expenditure.			Net results.
			A	B	Total *	
		Rs.	Rs.	Rs.	Rs.	Rs.
Panch Mahals	1914-15 ..	1,18,185	18,456	51,483	69,939	+ 48,246
	1915-16 ..	1,14,023	10,927	48,650	59,577	+ 54,446
Surat	1914-15 ..	1,76,163	1,09,483	59,723	1,69,211	+ 6,952
	1915-16 ..	2,32,603	1,12,293	62,734	1,75,032	+ 57,571
North Thána.	1914-15 ..	5,93,732	19,167	50,723	69,895	+ 5,28,837
	1915-16 ..	5,54,038	28,281	54,539	82,820	+ 4,71,218
Central Thána	1914-15 ..	2,62,865	23,596	56,334	79,930	+ 1,82,935
	1915-16 ..	2,56,086	14,317	49,756	64,073	+ 1,92,013
South Thána	1914-15 ..	2,08,836	13,700	61,883	75,583	+ 1,33,253
	1915-16 ..	2,03,488	14,924	63,525	78,449	+ 1,25,039
North Násik	1914-15 ..	55,054	7,455	31,013	38,468	+ 16,586
	1915-16 ..	59,819	2,463	31,051	33,514	+ 26,305
South Násik	1914-15 ..	1,47,262	27,306	56,255	83,561	+ 63,701
	1915-16 ..	1,68,442	16,123	54,046	70,169	+ 98,273
Total*	1914-15 ..	15,68,776	2,21,664	4,15,537	6,37,201	+ 9,31,575
	1915-16 ..	16,57,003	3,55,694	4,08,045	7,63,739	+ 8,93,264
Average of past five years	....	15,77,916	3,10,125	4,07,058	7,17,183	+ 8,60,733

* This is inclusive of the figures for the Direction, Working Plans and Famine Fodder Divisions.

N. B.—In the following notes figures are rounded off.

Panch Mahals.—The decrease of Rs. 13,500 in coupe receipts was due to fewer coupes sold owing to less demand on account of local scarcity of rain which depressed trade and progress generally. Much material consequently remained on hand in Contractors' yards. Nevertheless rates remained steady for the amount was sold owing to good competition.

The increase of Rs. 5,750 under grass was due to better rates and more extensive purchase due to local scarcity in neighbouring districts.

An increase of Rs. 6,200 was realised under apta and temburni leaves (the normal figure being Rs. 3,500) owing to this commodity being sold by blocks instead of by ranges; probably because this method of disposal favoured small local men. The result is remarkable.

Surat.—An increase of Rs. 59,000 under departmental operations was due to better outturn from saw mills and better rates at sales on the station dépôt (the figure is on gross receipts).

There was a decrease of Rs. 8,500 on dead and fallen trees owing to the smaller realization on conversion than estimated due to many trees proving hollow. (The figure is on net receipts and will probably be recovered in the next year.)

North Thána.—A decrease of Rs. 94,100 on last year's figures for coupes in spite of 3 extra being sold is attributed to dullness in trade due to the war.

Decreases of Rs. 1,800 on gurcharan sales in spite of more trees being sold and of Rs. 1,850 under bamboos were probably due to the same reason.

A decrease of Rs. 19,800 for malki trees sold was chiefly due to the smaller number disposed of.

The decrease of Rs. 4,000 under grass was due to a grant of forest land to a private milk concern and will be an annual loss to net forest revenue.

Central Thána.—A decrease of Rs. 12,850 on coupe sales was due to lower rates due to slack trade.

There was a decrease of Rs. 2,700 on gurcharan receipts, but rates were better than last year, the number of trees being proportionately fewer. The total quantity was small and probably the quality better.

A decrease of Rs. 2,300 on bamboos was due to dull trade.

South Thána.—An increase of Rs. 11,850 on coupe sales was due to better demand, more coupes finding purchasers while rates were maintained.

A decrease of Rs. 40,350 in gurcharan receipts is due to fewer trees sold.

North and South Násik.—These two divisions must be considered together owing to the Kalwan range changing hands from the one to the other.

An increase of Rs. 7,400 was due to more coupes being sold owing to greater demand.

An increase of Rs. 16,850 in malki sales is due chiefly to larger number of trees sold.

Increases of Rs. 5,100 and Rs. 1,750 on grass and grazing receipts respectively indicate a general rise in demand for fodder.

A decrease of Rs. 10,000 on mhowra seed is due to the war, also a continued loss of Rs. 2,000 on rosha grass. These products are said to have provided "Olive oil made in Germany" and the bases of Austrian perfumes respectively. If so, there is comfort in the loss.

The year represented the maximum local effect of the war on our forest revenue and there is cause for congratulation that it has not been greater.

Fortunately, forest sales of the last year were mostly concluded just before the war broke out, and its effect in that year only necessitated a granting of extra time for payment of a small portion (about 15th amounting Rs. 86,000) of forest dues in the year under report. Thus the effect was spread over the two years.

Since the close of the year under report the forest sales of 1916-17 have practically been completed, prices all round (the raw products for German olive oil and Austrian perfumes excepted) have shown a sharp rise practically to normal prices if not beyond (there has not been time for minute examination).

The magnitude in the fluctuations of receipts under different heads will convey some idea of the capital value of the forest estate and the value of the privileges enjoyed from it by the local people which is equal to what Government realise in revenue. That estate has still some valuable portions hardly touched. In "Gurcharans," "Traverse" numbers and "Protected Forests" there is

much latent wealth which only requires skilled management unfettered by prejudice and provided with reasonable staff and funds to add materially to the annual revenue for all time.

Central Circle.

Excluding famine fodder operations, the financial results of the past two years and the average of the five preceding years are as follows :—

Year.	Revenue. Rs.	Expenditure. Rs.	Surplus. Rs.
1915-16	7,72,218	5,05,356	2,66,862
1914-15	7,77,531	5,35,258	2,42,273
1910-1911 to 1914-15. (5 years' average).	7,30,852	5,18,262	2,12,590

and separating the jurisdictions of the two Commissioners the figures are—

Central Division.

Year.	Revenue. Rs.	Expenditure. Rs.	Surplus. Rs.
1915-16	5,93,549	4,13,867	1,79,682
1914-15	6,26,411	4,36,504	1,89,907
5 years' average	6,07,474	4,16,560	1,90,914

Southern Division.

1915-16	1,78,669	91,489	87,180
1914-15	1,51,120	98,754	52,366
5 years' average	1,23,378	1,01,702	21,676

Thus a slight fall in revenue of Rs. 5,313, due to causes explained below, has been far more than counterbalanced by an expenditure decreased, by the necessity for economy, by Rs. 29,902, resulting in a net increased surplus of Rs. 24,589. For divisions under the jurisdiction of the Commissioner, Central Division, revenue in 1915-16 is less by Rs. 32,862 than that of 1914-15, and less by Rs. 13,925 than that of the five year average, results which are due mainly to the three Khándesh Divisions, where the effects of the war have been more pronounced than in Poona and Sátára. In the two latter divisions, although Sátára continues to show a deficit on the year's working, the demands on the forests are so intense, and markets so close to centres of consumption that the value of forest materials is steadily increasing, and appears likely to continue to do so independent of outside factors; in Khándesh, on the other hand, material is in excess of demand and markets are far off, and exceptional prosperity all round is necessary for produce to compete with that from centres of supply, such as the forests of Baroda and the Northern Circle, which are far more favourably situated for the trade towards the coast, in which direction much of the Khándesh material, more especially that of North and West Khándesh, would ordinarily go. The same arguments apply to the Kolába Division, under the jurisdiction of the Commissioner, Southern Division, where the proximity of the Bombay market guarantees an ever increasing demand for forest material and an ever increasing revenue.

As regards expenditure little need be said other than that the economies necessitated by the war less affected Kolába, where few roads and buildings are ordinarily constructed, than Poona, Sátára and Khándesh.

The financial results of the various divisions are commented on below :—

East Khándesh.—Revenue decreased by Rs. 9,864, and was also lower than that of any of the five years preceding. The main falling off was in sales of grass, and was due to circumstances already explained under the head "Grass and Grazing."

Timber and fuel showed slight increases of Rs. 1,967, which however was an outstanding of the previous year, and Rs. 4,872, the result of the constant demand which is ensured by the absence of any forests in the plains talukas. Decrease in expenditure was mainly under salaries.

North Khándesh.—Absence of demand for timber and fuel and poor prices obtained for rosha grass caused a decrease in revenue of Rs. 13,127 as compared with 1914-15, and of Rs. 25,940 as compared with the five year average. Curtailment of the roads and buildings programme resulted in expenditure being less by Rs. 5,426.

West Khándesh.—Rs. 27,345 less revenue than in 1914-15 was the result of the effects of the war, purchasers being unobtainable for the waste and malki numbers, the clearance of which is ordinarily the main source of income in the division. Economies on roads and buildings effected a decreased expenditure of Rs. 4,425.

Poona.—The surplus here was Rs. 74,217, as against Rs. 60,080 in 1914-15, and Rs. 38,041, the previous five year average, a state of affairs which is more especially satisfactory when it is pointed out the surplus owes nothing to decreases in expenditure, which have also risen, but entirely under establishments, from Rs. 73,162, the five year average, to Rs. 85,238 in 1914-15 and Rs. 88,562 in the year under report. The ever increasing demand for forest material in this division which has already been alluded to, and the rise in prices for the same, may confidently be expected to result in further progress in the future, at any rate so far as the forests themselves are concerned, but at the same time one item of revenue will disappear, viz., the proceeds of the lands which have been cleared for transference to the Revenue Department, a work which is now completed. Demand however is so great that forest areas hitherto unworked will certainly be called on to make good the deficiency. To the practically continuous and most efficient administration of Mr. Thomson during the last 4½ years the progress made is largely due.

Sátára.—A small increase in revenue of Rs. 1,803, mainly from grass and grazing, and a decrease in expenditure of Rs. 6,267 imposed by the necessity for economy in roads and buildings, was more than counterbalanced by increased establishment charges, and resulted in a deficit of Rs. 9,329 as against Rs. 9,181 in 1914-15. The forest resources of the division are extremely poor, but such as they are it is satisfactory to be able to report that the prospects of increased revenue in the current year are already assured.

Kolába.—This division exhibits most consistent progress. Revenue has risen from Rs. 1,23,376, the five year average, to Rs. 1,51,120 in 1914-15 and Rs. 1,78,669 in the year under report, while expenditure having decreased with changes in the pay of officers holding charge, the surplus has risen from Rs. 21,675, the five year average, to Rs. 52,366 in 1914-15 and Rs. 87,180 in 1915-16. These satisfactory results are due partly to fresh areas under the working plan coming under exploitation, but mainly to high demand and high prices realized for the coupes. In these Kolába forests, Government possess a property of great present and greater potential value, a state of affairs to which not only the proximity of the Bombay market and the easy access thereto by water, but also the excellence of much of the material in the forests contribute.

Further classification of the revenue and expenditure of the circle is as follows :—

I.—REVENUE.

	Receipts.	Percentage.
	Rs.	Rs.
Major produce ..	4,03,907	52·3
Minor produce ..	3,68,311	47·7
Total ..	7,72,218	100·0

II.—EXPENDITURE.

A.

		Charges. Rs.	Percentage. Rs.
Extension and constitution	..	6,934	6·6
Improvement	..	63,608	60·9
Exploitation	..	33,823	32·5

Total .. 1,04,365 100·0

B.

Administration	..	52,270	13·0
Executive	..	1,41,265	35·3
Protective	..	2,07,456	51·7

4,00,991 100·0

Southern Circle.

The financial results of the year as compared with those of 1914-15 and with the average of the preceding five years are as follows:—

Year.	Revenue.	Expenditure.	Surplus.	Percentage of surplus to gross revenue.	
	Rs.	Rs. Rs.	Rs.		
1915-16 ..	19,95,685	A 7,35,480 B 4,04,419	11,39,899	8,55,786	43·
1914-15 ..	18,68,706	A 6,86,099 B 3,80,500	10,66,599	8,02,107	43·
Average of 1909-10 to 1913-14.	16,69,402	A 6,29,263 B 3,43,599	9,72,862	6,96,540	42·

The above will show that there was an increase in the receipts, expenditure and surplus of the year. The surplus of revenue is shared in by all the divisions except Kánara, Southern Division, and Ratnágiri. The percentage of net to gross revenue remained normal. The following table compares the receipts and charges of the year in detail according to budget heads with those of 1914-15:—

Budget heads.		Amount.		Difference.
		1914-15.	1915-16.	
		Rs.	Rs.	
Receipts	I ..	12,81,448	13,74,332	+ 92,884
	II ..	5,32,180	5,68,738	+ 36,558
	III ..	925	459	— 466
	IV ..	11	11	....
	V ..	54,142	52,145	— 1,997
	Total, Receipts ..	18,68,706	19,95,685	+ 1,26,979
Expenditure A.	I ..	5,02,483	5,91,151	+ 88,668
	II ..	7,292	7,050	— 242
	III ..	158	62	— 96
	VI ..	12,447	12,475	+ 28
	VII ..	94,842	71,701	— 23,141
	VIII ..	51,980	43,171	— 8,809
	IX ..	16,897	9,870	— 7,027
	Total A ..	6,86,099	7,35,480	+ 49,381
Expenditure B.	I ..	3,23,948	3,45,766	+ 21,818
	II ..	42,849	45,216	+ 2,367
	III ..	13,703	13,437	— 266
	Total B ..	3,80,500	4,04,419	+ 23,919
	Total, Expenditure ..	10,66,599	11,39,899	+ 73,300

Revenue.

It is most satisfactory to note that, notwithstanding the fall of prices due to the congestion of the timber market and absence of demand for timber, the total revenue of the year shows an advance of Rs. 1,26,979 over the previous year and of Rs. 3,26,283 over the average of the preceding five years; had all the material of the year realised its normal value, the receipts would have certainly beaten the record revenue of the year 1913-14 (Rs. 20,18,753).

The main revenue heads I and II are responsible for the increased revenue from larger quantities of material exploited and disposed of during the year. There are prospects of further increasing the revenue under these heads and it is hoped that, with increased facilities of extraction for the large locked-up forest capital and with the speedy and successful termination of the war followed by expansion and improvement of the timber market, the revenue will continue to improve year by year. The revenue under III and V is always variable and the small differences need no comment.

Expenditure.

The total expenditure under A and B increased by Rs. 73,300 over the last year's figure. The increase under A-I was due to payments of arrear contract wages withheld in the previous year for lack of provision and to payments of wages for larger quantities of timber and fuel exploited during the year. The curtailment of expenditure on roads, buildings, wells, sowing, planting and fire-protection with a view to economy during the war accounts for the decreases under A-VII and A-VIII. The decrease under A-IX was due to the smaller amount spent in payment of rewards to informers of forest offences and to smaller number of articles of uniform paid for. The excess under B-Establishments was in consequence of (1) a senior Imperial Officer holding charge of the Kánara, N. D., during the whole year, (2) a senior Imperial Officer having been appointed to Kánara, W. D., in place of a junior Officer gone on long leave, (3) a Sub-Divisional Forest Officer serving in Kánara, E. D., during the whole year and (4) increase in the rates of pay of officers and establishments under the time-scale. The variations under the other heads are trivial.

The following statement shows the proportion of revenue and expenditure under the different heads:—

Particulars.	Total.	Percentage.
<i>Revenue.</i>		
	Rs.	
Major produce	17,54,450	88·
Minor produce	1,89,089	9·
Miscellaneous	52,146	3·
	19,95,685	100·
<i>Expenditure A.</i>		
Extension and constitution .. .	6,630	·9
Improvement	1,08,242	14·7
Exploitation	6,20,608	84·4
	7,35,480	100·
<i>Expenditure B.</i>		
Administration	55,839	14·
Executive	1,87,953	46·
Protective	1,60,627	40·
	4,04,419	100·

The outstandings of revenue at the opening and close of the year were Rs. 2,55,995-15-1 and Rs. 4,92,395-9-8 respectively. Three items amounting to Rs. 359-8-8 were written off as irrecoverable revenue under the orders of the Conservator.

The outstandings due to the Department from contractors and disbursers amounted to Rs. 2,02,267-11-5 against Rs. 1,95,228-3-8 in the previous year.

The estimated value of timber and other produce in depôts rose from Rs. 8,48,942 to Rs. 10,85,650 and that of live and dead stock fell from Rs. 4,28,846 to Rs. 4,27,739.

Sind Circle.

The financial results of the year as compared with those of the preceding year and with the average of the past five years are as under :—

Head.	Average of last 5 years.	1914-15.	1915-16.
	Rs.	Rs.	Rs.
Revenue ..	4,10,937	4,18,718	3,79,875
Expenditure A ..	43,575	42,745	32,511
Expenditure B ..	1,65,801	1,79,389	1,83,151
Total, Expenditure ..	2,09,376	2,22,134	2,15,662
Surplus ..	2,01,561	1,96,584	1,64,213

The decrease in gross revenue is due to the following reasons :—

(a) The coupe revenue of the year being greater and the collection of such revenue being spread over two years Rs. 17,000 more than last year are outstanding and will be collected in 1916-17; also poor results were obtained by the sale of coupes in the Jerruck Division.

(b) A less quantity of fuel was supplied to the Government steamers on the Indus.

The decrease of Rs. 10,234 under A—Conservancy and Works is due to the postponement of new works on account of the war.

The increase of Rs. 3,762 under B—Establishment is due to increase of pay to officers of the Imperial and Provincial Services, to members of the clerical establishment under the time-scale and also to the grant of Sind allowance to Mr. Robinson (*vide* Government Resolution No. 3060, dated 19th August 1915).

The revenue and expenditure of the year are further classified as follows :—

I.—REVENUE.

Particulars.	Receipts.	Percentage.
	Rs.	Rs.
Major produce ..	2,70,665	71
Minor produce ..	1,09,210	29
Total ..	3,79,875	100

II.—EXPENDITURE A.

Particulars.	Charges.	Percentage.
	Rs.	
Extension and constitution ..	..	..
Improvement ..	26,334	81
Exploitation ..	6,177	19
Total ..	32,511	100

III.—EXPENDITURE B.

Administration ..	32,456	18
Executive ..	78,925	43
Protective ..	71,770	39
Total ..	1,83,151	100

The revenue outstanding on 30th June 1916 was Rs. 77,510 against Rs. 60,706 on the same date last year. This represents instalments payable by coupe contractors and others which are not due or recoverable until after the close of the year.

Bhai Jethmal had to pay Rs. 6,500 on account of the lac contract of the Jerruck Division for 1908-09 of which Rs. 4,285-5-11 have been recovered and credited. The Collector of Hyderabad has been requested to recover the balance.

The Commissioner in Smd has been requested to sanction the writing off of the sum of Rs. 3,038-4-0 due from Mr. Chandiram Karamsing as an irrecoverable revenue.

CHAPTER IV.

ADMINISTRATION.

Northern Circle.

The charge of the circle was held by Mr. W. F. D. Fisher throughout the year.

Divisional Charges were held as follows:—

Panch Maháls..	{ Till 3rd December 1915 ..Mr. R. W. Inder. From 4th December 1915 till 30th June 1916 Mr. W. C. Milne.
Surat ..	{ Till 19th January 1916 ..Mr. G. E. Marjoribanks. From 5th May 1916 till 30th June 1916..Mr. R. W. Inder.
North Thána ..	{ Till 1st December 1915 ..Mr. J. B. Brooks. From 2nd December 1915 to 30th June 1916 Mr. W.E. Copleston.
Central Thána..	Throughout the year Mr. B. H. Dalal (except for six weeks' privilege leave when Mr. Copleston held charge in addition).
South Thána ..	Throughout the year.: Mr. P. E. Aitchison.
South Násik ..	Do. .. Mr. D. R. S. Bourke.
North Násik ..	Do. .. Mr. H. A. Bhadbhade.
Working Plans..	{ Till 3rd December 1915 ..Mr. W. C. Milne. From 4th December 1915 till 4th May 1916..Mr. R. W. Inder. From 5th May 1916 to 30th June 1916 ..Mr. P. E. Aitchison.

All Divisional Forest Officers worked well. Mr. Marjoribanks' transfer to the Southern Circle was a material loss to this circle which just after the close of the year became the more serious by the departure for military employ of his successor in Surat (Mr. R. W. Inder) who had not only been selected for that charge but had for its sake been given special facilities to tour in it with Mr. Marjoribanks for a period of six weeks before handing over charge in order to preserve continuity in a charge of prime importance, both from forest and political aspects.

Sub-Divisional Officers.

Messrs. B. J. Patel, R. K. Kanitkar and V. G. Bhalerao were employed in Panch Maháls, Surat and Central Thána respectively, throughout the year, except that Mr. Patel was lent to Balasinor State from 20th January 1916 to 3rd March 1916.

Mr. L. S. Koppikar served in North Thána till 1st December 1915 when he proceeded on sick leave till 4th June and on his return acted as Personal Assistant to the Conservator.

Mr. K. B. Gokhale served in South Thána till 25th August 1915 when he died suddenly.

Mr. D. N. Damle served in South Násik till 30th November 1915 when he took leave prior to retirement.

Mr. K. E. Kotwal was attached to the Working Plans Division till 21st September from which date till the close of the year he was Sub-Divisional Forest Officer, South Thána.

All worked satisfactorily, Mr. Kotwal especially doing well at working plan data.

All divisional offices were examined during the year except North Násik, which has been examined since.

The office establishment worked satisfactorily on the whole. The standard of efficiency is not what it should be, and if it were, two-thirds of the present number of clerks would be sufficient. Much more economy in routine work is also possible. Mr. Anderson's system of record would probably be suitable for introduction. Special study is being made of this, and when a man as Superintendent of record is available the matter will be taken up.

The protective staff throughout the circle is, *with exceptions*, very inefficient especially in control. Rangers and Foresters have too large charges. The result is that while the uses to which Provincial officers can be put is limited, the guards are lazy, indifferent and lacking prompt obedience. Thus the Divisional Officers carry a burden that hampers progress and is most disheartening. Of course some Rangers and Foresters have done very well. Among the former Mr. Kazi in Panch Mahals, Messrs. Mankikar and Dubhashi in Surat, Mr. Sathaye in North Thána, Mr. Nagarkar in Central Thána, Mr. Tendulkar in South Thána and Mr. Kundalkar in South Násik merit special mention.

During the year six ranges were sub-divided, thus creating six new range charges. This helps control but does not provide more establishment.

Casualties.—Deaths 25 (being 2½ per cent. of the total staff, *viz.*, 1 Provincial Officer, 1 Ranger, 5 Foresters, 18 Guards); retirements 18; resignations 16; total 5 per cent. (These figures are about normal.)

Discipline.—Dismissals 14, services dispensed with 21, degradation 11, fined 174, total 20 per cent., which figures are about normal.

Recruitment.—While the standard of applicants for Ranger recruits is good and numbers ample, there is great need for open recruitment of Foresters. It is hoped to initiate this system shortly as the guards' grades do not form a suitable recruiting ground for Foresters. The limit of Rs. 12 for beat guards must be raised to Rs. 15 if we wish to obtain suitable though illiterate men, especially in the very valuable Thána District. Vacancies in the guards' grades will, it is hoped, also be open by public notification of vacancies, and all "Umedwars" and candidates prohibited, acting men in the lowest grade having no more claim than any other applicant, for these are the doors by which the inefficient and otherwise undesirable now wriggle into the Department.

The same is true of the senior clerks' grade. Umedwars, candidates and others have usually secured acting appointments and become confirmed without any enquiry whether more suitable persons are available, with the consequence that now it is difficult to find men suitable as head clerks and inefficient men have secured several of these important posts. Last year for the first time public notice was given for applicants to fill two vacancies in the senior clerks' grade. About 30 applicants appeared, about 7 were admitted as qualified and out of these two were eventually selected. Even thus the standard might have been higher, but it will doubtless improve when such opportunities of securing Government service are better known, and the back door found closed.

The junior clerks' grade is the most unsatisfactory in the whole service. Any man who can do the clerical work in a range office is good enough though a working knowledge of English is desirable. Yet the idea has got about that the junior clerk grade is the recruiting ground for senior clerkships. In reality it is the most undesirable source for recruitment to the senior places. These junior clerks are recruited on Rs. 20 and are expected to spend the rest of their lives on the same pay. If they were recruited on Rs. 15 and had a yearly increment of 8 annas to Rs. 30, probably the difficulty now experienced would disappear.

Training.—The training our Ranger probationers get at Dehra Dun is a very great asset, though training at a Presidency centre would have still greater advantages. Such a Presidency training centre for Forester probationers similarly selected would be *invaluable*. The local Forest Class has had to be abandoned for many reasons. Of these the shortness of the course and absence of a practical period, the unsuitability of the instruction, and fundamentally the absence of suitable men to receive instruction made such action imperative. When we realise that a comparatively small outlay and a little organization would quadruple the value of our staff, it is difficult not to be impatient for their advent.

Even for clerks some methodical instruction is required, apart from any system of examination of selection for first appointment. A material portion of present routine work of all offices is the correction of mistakes or the disposal of work caused by them due to the fact that "experience" is the only instructor our clerks have in their business. Day after day and year after year the same mistakes, silly, ignorant, careless mistakes, are made just because new clerks must make those mistakes before they know better. A six months' training in office routine would add vastly to the value of each individual in the office, and by giving intelligence to an automaton save an infinity of unnecessary work and friction.

The relations of Forest with Revenue officers have been satisfactory in all districts.

Central Circle.

Mr. L. Napier held charge of the circle throughout the year except for the period from 22nd September to 1st November, when he was deputed on special duty for famine fodder operations, and Mr. D. A. Thomson, Divisional Forest Officer, Poona, held additional charge.

Messrs. R. P. Da'ley and R. V. Pethe were Divisional and Sub-Divisional Officers in East Khándesh throughout the year.

In North Khándesh Mr. H. W. Starte held the division and Messrs. B. J. Joshi and G. R. Patkar the sub-division.

Mr. A. F. Gonsalves held West Khándesh from the beginning of the year to December 7th, and again from April 25th to the close of the year. In the interval Mr. J. B. Brooks was in charge, ill-health causing him to take leave. Mr. R. A. Shirali held the sub-division.

Poona was held by Mr. D. A. Thomson with Messrs. T. N. Koppikar, B. J. Joshi and A. N. Master as Sub-Divisional Officers for varying periods.

In Sátára Mr. C. E. L. Gilbert held the division combined with the duties of Superintendent of Mahábleshwar, and Mr. E. O. Sampson was Sub-Divisional Officer from October 20th.

In Kolába Messrs. C. G. Dalia and G. S. Dangi were Divisional and Sub-Divisional Officers throughout the year.

Mr. V. D. P. Rebeiro was Divisional Forest Officer, Working Plans.

One Ranger joined the circle from Dehra Dun, having obtained a Higher Standard certificate with honours, and two students were sent there for the 1916—18 course.

The Foresters' class of 11 students was held in Poona with Mr. Sampson as Instructor in addition to his duties as Sub-Divisional Officer, and 10 passed the examination.

In East Khándesh the services of a Ranger had to be dispensed with for general inefficiency and such gross laxity as to make possible the criminal misappropriation of Government funds which led to the prosecution and conviction of his clerk as referred to in last year's report. Another Ranger in the same division was reduced to Forester for persistent neglect of duty. Both were trained Rangers of the Poona Forest class and of considerable service. In Sátára a guard was convicted of criminal misappropriation and sentenced to one month's imprisonment.

Casualties were 17 deaths, 19 resignations, 41 dismissals and services dispensed with, and 35 retirements.

One civil suit was instituted against Government by a contractor in North Khándesh for cancellation of his contract by the Forest Department on account of his misdeeds, but is not yet decided.

Recruitment for the protective establishment showed no improvement in the class of men coming forward, the difficulty being especially felt in Kolába and in Khándesh. In the former the Bombay labour market, with its high wages, absorbs all who want work, in the latter those who are willing to take forest employ are too illiterate and irresponsible to be of much value under the conditions of service at the present day. Recruitment of junior clerks is also a difficulty,

and not a few unqualified men have perforce to be employed. The prospects of stagnation for several years in a range office on the same pay offers few attractions to good men.

With the exceptions above mentioned the protective establishments worked on the whole satisfactorily as did also office establishments.

Relations between the Forest and Revenue Departments were everywhere most satisfactory and few complaints were made as to the inadequacy of punishments inflicted by Magistrates on offenders in forest cases.

All Divisional Officers worked with great energy, and without exception were well supported by their Sub-Divisional Officers, a fact to which the Conservator can testify from personal observation. The services of several Rangers have received special commendation in divisional reports, and due consideration will be given to such men as opportunity occurs.

The Akrani Pargana was administered by the Divisional Forest Officer, North Khándesh, with the Range Forest Officer as ex-officio Mahalkari. A simple working plan is in force to supply the people with fire-wood free and hutting material at low rates, and for the present this meets all requirements. No further exploitation is at present carried out, although on the east of the Pargana there are valuable teak areas which would not only be the better for being worked, but which would yield a good return were there any means of getting the produce to market. This however cannot be the case until the road from Shahada referred to earlier in this report has been constructed. The Divisional Forest Officer brings to notice again the urgency for the provision of a Government dispensary at Dhadgaon. Sickness is rife in the Akrani, and Government servants are dependent on the Taloda dispensary 28 miles distant. The Swedish Mission is accomplishing much good work, more especially amongst women and children, but their limited means need supplementing by a Government institution. The area under cultivation is steadily increasing, the assessment received having risen from Rs. 2,507 to Rs. 3,356 in the last four years; the Collector has called for a report from the Divisional Forest Officer as to the necessity of increasing the assessment and the advisability of introducing the permanent revenue settlement. Rs. 4,000 were advanced as tagai, the demand for the same being less by Rs. 2,520 than in the previous year; but, on the other hand, recoveries of tagai outstandings considerably increased, facts which taken in conjunction with the increased area under cultivation point to a steady rise in prosperity. The rainfall was satisfactory, crops good and there were no epidemic diseases. The Government stud bulls, one Sonkairi in charge of a patil and one Khilari in charge of the Reverend A. P. Franklin, covered 57 cows, of which 37 of the produce are living and healthy; both bulls however are said to be somewhat too large a variety to be suitable for the local cattle. The primary school at Dhadgaon is doing well, but a second one at Kamod is not popular. The Range Forest Officer is invested with 3rd class powers for the trial of Abkari cases, and 5 offences were disposed of by him during the year, all resulting in convictions; the result of it being possible to dispose of such cases within the Pargana itself should lead to a reduction in this class of offence.

The Collector in his review of the Divisional Forest Officer's report writes that "Mr. Starte has given an interesting account of the Akrani, which he has administered successfully during the year."

As regards reports from other divisions all special comments made by the Collectors have been noted in various paragraphs above.

Southern Circle.

The charge of the circle was held by Mr. T. R. Bell throughout the year.

The charges of forest divisions and sub-divisions were held by the following officers:—

Division.		Sub-Division.
Kánara, N. D.	..Mr. J. Dodgson	..Mr. R. A. Hemmadi.
Kánara, E. D.	..Mr. A. G. Edie	..Mr. F. X. Saldanha.
Kánara, C. D.	..Mr. G. S. Butterworth.	
(newly formed on 1st February 1916).		

	Division.	Sub-Division.
Kánara, S. D.	{ Mr. G. S. Butterworth for 7 months. Mr. S. P. Limaye for 5 months.	Mr. S. B. Bendigeri.
Kánara, W. D.	{ Mr. A. C. Hiley for 10 months. Mr. Marjoribanks for 2 months.	
Belgaum	{ Mr. A. G. Edis (in addition to his charge of Kánara, E. D.) for 4½ months. Mr. E. M. Hodgson for 7½ months.	Mr. R. R. Hattiangadi.
Dhárwár-Bijápur (combined Division from 1st February 1916).	{ Mr. G. R. Duxbury (old Dhárwár Division, 7 months and new combined Division, 2 months). Mr. S. P. Limaye (old Bijápur Division, 7 months). Mr. T. N. Koppikar (new combined Division, 3 months).	Mr. T. N. Koppikar (new Sub-Division from 27th January 1916).
Ratnágiri..	{ Mr. W. W. Smart, I.C.S., Collector, 7 months. Mr. J. P. Brander, I.C.S., Collector, 5 months.	
Working Plans Division.	Mr. W. A. Miller.	

Changes.—Mr. Duxbury was transferred to Sind as Deputy Conservator in charge of that circle, Mr. Hiley went on 6 months' leave and Mr. Hodgson returned from leave during the year.

Mr. M. S. Tuggarse, Ranger, Ankola in Kánara, C. D., promoted to the Provincial service during the year, continued in charge of the range.

Forest Students—Dehra Dun.—The candidate Mr. Madan Lal Khanna, nominated by Government for the Provincial Service course of 1916—18, satisfactorily underwent his 6 months' practical training in this circle and joined the Imperial Forest College in July 1916.

Rangers' Course of 1914—16.—Of the two candidates nominated, one left the course soon after joining and the other passed out with a Ranger's certificate and was posted as a Ranger in the Belgaum Division.

Rangers' Course of 1915—17.—The two candidates sent up are due back in April 1917. They are said to be doing well.

Rangers' Course of 1916—18.—Five candidates were sent up during the year.

Vernacular Forestry Class, Belgaum.—The Forestry Class, Belgaum, was, as usual, conducted by Mr. Hattiangadi, Sub-Divisional Forest Officer, Belgaum, in addition to his own duties. For the Foresters' course of 1915 there were 7 students picked out from guards' grades of the several divisions, all of whom passed.

Inspection.—All the divisions of the circle except Ratnágiri were visited by the Conservator during the year, and all the divisional offices in the circle, and 20 range offices, 68 round offices, 10 depôts and 44 nakas in the Kánara Divisions were inspected by his Personal Assistant with a view to establish uniformity in procedure and office work.

Casualties and Punishments.—The casualties and punishments in the subordinate service were :—

Year.	Casualties.				Punishments.				Total.
	Deaths.	Resig- nations.	Dis- mis- sals.	Retire- ments.	Degra- dations.	Suspen- sions.	Fines.	Prose- cutions.	
1915-16 ..	16	38	46	22	31	29	396	9	587
1914-15 ..	9	19	68	14	28	24	358	9	529

Criminal Offences.—The particulars of the nine prosecutions instituted during the year are :—

Division.	Subordinate prosecuted.	Charge.	Result of prosecution.
Kánara, E. D.	1 Forester and 2 Guards.	Torturing a man to extort confession in connection with a fire case.	3 years and 2 years' rigorous imprisonment : they are said to have appealed to the High Court.
	1 Guard	Taking bribes to hush up a forest case.	4 months' rigorous imprisonment.
	1 Guard	Robbing a Forester living in the same naka with the Guard.	1 year's rigorous imprisonment.
	1 Forester	Taking bribes	Acquitted.
Kánara, S. D.	1 Forester and 1 Guard	Taking bribes to hush up a forest case.	Discharged, but dismissed departmentally ; 7½ months' rigorous imprisonment and Rs. 100 fine.
Belgaum	1 Guard	Illicit sale of two teak poles	Convicted, and being a juvenile offender was let off on his furnishing a security for good behaviour for 6 months.

Hunting and Shooting—

	1915-16.	1914-15.
Game licenses issued	48	58
Breaches of game rules brought to light..	4	2
Fine recovered for breach of rules	Rs. 155	Rs. 50
Rewards distributed for reporting illicit shikar.	50	150

The revised game rules, sanctioned for the Southern Circle shortly before the close of the year, are being introduced.

The relations between the Forest and other Government Departments were throughout most satisfactory.

Land Revenue Administration.

Kánara, E. D.—The Bilki Mahal of the Yellápur Taluka was administered by the Divisional Forest Officer as Assistant Collector and by the Range Forest Officer, Bhartanhalli, as Mahalkari. The Divisional Forest Officer, Mr. Edie, states that it would be better if the Divisional Forest Officer were given magisterial powers and the powers of a Forest Settlement Officer in the Mahal. His further remarks are—

“The creation of this Mahal has made it much easier for the Forest Department to get the people to come on forest works. The people seem to be quite contented under the control of this Department.”

Belgaum Division.—The Belgaum Range Mahál and the Khánápur West Range Mahál were administered by the Divisional Forest Officer, Mr. Hodgson, as Assistant Collector and by the Range Forest Officers of the respective ranges as Mahálkari. Efforts were made towards inducing the villagers to help with forest operations. Mr. Hodgson is taking a keen interest in the administration of the kumri villages under his charge. In Government Order No. 5249 of 22nd May 1916 he was appointed as Forest Settlement Officer for the Khánápur Forest Mahál.

The management of the Devikop Forest Mahál has presented no difficulty during the year.

The following new forest maháls were sanctioned during the year to be constituted from 1st August 1916 :—

Division.	Taluka.	Forest Mahál.	No. of villages.	Mahálkari.
Kánara, N. D.	Haliyal.	Virnoli	12	Range Forest Officer, Virnoli.
		Kulgi	11	Range Forest Officer, Kulgi.
		Dandeli	23	Range Forest Officer, Dandeli.
Kánara, E. D.	Yellápur	Kirwatti	8	Range Forest Officer, Kirwatti.
Kánara, W. D.	Kárwár	Supa	120	Mahálkari of Supa.

The Divisional Forest Officers have been appointed ex-officio Assistant Collectors within the limits of the respective maháls.

Services.—The executive and clerical staffs have worked satisfactorily during the year and I should like to mention particularly the services of Messrs. Chandavarkar, Hemmadi and Taggarsee, Extra Assistant Conservators, amongst the former—Mr. Chandavarkar for hard and careful work in the inspection of all the divisional, range and round offices of the circle during the last two seasons. He is my Personal Assistant and was deputed to see that all the recent orders issued for the more systematic and economical working of all branches of forest work were being properly carried out as regards the keeping of registers, forms and other necessary means of control and the reduction within reasonable limits of correspondence and clerical work in the ranges, rounds and beats. Mr. Hemmadi I commend for energetic assistance rendered to his Divisional Forest Officer and Mr. Taggarsee for good work in silvicultural operations.

Amongst the clerks Mr. Bellare of my own office has kept up his reputation for good, hard work; and Mr. R. S. Nagarkatti, who was my camp clerk during much of the season, is a hard-working, conscientious and reliable member of the establishment. Mr. Hodgson speaks highly of his Head Clerk, Mr. A. N. Saldanha, and I can vouch for the fact that he is correct in doing so. The best Rangers we have got are Messrs. V. N. Hasabnis of Virnoli, V. S. Kanitkar of Bhartanhalli and J. D. Rego of Mundgod.

Sind Circle.

The Sind circle was in charge of Mr. E. G. Oliver from 1st July 1915 to 13th November 1915 when he took a month's leave, Mr. Newman acting in the circle in addition to his own duties. Mr. Oliver went on furlough on the 15th April 1916 and Mr. G. R. Duxbury held charge to the end of the year.

All Divisional Forest Officers and Sub-Divisional Officer, Sukkur, have worked well throughout the year. Owing to the low inundation and the absence of rain the year was a trying one, the forest being difficult to protect against grazing and fire.

The work of the Range Forest Officers left much to be desired in the Sukkur Division, especially in the Kot Sultan, Sukkur and Rohri Ranges. Incapacity for vigorous outdoor work was the standing defect. Most of the Rangers sent to Upper Sind at once complain of the climate and try to get sent away. Some of the present Sind Rangers have no real liking for the active life of a Forester. There are exceptions; Messrs. Bulchand Parumal, Rodrigues and Nenumal in the Jerruck Division have shown exceptional good work, while Messrs. Pinto and Badlani in Sukkur and Messrs. Dalpatrai and Kotumal in Larkana have been praised by their Divisional Forest Officers.

The office establishment have worked well and to the best of their ability. In the circle office my predecessor specially praised the work of Mr. Imdadali Mahomed Ashraf Kazi, Head Clerk, and Mr. Ramchand Manghanmal, 2nd Clerk. Arrangements have been made that all clerks capable can learn account work; at present this work has remained in the hands of a few.

Only the Divisional Forest Officer, Jerruck, reports an improvement in the efficiency of the lower protective establishment. The class reported as most necessary to improve is the class of Sub-Ranger, both as regards education and morals.

Two Government stipendiary students (i) Gulam Mahomed Abdul Hamid Kureshi, and (ii) Parsram Khemchand Mirchandani were sent to Dehra Dun for training as Rangers.

The casualties of the year were as follows :—

Division.	Deaths.	Casualties.					Discipline.			
		Retire-ments.	Resig-nations.	Diamis-sals.	Services dispensed with.	Perce-n-tage.	Degra-dations.	Fines.	Super-sessions.	Perce-n-tage.
Sukkur ..	1	4	5	18	2	17·7	16	62	..	46·1
Lárkána ..	2	..	3	5	..	15·1	9	18	..	40·9
Hyderabad ..	3	..	3	2	3	13·09	4	..	..	4·76
Jerruck ..	1	1	19	15	4	43·5	2	21	..	25·0
Total ..	7	5	30	40	9	22·5	31	101	..	29·2

Mr. Lekhraj Lachiram, Head Clerk, died of consumption in Hyderabad Division.

A Sub-Ranger died of pneumonia in Lárkána Division.

One forest guard died of fever in Sukkur Division and another of sunstroke in Hyderabad Division. In Jerruck there was one death and one retirement.

In Lárkána a guard was assaulted and murdered in Dosu forest when catching thieves illicitly cutting wood. Another guard in the Garhi Yasin range has been missing since 15th March 1916; the Divisional Forest Officer reports that it is believed that the man has been murdered and the corpse buried in the jungle.

Forester Gobindram Jechandrai was dismissed for bad protection work in the Rohri range of the Sukkur Division.

The relations between the Revenue and Forest Departments continued to be satisfactory.

All range offices and ghat records were inspected by their respective Divisional Officers and some by the Conservator who also examined all divisional offices during the year.

Good progress was made during the year in the classification of both English and vernacular records.

CHAPTER V.

GENERAL REMARKS:

Northern Circle.

Panch Mahals.—The Divisional Forest Officer calls attention to the increasing demand for land for cultivation, especially for cotton crop in the Halol Táluka. The Charans—professional graziers—are among the applicants and much of the land allotted to them as grazing grounds is suitable for such cultivation, but they are bad cultivators.

The Collector makes remarks and suggestions on the same subject.

The Conservator will confer with both officers on the subject and on cognate matters which are of equal importance. If practical proposals can be formulated, they will be duly incorporated in a full report to Government.

The Collector draws attention to surplus irrigation water available and suggests its utilization for forest nurseries.

The Conservator thinks that general experience warns us that a year of severe scarcity of rainfall might at a blow wipe out the labour and expenditure of many years. But the matter will receive his attention and consideration during his tour this autumn.

Surat.—The Divisional Forest Officer having been in charge for a very short time refrained from any remark.

The Collector writes :—

"The undersigned made several camps in the Dángs and was much impressed by the signs of efficiency and progress that was noticeable everywhere. Road-making in particular is receiving the attention it deserves, and the results reflect credit on all concerned; Mr. Marjoribanks has administered the Dángs for five years with energy and tact, and his name will not be forgotten there."

The Conservator cordially endorses the Collector's remarks.

North, Central and South Thána.—There was an absence of any outstanding feature of the year except an attempt to organize better control by the protective establishment by the formation of five new ranges already mentioned in this report, but little real improvement can be made until funds for the establishment are better utilised and subsequently added to. Scientific forestry is impeded accordingly and though rising prices obscure facts serious loss in the future must result.

The Collector suggests a liberal scale of rewards for detecting offences of illicit cutting. The Conservator fears the results would be illusory and the main trouble remain unaffected. Essential control is lacking, and no rules, orders nor mere prescriptions will take the place of efficient staff, authority and funds.

The other important matter the Collector touches on is the control of gurcharans. It is not thought advisable to put this vastly valuable woodland property into the hands of the Forest Department. It is suggested that "a trained Forest Officer with a small staff should look after the Thána gurcharans under the orders of the Revenue Department." When it is considered that these gurcharans are generally adjoining reserved forests, indistinguishable from them except by cut lines and boundary pillars, it is not clear why it is necessary to have a separate staff for their control. Additional staff for the forests is necessary, and given that, the added control of gurcharans would only make for efficiency all round. The Thána gurcharan corresponds exactly with the protected forest of the Dángs except that latter includes the cultivation as well. What is required would seem to be a better utilization of the Forest Department generally and of the Divisional Forest Officers in particular. They are under revenue control in every instance, and experience shows that the more intimately they are in touch with the people the smoother and more economical the running of the administrative machinery.

Lastly the Collector deplores the destruction of malki injaili, but that is a trivial matter compared with the control of gurcharans, and would probably be largely mitigated were the intelligence of the Forest Department brought in closer touch with the needs of the people as above indicated.

South Nasik.—The Divisional Forest Officer remarks :—

"The position of the protected forests of Peint Taluka is in my opinion very unsatisfactory.

These forests form an extensive and very valuable property of more than 55,000 acres in extent. They should be put under some sort of regular sanctioned working plan as soon as possible, their management should be entirely in the hands of the Forest Department, and the coppice shoots resulting from the fellings should be kept and sold by Government under a regular plan. The detailed facts of the case have already been reported."

The Collector in forwarding the report writes :—

"Mr. Bourke's report is most interesting. It is a pity that such a keen and observant officer could not stay longer in this charge, the importance of which has in my humble opinion never been sufficiently appreciated. I believe that the forests of Peint are a most valuable property and at present almost wasted for want of expenditure on communications. It is practically the same country as the Surat Dángs, but while the latter has got everything it wanted, Peint has unfortunately escaped notice and has got very little.

* * * * *

I entirely agree with what Mr. Bourke says in paragraph 90 about protected forests in Peint, but the matter has been dealt with separately."

The Conservator thinks Mr. Bourke's observations and conclusions as regards the Peint Range are correct in the main. Sylviculturally they are only new as applied to that area. Similar observations and conclusions by others form the basis of recent working plans sanctioned and under preparation in other parts of India including the revised working plan for the Thána District. The report referred to by Mr. Bourke is with the Conservator pending the inspection of the Peint forests this season both by the Conservator and Working Plans Officer, if possible.

Mr. Bourke's comparison of the liberality of provisions for the development of the Dángs with the apparent total neglect of the very similar property in Peint breaks down in failing to recognise the fundamental factors of justification and success of the liberality of provisions granted to the Dángs, viz., the selected Divisional Officer, his powers and general administrative position. The success in the Dángs could be repeated and even surpassed in Peint if the Divisional Forest Officer were similarly qualified and paramount there. It is what the country requires and it is hoped the matter will receive favourable consideration when the special report is made. The preliminaries are in hand.

North Násik.—There is no matter of special remark at present.

The feature of the year has been economy on account of war, but an error (if any) has been made by overcurtailment in expenditure of funds originally sanctioned for development. It is a difficult question for the Conservator who feeling the pressing needs of local works has felt bound to surrender the utmost for the war.

Central Circle.

A year which at one time threatened to be overshadowed by famine, with its attending results of dislocation of trade and diversion of the energies of the Forest Department from their duties proper to the conduct of famine fodder operations, was eventually redeemed by the unprecedented and unexpected rainfall in October, thus enabling satisfactory progress to be made in the exploitation of the forests and in the collection of revenue. The war however put an end to progress in the important works of the development of communications and the housing of the forest establishments.

As regards famine fodder operations no detail is called for here other than that the 25 lakhs lbs. of grass in reserve in West Khándesh was of the greatest value in meeting the requirements of famine-stricken areas in Gujarát and Káthiáwár; the reserve has been duly renewed by Mr. Bhiladwala under his contract with Government. The timely rains put a sudden end to the further large operations for the supply of grass that had been arranged for in Poona, Kolába, and West Khándesh, not, it is true, without considerable financial loss to Government, due to those operations being already in train and to the necessity of paying compensation on the contracts that had been made, but at the same time at a loss that was trifling compared to the direct and indirect loss that a continued absence of rain would have caused.

Speaking generally, it may safely be said that given normal conditions for trade, the further progress of the forests is assured. Their nature and location offer less scope for large schemes of development than elsewhere, but the demand on them is steadily increasing. The enquiries of the Industrial Commission may open out fresh markets for minor products such as tanning materials, rosha grass and mhowra seed, but not, it is expected, to any great extent; the main revenue of the circle must always be derived from the small timber, fuel, and grass which alone the forests are capable of producing, and which local markets will absorb. And it must be remembered also that fresh industries would encroach on the already all too limited labour market, and so while beneficial in one way, would react unfavourably in others. The needs of the circle are continuous: fire protection in Khándesh to bring the forests into the improved condition of which they are undoubtedly capable of being brought, and a steady policy of road development on the comparatively restricted scale which will meet the requirements of each ensuing period of years.

Southern Circle.

The year has been full of promise for the development of the forests in the circle, more particularly for those of Kánara District and those portions of Dhárwár lately transferred to the Northern and Eastern Divisions thereof. The creation of a fifth division in Kánara and the consequent interchanges of area has already been fully explained in the body of this report (section I of Chapter I.) Although the fifth division was administratively necessary from a purely forest point of view, the existing charges being too extensive for proper management by one Divisional Forest Officer, its creation would not have been sanctioned had the case not been strengthened by a scheme for the amelioration of the condition of the Kunbi Marathas in the Supa Petha submitted to Government by the Collector of Kánara. Under this scheme, Supa is now a forest mahal with the Divisional Forest Officer, W. D., as Assistant Collector. The fifth division and all the changes connected therewith has entailed no extra cost to Government beyond the pay of 5 peons or puttewallas. The Bijápur Division has been added on to the old Dhárwár Division *minus* the portions transferred to Kánara, E. D. and N. D. and forms the new Dhárwár-Bijápur Division. Thus the number of divisional charges in the circle is the same as before and, while the areas of the five in Kánara have decreased and become more compact, that of Dhárwár-Bijápur has increased both in size and in the number of component parts or blocks of forest separated by long distances. It is a most unmanageable charge as it stands now.

The general necessity for making the most of all the resources of the empire likely to produce revenue having become apparent during the course of the war in Europe, enquiries have also been started into the possibility of further development of the utilization of forest produce. The Commissioner of the Southern Division, visited the Kánara jungles during the season and made notes with this object. These notes became the subject of correspondence between him and Government with the result that it seems to have been recognized that Bombay possesses in its jungles a source of potential revenue the existence of which has up to the present been more or less unknown to those unconnected with the direct management of the forest estate. A scheme for a light railway to tap the eastern parts of the Eastern and Central Divisions of Kánara is being considered by Government, to run from Hubli *via* Kalghátgi to Mundgod. This is to be built by private enterprise. The scheme for the Dandelli-Bhistenhatti Railway which is to be built by Government and which has been the subject of correspondence for years past was again postponed for want of sanction to Rs. 5,000 for a regular survey by an experienced Railway Engineer.

His Excellency the Governor of Bombay in the month of May visited the Northern Division of Kánara where the line is to be built and devoted several days to an inspection of the forests and work going on with the result that the money has now been provided after the close of the year. His Excellency went into the matter of forest development on the spot and summoned the local forest officers to a conference at Astoli which was also attended by the Commissioner. As a result of this, the Conservator was ordered to prepare a statement of requirements for the fuller working and general development of the Kánara jungles. This has now been submitted and it is hoped that, in due course, means will be provided for at least a beginning to be made towards the realization of part of the interest on the enormous capital locked up in these forests.

The seeding of the dowgi bamboos (*Bambusa arundinacea*) is practically complete; a few small areas still remain alive in certain nallas in the Kalinadi valley in W. D. Kánara. It is probable that all will be dead even there in the next two years. Enquiries have been started bearing upon the utilization of bamboo-pulp for paper and Government have under consideration certain schemes for the installation of factories for the purpose in the Kánara District.

Tanning materials have also received some share of attention and Mr. Pilgrim, the Government tan-extract expert, visited Belgaum shortly after the close of the year to report upon the question of their utilization. A preliminary report has been submitted.

The services of an Engineer, Mr. Haines, Executive Engineer, Dhárwár, were temporarily lent to the Forest Department to examine the bed of the Kalinadi river above the tideway as far as the Hologadde slide in Gund, W. D. Kánara,

with a view to improving the waterway for floating timber. Before Mr. Haines could do anything with the Kalinadi it was found imperative, in the interests of immediate revenue, to open a channel in a tributary, the Kaneri nalla, to relieve the glut of logs on the road to the Hologadde slide and on that slide itself. Large arrears of logs had accumulated on the further side of Gund above the Kaneri nalla from past years and, these, added to those from the present year's fellings, cannot be brought out in time for sale without making another way of exit. The work in the Kaneri consisted in blasting a fairway between and past great boulders and masses of rocks. It was started rather late for various reasons and the early rains put an abrupt end to it before much could be done. A whole-time Forest Engineer is badly wanted in Kánara for such work and the laying out and maintenance of the forest roads, the building of bridges on them and to look after the saw mills and their machinery. Another P. W. D. Engineer is, in the meantime, to be deputed in November next to finish the above work commenced by Mr. Haines.

The Forest Economist again visited Kánara to inspect the log-seasoning experiments inaugurated by him. The work is not yet finished and the results are, therefore, not yet known.

The Instructor, Provincial Forest Class, Dehra Dun, went through the circle with his students again this year, being convinced of the educational value of this tour from last year's experience.

Betta assignments for the provision of green leaf-manure in the spice gardens of Sirsi Táluka were finished and it is hoped the rules will be working shortly. The work of taking agreements from the individual gardeners has been carried out with very little difficulty or friction. The spice gardens of Siddápúr are being treated in the same way and assignments are also finished there; leases are being taken.

Government have sanctioned the privilege of *soppu* in the below-ghat Tálukas of Ankola, Kumta and Honáwar and in the Bhátka Petha (Government Notification No. 5797 of 9th June 1916) the removal of green leaf-manure of unreserved trees in the areas of forest assigned for that purpose for the use of gardens, rice-lands and manure-pits. This privilege is exercisable only in the months of August and September in each year.

Hakkal assignments in Supa Petha of the W. D. Kánara continued to be intermittently cultivated by the Kumri Marathas and others. The supervision (which was *nil* up to now) and collection of revenue has been transferred to the Forest Department at the time of the creation of the fifth Kánara Division and Supa forest mahál.

Five new forest maháls were sanctioned at the end of the year as already mentioned in Chapter IV.

Rinderpest was again bad this time in Virnoli and Kulgi ranges where it chiefly attacked the bison. Great numbers of these died in the monsoon months with the result that these animals, which were formerly numerous in those areas, are now reported to be almost extinct. It will be necessary to close Kulgi, Virnoli and the Dandeli range where last year's visitation took place with similar results, to shooting of bison for some years to come. Fortunately the disease died out before the contractors started carting work in Virnoli and Kulgi this year and their work was not interrupted.

A new timber depôt was opened in Kánara, C. D., at Tadri on the coast for logs from Sirsi Range and the Soppinhosalli High Forest of S. D. Kánara.

The tram-rails and trolleys in Kodibag depôt of the W. D. Kánara were taken up as local prejudices were too strong against using them; it is also a fact that the rails were not heavy enough for continued work with large timber.

The monorail in Belgaum was again not used as the new contractor refused to work it. It now traverses the current coupe and a broken bridge on the road has been repaired, so the Divisional Forest Officer hopes to utilize it in the year 1916-17.

In Belgaum the Divisional Forest Officer reports that Berad labour was interfered with by the police who called off men to hunt for "*fararis*" or absconders and for "roll-call" purposes. Labour is scarce in the west of the Belgaum

Division and much time has to be wasted by the forest staff from the Divisional Forest Officer downwards in procuring sufficient to work the jungles and bring in the revenue. Some working arrangement has now been arrived at with the Police Department, however, and matters may improve. Mr. Hodgson acknowledges the valuable assistance rendered by the Revenue Department in helping to procure carts and men and particularly mentions the Mámlatdár of Khánápur in this connection.

No further charcoal experiments were carried out by Mr. Hodgson but he states that charcoal-manufacture is now well established in Gokák and Belgaum Ranges and further endeavours are being made to start kilns in the three Khánápur ranges.

Mr. Puransing, the Forest Chemist, Dehra Dun, visited Belgaum Division and carried out some distillation experiments at Tambulwadi with *Lantana* and *Blumea malcolmi* or "Panjrut", proving that the former contains nothing valuable in the way of oil, while the latter has sufficient to work with. A further report is awaited. Mr. Hodgson sent the following to Dehra Dun for analysis :—

Lantana fruits.

Phyllanthus emblica (Awla) fruits.

Spondias mangifera (Ambada or hog plum).

Trema Orientalis (Gol).

Careya arborea (Kumbha or Kowl).

24 coloured earths.

Sandalwood has also attracted more attention during the year and further observations go to show that the tree is rapidly spreading in all the areas affected by *Lantana*. Mr. Hodgson states that, while fires severely damage scattered bushes in grass lands, these never develop beyond the mild ground-fire stage which does practically no damage to any growth where *Lantana* is dense.

As a matter of fact the Conservator has himself noticed that the *Lantana* thickets often entirely extinguish an ordinary fire if it is not too violent. Sandal plants are parasitic on the roots of many species of trees and bushes and *Lantana*, while protecting them against damage from burning, gives them all the nourishment they want. Sandalwood is too valuable to waste and every effort should be made to protect and propagate it. We know hardly anything about it as yet and certainly have very little idea how much there is in the circle outside the areas under the management of the Department. Enumeration of the trees was begun in the Dhárwár District (where it is perhaps most plentiful) in the year 1913-14, but was not proceeded with. It has been recommenced this year and the artificial propagation of the species is also engaging the attention of the Divisional Forest Officer and his staff. It is certain that everywhere a great deal of looting goes on without our knowledge, but it is only lately that we have been able to arrive at even a hazy estimate of its extent. Without further legislation for the better protection of the trees than that now existing, little can be done and the question is still under consideration.

The transfer of the forests of Ratnágiri to the Revenue Department, already recommended to Government, is presumably still under consideration and the Collector states that a further report on the subject has been called for by the Commissioner, S. D.

The Collector of Kánara makes no remarks in forwarding the five reports appertaining to his district. The Collector of Dhárwár says that "the employment of a special Forester for enumerating sandalwood trees growing outside the forest areas is recommended in order to protect the rights of Government." Steps are being taken. The Collector of Bijápur, while commending Mr. Koppikar for his sympathetic treatment of the people, endorses the latter's statement that "the relations of the Forest Department with the Revenue Department and the people have been satisfactory and goes on to say :—

"The decrease in the number of offences dealt with and of those sent to Court is satisfactory. It should be borne in mind that not every offence coming to notice is worth being investigated. Even the Police stop investigation under section 157 (b), Criminal Procedure Code, of a large number of offences which are really comparatively more important than a good many of the forest offences which are still fully investigated in this division. If fewer offences were taken up for investigation with discrimination, it would leave the guards and Rangers more time for patrolling and other necessary conservancy work in their charges.

"I would have no objection to hand over to the Forest Department certain pasture forests for management provided, as far as possible, an equivalent area of reserved forest in each case is turned into pasture, or disforested. This can be done in several places, particularly those close to village-sites where the reserved forest is but one mass of prickly pear and is of little use as forest. If thrown open to cultivation, these tracts could be quickly cleared of prickly pear to the mutual advantage of the Forest Department and the rayats."

The Conservator cannot agree with the Collector's remarks *re* offences. He toured through the Bijapur forests, visiting every one, a few years ago and again saw some of them last year and was struck with the amount of petty looting that goes on. Thefts of forest produce are necessarily of a petty nature as the whole of the Lamani population are engaged in them. These people live either in, or on the very edges of, the forests which are scattered about in isolated blocks in Hungund, Bagalkot and Badami talukas; and their petty depredations are extremely difficult to prevent. Any laxness in punishing even the smallest must inevitably lead to more. It is important to preserve what forest there is—it is all on dry, excessively stony hills which are absolutely unfit for cultivation with the exception of, perhaps, a few acres along the bases here and there—for climatic reasons if for no other; the revenue, also, though at present small, is capable of large expansion with careful management.

As regards Mr. Kabraji's remarks about exchanging lands, something is being done year by year to rectify matters and make conditions of protection easier by changing the boundaries where they interfere with villagers and cultivation. The prevalence of prickly pear, however, in most cases, is directly due to the habit of villagers of fencing their fields with it—planting live hedges of it to keep animals off the crops; not only pig but also village cattle. The largest areas of prickly pear are invariably found round villages. Why? And, although several such areas have been disforested upon representations made, the Conservator does not remember to have noticed a single one that had been cleared and made use of subsequently for cultivation.

Sind Circle.

No fuel was supplied to the Military Department by coupe contractors through the agency of the Forest Department.

Chil and deodar logs and sleepers were as usual imported into Sukkur for local use from the Punjab.

Large quantities of timber and fuel were imported into Sukkur, Rohri, Shikarpur and Larkana from the Khairpur State and to Larkana from the land of the Jagir Nawab Gaibi Khan.

There was no civil suit during the year.

Arrangements were made to give instructions in arboriculture to subordinates of the Public Works Department, District Local Boards and Municipalities at Rahuja in Sukkur and Miani in Hyderabad.

At Rahuja 3 men passed out of 4 candidates, one having left the class almost immediately; while at Miani all six candidates passed the final examination. It has been found impossible with the present inadequate Range staff to appoint a specially qualified Ranger as mentioned last year.

Ranger Bulchand Parumal was appointed to act as Probationary Extra Assistant Conservator in the month of January 1916, but it was found imperative to keep him in the Mulchand Range as no officer fit to hold charge was available.

The Divisional Forest Officer, Jerruck, remarks as follows:—

"The value of the forests to the cattle owners of the Sind Kohistan tract and of Cutch has been well demonstrated during a year of drought. Many thousands of cattle were admitted free in the forests from January to May where an unusually abundant pod crop carried many of them through the most critical period of the season. But for the crops the horned cattle would have perished without exception as there was no fresh grass whatever in the forests after the end of the cold weather. Even as it was many did die, being in a condition of semi-starvation before they ever reached the forests."

Hunting and shooting—

Rules to regulate hunting, shooting, poisoning of water and setting traps or snares in the reserved and protected forests of the Province of Sind were prescribed and applied under Government Notification, Revenue Department, No. 5291 of the 12th May 1915. These were introduced for the preservation of the hog deer and certain game birds it was desirable to protect during the breeding season and also to help to guard forests against incendiarism.

The following remarks have been made by the Collector and by the Deputy Commissioner, Upper Sind Frontier, when forwarding the Administration reports of the Divisional Forest Officers :—

Sukkur Division :—By Mr. J. W. Smyth, Deputy Commissioner, Upper Sind Frontier :—

Alteration in areas.—Of the four undecided claims to kachas only one belongs to this district. The land involved is under dispute with the Bahawalpur State.

General Protection.—The Magistrates still experience difficulty in deciding forest cases owing to the occasional failure of the subordinate forest officers to appear in Court on the prescribed dates.

Protection from Cattle.—To check this evil it has been proposed to levy enhanced fines for unauthorized grazing. No objections to the draft notification prescribing these fees have been received, and the orders of Government may be expected shortly.

Grazing.—It is possible that the increase in the fees derived from grazing may also be due to the reduction of the fees. It is difficult to believe that the striking increase in the figures of the Kashmore Range is altogether due to the vigilance of the Range Forest Officer.

Larkana Division.—By Mr. A. Mackie, Collector of Nawabshah :—

The decrease in net income is very striking.

Jerruck Division.—By Mr. A. S. A. Westropp, Collector of Karachi :—

“The report chronicles a satisfactory administration of the division during a year of low inundation and total failure of rains which caused a fodder scarcity in the district but more acutely in the hilly region. The Collector is glad to acknowledge that the situation on being brought to the notice of the Forest Department received sympathetic treatment at their hands. This is evident from paragraph 74 of this report showing that free grazing passes were issued for 5,198 cattle in the 3 ranges of the Karachi District. This concession combined with Rao Bahadur Seth Vishindas' generosity in issuing free passes to the Kohistan people for the collection of babul pods for their cattle, as well as for sale from the 15 riverain forests taken up on contract by him, afforded substantial relief to the distressed graziers who however in spite of such assistance, it is much to be regretted, lost much of their stock.

The increase of forest offences commented upon in paragraph 24 *et seq* of this report is a natural consequence of the adverse conditions which prevailed during the year and the Forest Department is to be complimented on the exercise of vigilant supervision which checked serious damage and on the successful result of the prosecutions lodged in criminal courts as well as of the large number of minor offences compounded departmentally in a liberal spirit.

The price of firewood has greatly increased in Karachi owing, it is said, to a combination among sellers. It would have been interesting to see this point briefly noticed in this report.

The reduction of the ghat fees at Tatta referred to in paragraph 65 of the report had the approval of the Collector. It was evidently a well conceived step both in the interests of the poor wood-cutters and the townspeople of Tatta.”

REMARKS OF THE COMMISSIONER, NORTHERN DIVISION, ON THE
FOREST ADMINISTRATION REPORT OF THE NORTHERN CIRCLE
FOR THE YEAR 1915-16.

No., F.O.R.—47.

Ahmedabad, Shahi Bagh, W. D., No. 1,
23rd October 1916.

REVENUE DEPARTMENT.

Submitted to Government.

2. The changes in the forest area were unimportant. The North Dangs working plan was sanctioned last year, while the year under report saw the completion of that for the South Dangs, leaving only the Central Dangs to be dealt with. In Surat, the Mándvi forest still remains to be dealt with, while in the Panch Maháls the Eastern Maháls working plan is under preparation, and that for the Western Maháls is still to be taken up. In Thána good progress is reported in connection with the revision of the working plans of the three Thána divisions.

3. Progress in the construction of new roads was not as good as in the year preceding, only 15½ miles of new roads having been constructed at a cost of Rs. 10,500 as against 37 miles at an aggregate cost of Rs. 18,294 in the past year. The expenditure on new buildings also declined from Rs. 20,138 to Rs. 4,193.

4. The Panch Maháls and North Thána are principally responsible for the increase in the number of forest offences. In the former it is ascribed to the scarcity in North Gujarat and Káthiáwár, which brought down larger numbers of cattle in search of pasture, and in the latter to the better, though not yet complete, reporting of illicit fellings. Cases of injury to forest by fire were fewer by 152 than in the year preceding. Communal punishments are reported to have produced good results.

5. Fire conservancy appears on the whole satisfactory. There was an appreciable decrease in the area burnt as compared with the preceding year.

6. The number of cattle impounded rose from 52,034 to 60,973. The Panch Maháls owing to the scarcity referred to in paragraph 4 above showed a large increase of 12,496 over last year's figures.

7. Having regard to the effects of the war on the working of the forests, the financial results of the year may be regarded as satisfactory.

8. Mr. Fisher's proposals with regard to increasing the number of ranges in the circle were submitted to Government under this office No. F.O.R.—74, dated 28th September 1916.

9. The undersigned has no personal knowledge of the working of the circle, but gathers from the report itself that the circle has been administered with success and efficiency by Mr. Fisher and his subordinate officers.

A. H. A. SIMCOX,
Acting Commissioner, N. D.

REMARKS OF THE COMMISSIONER, CENTRAL DIVISION, ON THE
FOREST ADMINISTRATION REPORTS OF THE NORTHERN AND
CENTRAL CIRCLES FOR THE YEAR 1915-16 SO FAR AS THE
AREAS IN THE CENTRAL DIVISION ARE CONCERNED.

No. Genl.—1401 of 1916.

Camp Nasik, 15th November 1916.

The following review of the Administration Reports of the Northern and Central Circles for the year 1915-16, so far as the areas in the Central Division

are concerned, is submitted to Government in the Revenue Department. The Conservators' reports have already been submitted by those officers direct to Government.

2. The area of the Central Circle was further reduced by 49 square miles during the year under report, the chief reason for this decrease being the disforestation of certain areas of pasture forest already in charge of the Revenue Department.

3. Two hundred and twenty-one miles of the outer boundaries of forests were demarcated during the year at a cost of Rs. 2,613 against 223 miles at a cost of Rs. 2,241 in the preceding year. Satisfactory progress is being made in South Násik in the erection of intermediate cairns.

4. Working plans in the Central Circle for only 44 square miles received the sanction of Government against 157 square miles during the preceding year. Mr. Napier explains the reason for the delay in the completion of the revised plan of the East Khándesh Satpuda forests. Mr. Fisher reports that an attempt is to be made to take in hand during the coming season plans for the forests of the Násik Divisions if the reduced staff of Imperial Officers can manage it.

5. As regards roads, expenditure was considerably reduced in the Central Circle owing to the financial stringency and only very important works were undertaken, expenditure showing a reduction of Rs. 9,158 as compared with the previous year. The Commissioner thinks that the Conservator of Forests, Central Circle, is probably right in thinking that a road connecting Dhadgaon with Shahada is preferable to one connecting it with Taloda, *via* Kothar, and the Public Works Department may be directed to frame a project and estimate for the former. It will be useful for the Forest Department and it will also serve to open up the Akrani to the outer world. Mr. Napier's remarks about the Koyna valley road deserve attention and his final conclusions will be awaited with interest.

6. The desirability of developing the two Peint Ranges in the South Násik Division of the Northern Circle is apparent, and when a full-time officer with the requisite qualifications is available, the matter will no doubt receive consideration. Expenditure on buildings also decreased in the Central Circle by Rs. 16,399.

7. A statement showing forest offences committed in the districts of the Central Division has been prepared and appended to this review to facilitate comparison of this year's figures with those of last year. Offences reported have declined from 7,817 to 6,998, a reduction of 10·4 per cent. There have been fewer offences reported in every district: it is not so certain that there have been fewer committed. It is unpleasant to note that in both circles the Conservators notice the negligence of their subordinates, *e.g.*, Mr. Napier as regards fire-tracing and Mr. Fisher as regards reports upon illicit fellings by his protective staff and as regards incendiarism done with the knowledge and connivance of fire guards. The number of offences of injury by fire shows an increase of 15 (438 against 423 in the previous year) but the area burnt this year (168,940 acres) was smaller than that (188,551 acres) burnt in 1914-15.

	Current year.	Past year.	
East Khándesh ..	11,560	49,211	8. There was a small reduction in the number of cattle of all kinds and sheep and goats impounded during the year—74,841 against 80,284 during the past year. Mr. Napier remarks that in Poona the people are in the habit of evading payment of grazing fees till long past the fixed date and suggests that nothing short of double fees will result in any improvement.
West Khándesh ..	10,045		
North Khándesh ..	8,082		
Poona	11,562		
Sátára	5,571	20,897	
North Násik ..	16,537		
South Násik ..	11,484		
	74,841	80,284	

9. The receipts from hirda in the Central Circle show an increase of Rs. 14,989 over the previous year's figures under this head. In respect of the crop in the Poona District the Conservator reports that "it had perforce to be collected departmentally, no other system being possible in a locality where the hirda trees in occupied lands so largely outnumber those in forests, where the villagers themselves carry on such a large trade in the fruits, and where no contractor will purchase the forest hirda on the trees for fear of its finding its way to the villagers' lepôts rather than to his. The share system of collection is adopted under which

each forest village by agreement contributes a fixed quantity free of charge, all balance over and above such quantity being at his disposal, but the system throws much work on the Forest Department in keeping the villagers to their agreements, and in the subsequent transport of the hirda to central depôts where it can be sold to Bombay merchants. With great difficulty, and only after much personal exertion by the Divisional Forest Officer, was a satisfactory sale effected of the 1915-16 crop and of that which had remained unsold from the previous year. The net profit on the operation was Rs. 4,318."

10. Fires caused considerable loss in East Khándesh, and the Conservator notes that in at least 17 cases this was due to the bad work of forest subordinates and carelessness in firetracing. The protection of forests from fire is probably the most important and the most difficult of all the operations of the Department.

11. Excluding famine fodder transactions, the year's working in the Central Circle as now constituted resulted in a decrease of Rs. 5,313 in receipts as compared with those of the preceding year and in a corresponding decrease of expenditure to the extent of Rs. 29,902. There was a net surplus of Rs. 2,66,862 in this circle. In the two Násik Divisions of the Northern Circle the receipts rose from Rs. 2,02,316 in 1914-15 to Rs. 2,28,261 in the year under report, while expenditure fell from Rs. 1,22,029 to Rs. 1,03,683.

12. The question of providing a dispensary at Dhadgaon is still under consideration, being delayed only by want of funds. It was impossible to provide for it either this year or last year.

13. Mr. Napier's remarks are most interesting. Reference has already been made to the Dhadgaon dispensary and road, and the Koyna valley road. Special attention is also invited to the Conservator's remarks about East Khándesh fires, trespass and the evasion of grazing fees in Poona, and the evils resulting from a lack of continuity in administration. It is pleasant to notice the spirit of co-operation which now exists between the Forest and Revenue Departments. Excellent work has been done throughout the year by the forest officers of this Division.

C. N. SEDDON,
Commissioner, C. D.

Number of Forest Offences committed in the Central Division.

Divisions.	A Cases taken into Court.				B Cases compounded and warned.				C Cases undetected.				Total.				Grand total. 1915-16.
	Injury to forest by fire.	Unauthorised fellings or appropriation of wood or other minor forest produce.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorised fellings or appropriation of wood or other minor forest produce.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorised fellings or appropriation of wood or other minor forest produce.	Grazing without permission.	Other offences.	Injury to forest by fire.	Unauthorised fellings or appropriation of wood or other minor forest produce.	Grazing without permission.	Other offences.	
East Khándesh ..	3	43	16	13	2	215	267	95	24	109	2	4	29	367	285	112	793
West ..	8	4	5	3	2	171	357	17	45	75	5	1	55	250	367	21	693
North ..	1	8	5	5	14	194	145	88	27	96	3	4	42	298	153	97	590
Poona ..	3	24	35	7	27	694	788	78	111	132	5	1	141	850	828	86	1,905
Sátára ..	9	6	13	3	14	354	445	67	43	66	..	1	66	426	458	71	1,021
North Násik ..	2	10	5	1	4	335	499	65	31	36	..	1	37	381	504	67	989
South ..	1	17	17	5	7	404	341	57	60	98	..	..	68	519	358	62	1,007
Total ..	27	112	96	37	70	2,367	2,842	467	341	612	15	12	438	3,091	2,953	516	6,998
Figures for 1914-15 ..	38	112	116	32	84	3,007	2,865	471	296	763	10	18	423	3,882	2,991	521	7,817

REMARKS OF THE ACTING COMMISSIONER, SOUTHERN DIVISION,
ON THE FOREST ADMINISTRATION OF THE SOUTHERN CIRCLE,
FOR THE YEAR 1915-16.

No. 4856.

REVENUE DEPARTMENT.
Belgaum, 31st October 1916.

The sub-joined table shows that the revenue has increased by 1·3 lákhs and that the figures of revenue and expenditure do not compare unfavourably with those of 1913-14 which showed a remarkable excess over the average of five years previous to that year :—

	Average of 5 years upto 1912-13.	1913-14.	1914-15.	1915-16.
	(Figures in lákhs of rupees.)			
Revenue ..	15·5	20·2	18·7	20·
Expenditure ..	9·2	10·9	10·7	11·4
Net surplus ..	6·3	9·3	8·	8·6

The value of sales has increased by 5 lákhs of rupees.

Satisfactory exploitation is hampered by labour difficulties. The question of labour supply in the Khánápur forests of Belgaum by the establishment of a settlement of Berads is under consideration of Government.

The transfer of the revenue management of the in-forest villages to the Forest Department is likely to solve the labour supply difficulty to a certain extent in those regions.

Forest Settlement.—I have issued orders that the Sub-Divisional Officers in Belgaum and Kánara should expedite the forest settlement work in addition to their other duties. The Collector of Kánara has been asked whether Kánara cannot do without a special Forest Settlement Officer and his report is still awaited. As to Belgaum, I do not think a special officer is now necessary. 17,705 acres out of 56,898 acres proposed for afforestation in this district lie within the area transferred to the Forest Department for revenue management for which the Divisional Forest Officer who is ex-officio Assistant Collector has been appointed Forest Settlement Officer in Government Notification No. 9982 of 17th October 1916. A portion of the remaining area consists of occupied land which it is not considered necessary to acquire at Government expense during this period of financial stringency. I am trying to see whether the work that remains can be performed by the Sub-Divisional Officers without extra expense to Government.

Communications.—Rupees twelve thousand eight hundred and forty-six were spent on new works against Rs. 15,378. Measures for providing facilities of communication such as a lumber railway, improved waterways on the Kalinadi and Kaneri, etc., are under consideration.

Crime.—Crime does not show a tendency to increase except in the case of injury to forests by fire, the number of cases of which increased by 280 and the area burnt by 173,200 acres. This excessive conflagration is attributed to an exceptional dry weather and the existence of dead bamboos which are a source of great danger. When they burn they cast flaming fragments for long distances. In view of the potential value of the forests burnt the loss to Government is very considerable and more effective measures should be taken in the matter. A remedy has been proposed by amending section 78 of the Forest Act so as to impose on all who enjoy privileges certain liabilities as regards fires.

Administration.—Punishments have again increased from 419 to 465.

General.—The question of management of Ratnágiri forests by the Revenue Department is still under consideration. The question of control over sandalwood trees by legislation is under discussion with the Forest Department. Sandalwood is of great value and there is no doubt that with proper control a large revenue could be derived. As it is, it is difficult to prevent theft of sandalwood. The question is a difficult one and has already been discussed by me at two conferences. It was decided in Government Resolution No. 1442 of 10th February 1912 to follow the Mysore rules, but these rules are substantive law and we have no law of sandalwood. A short Bill has been drafted by the Conservator, but before I can put it before Government, it is necessary to show the value of the property to be protected and the increased income likely to be secured. These details the Forest Department have some difficulty in collecting.

Enquiry is proceeding with a view to developing the resources of the forest estate more fully. Recently I have put before the Forest Department the question of dry wood distillation and have arranged to have certain woods tested with a view to the exploitation of charcoal and dry distillation of the most favourable woods.

Communications are also engaging attention. I am having prepared a map of all roads existing and proposed in each forest division showing what amount is required to be spent on each and what the extra return will be. Government will then be in a position to know where money can be expended with the best prospects of a return.

By the amalgamation of the Bijápúr Division with Dhárwár, a fifth Forest Officer has been provided for the Kánara forests.

The relations of the Forest Department with other Departments have been most satisfactory and its affairs have been administered most efficiently with due regard to the interests of the public by all forests officers.

L. J. MOUNTFORD,

Acting Commissioner, Southern Division.

REMARKS OF THE COMMISSIONER, SOUTHERN DIVISION, ON THE
FOREST ADMINISTRATION REPORT OF THE CENTRAL CIRCLE
(ONLY SO FAR AS THE KOLÁBA DIVISION IS CONCERNED) FOR THE
YEAR 1915-16.

No. 4481.

REVENUE DEPARTMENT.

Belgaum, 11th October 1916.

This Division is only concerned with the Kolába District in the present report.

2. In Kolába, the valuable forest is 269,327 acres out of a total in the Central Circle of 1,833,141; the net surplus is Rs. 87,180 out of Rs. 2,66,862, i.e., the area which is $\frac{1}{7}$ th of the whole produced $\frac{1}{3}$ rd of the surplus.

3. Out of 155,471 acres burnt, only 833 were burnt in Kolába.

4. The expenditure in Kolába is 10 per cent. less than the five years' average.

5. From the above figures the administration of Kolába forests appears satisfactory and with the improvement of forest roads the value of the forest estate in that district should improve even more.

L. J. MOUNTFORD,

Acting Commissioner, Southern Division.

REMARKS OF THE COMMISSIONER IN SIND ON THE FOREST ADMINISTRATION REPORT OF THE SIND CIRCLE FOR THE YEAR 1915-16.

No. 2959 of 1916.

REVENUE DEPARTMENT.

Office of the Commissioner in Sind.

Government House, Karachi, 14th October 1916.

Submitted to Government.

2. The revenue of the year amounted to Rs. 3·8 lákhs against an average of Rs. 4·1 lákhs for the last 5 years and the expenditure to Rs. 2·15 lákhs against an average of Rs. 2·09 lákhs, the surplus revenue being thus reduced from Rs. 2·01 lákhs to Rs. 1·64 lákhs.

This decrease of revenue is due to the fact that payments of coupe revenue are spread over two years, and the arrears on account of 1914-15, which were recovered in the year under report, were Rs. 90,000 less than the similar sums recovered in 1914-15.

On the other hand, grazing fee collections rose from Rs. 41,000 to Rs. 46,000; the revenue from minor forest produce from Rs. 40,000 to Rs. 46,000 and the price of coupes from Rs. 1·76 lákhs to Rs. 2·53 lákhs.

3. The statement of penalties included in Chapter IV reveals a very unsatisfactory state of affairs. In the Jerruck Division 43 per cent. of the establishment resigned or were dismissed; in the other divisions dismissals and resignations varied from 13 to 17 per cent. Further, in the Sukkur and Lárkána Divisions punishments of degradation and fine amounted to 46 and 41 per cent.

The Commissioner is enquiring into the necessity of these disciplinary measures. It is not stated what proportion of the men punished belonged to the lower grade of Forest Guards or to the superior ranks—a fact which should always be noted in the report of the Deputy Conservator. Seeing that the cost of the establishment has within the last 10 years been raised from Rs. 1·12 to Rs. 1·83 lákhs, it is reasonable to expect a higher standard of efficiency, but these figures would indicate that this result has not yet been attained.

4. The year was undoubtedly a difficult one from the administrative standpoint. The area flooded by the river was only 271,000 acres against 568,000. There was no rain, and the forests were invaded by large quantities of cattle in very poor condition with graziers from the hills on the west or the deserts on the east wholly unused to discipline. The result was necessarily a very large increase of forest offences.

The area burnt rose from 1,046 acres to 6,451 acres. This, though a remarkable increase, does not represent any serious loss, and was the natural result of the very dry condition of the grass and of the anxiety of graziers to save their cattle by obtaining some green fodder at any cost.

Unauthorised fellings similarly increased from 1,269 to 1,642 and illicit grazings from 1,865 to 2,752. The increase in unauthorised fellings occurred chiefly in the Sukkur Division and is attributed to the stricter supervision of the Divisional Forest Officer. Cases of illicit grazing were most frequent in the Hyderabad and Sukkur Divisions, the absence of rain in the hills having caused a great influx of Brahui and Baluchi graziers with their cattle into the riverain forests of those divisions.

The results of prosecutions were satisfactory, 87·66 per cent. ending in conviction. The number of cattle impounded rose from 17,300 to 18,158.

5. Experiments in the propagation of lac failed once more. It is, however, desirable to persevere in the hope of eventual success.

6. The revision of the working plans made good progress, 235·9 square miles being taken in hand and completed.

7. It is satisfactory to note that the relations of the Forest Department with the people and the Revenue Department have been most harmonious, and in particular, that in a season of acute distress for the cattle of the province, the forest Administration threw open their grazing liberally and accorded substantial relief.

H. S. LAWRENCE,
Commissioner in Sind.

APPENDICES.

APPENDICES.

FORM No. 7.—Area of Reserved Forest, 1915-1916.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st July 1915.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1916.		No. and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
NORTHERN CIRCLE.				Acres.	Sq. m. a.	Acres.	Acres.	Acres.	Sq. m. a.		
Panoh Mahals	Panoh Mahals.	Reserved ...	212,199	831 359	...	...	212,199	831 359	.....
Surat	Surat ..	Do. ...	51,791	80 591	...	...	51,791	80 591	.....
Dangs (leased)	Dangs ...	Do. ...	211,795	830 595	...	...	211,795	830 595	.....
North Thana	Thana ...	Do. ...	214,149	834 389	...	...	214,149	834 389	.....
Central Thana	Do. ...	Do. ...	236,316	869 156	(a) 20	(b) 1	236,335	869 175	(b) 10328 11-10-1915; (b) 8312 4-8-1915.	(a) Due to correction of boundary.
South Thana	Do. ...	Do. ...	212,691	832 211	...	...	212,691	832 211	.....
North Nasik	Nasik.	Do. ...	484,979	760 579	(a) 24	* (b) 108,641	378,362	591 122	(a) 13103 7-12-1915; (b) 7872 20-7-1915, (b) 3446 25-8-1916.	* Transfer of Kalwan Range from North Nasik to South Nasik Division—vide G. R. No. 3548 of 24th March 1915.
South Nasik	Nasik ...	Do. ...	295,671	461 631	* (a) 108,280	(b) 995	402,956	623 396	(a) 8477 9-8-1915; (a) 11677 3-11-1915, (b) 1009 2-9-1916, (b) 7576 12-2-1916, 14-7-1915.	
Ahmedabad	Ahmedabad.	Do. ...	12,032	18 512	...	...	12,032	18 512	.....
Total, Northern Circle.				1,933,623	3,021 183	108,324	109,637	1,932,310	3,019 150		
CENTRAL CIRCLE.											
East Khándesh	East Khándesh.	Reserved ...	511,978	799 618	...	* 108	511,870	799 510	* 7555 13-7-1915, 89 5-1-1916.	
West Khándesh	West Khándesh.	Do. ...	494,597	772 517	† 44	† 14	494,627	772 547	† 9813 14-9-1915, 3887 8-4-1916, † 8478 9-8-1915.	
North Khándesh...	Do. ...	Do. ...	555,766	868 246	...	...	555,766	868 246	.....
Poona	Poona and Ahmednagar.	Do. ...	646,040	1,009 280	‡ 763	‡ 282	646,521	1,010 121	‡ 5832 26-5-1915, 5835 8817 26-5-1915, 17-8-1915, 11119 4*81 19-10-1915, 4-5-1915, 5790 871 24-5-1915, 12-1-1916, 2593 9031 7-3-1916, 23-8-1915, 11318 13123 26-10-1915, 8-12-1915. ‡ 3729 11545 5-4-1915, 26-10-1915, 2007 6080 23-2-1916, 2-6-1915, 11547 1*736 30-10-1915, 30-11-1916, 3157 12736 22-3-1916, 30-11-1916, 11862(a) 10-11-1915.	

APPENDICES

FORM No. 7.—*Area of Reserved Forest, 1914-1915*—continued.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st July 1915.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1916.		No. and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.			Acres.	Acres.			Acres.	Equivalent in square miles.
1	2	3	4	5	6	7	8	9	10	11	12
CENTRAL CIRCLE—contd.											
Sátara		Sátara	Reserved	454,426	710 36	*234	† 210	454,440	710 40	* 5721 9811 24-5-1915, 9813 14-9-1915, 9815 14-9-1915, 9816 14-9-1915, 10335 14-9-1915, 5723 23-9-1915, 5723 24-5-1915, 11116 24-5-1915, 10594 29-10-1915, 17340 7-10-1916, 4579 7-7-1915, 2502 9-5-1916, 6795 7-9-1916, 23-6-1915	
		Do.	(Leased)	232	0 232			232	0 232		
Kolába		Kolába	Reserved	287,864	449 504	149	51	287,903	449 543	18313 9272 4-8-1915, 30-8-1915 512737 13792 30-11-1915, 27-12-1915	
Ahmednagar and Sholapur.		Ahmednagar and Sholapur.	Do.	498,056	778 186	† 2	‡ 24,900	473,068	730 108	3889 5-4-1916. † 8279 8968 3-8-1915, 21-8-1915 10425 11516 30-9-1915, 30-10-1915 9691 9814 10-9-1915, 14-9-1915 13390 11113 14-12-1915, 19-10-1916 88 955 5-1-1916, 26-1-1916 5079 6273 15-5-1916, 9-6-1915 6794 11809 23-6-1915, 10-11-1915 12331 13406 19-11-1915, 17-12-1915	
		Total, Central Circle.		8,441,959	5,388 639	1,073	25,605	3,124,427	5,359 427		
SOUTHERN CIRCLE.											
Kánara, N. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916 and 1st May 1916.	Kánara	Reserved	472,746	738 420	(a) 231	(c) 21	271,073	423 353	(c) 2588 7 3 1916.	
		Kánara and Dhárwar.	Do.			(b) 55,674	(d) 257,557				(b) From Dharwar to N. D. Kanara.
Kánara, E. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Do.	Do.	414,208	647 128	(e) 7 (f) 11	(h) 56 (i) 19,929	409,161	639 108	(e) 7742 5939 1917-1915, 12-6-1916, (f) Rectification of error, (h) 7573 9270 14-7-1915, 31-8-1915.	(d) From N. D. Kanara to W. D. Kanara.
		Do.	Do.			(g) 43,870	(j) 29,043				(g) From Dharwar to E. D. Kanara.
Central	New Division from 1st February 1916	Do.	Do.			(i) 19,929 (k) 187,821 (l) 230,135	(m) 27	467,801	731 21	(m) 1737 14-2-1916, 2581 2874 7-3-1916, 14-3-1916.	(e) From E. D. Kanara to C. D. Kanara.
Kánara, S. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Do.	Do.	555,494	887 584	(n) 8	(p) 31	411,044	642 164	(n) 11317 26-10-1915, 9456 (p) 78 3 26-7-1915, 3-9-1915, 10817 11544 5-1-1-13, 30-10-1915, 12319 13067 19-11-1915, 22-12-1915, 504 & 509 5234 17-1-1916, 20-5-1916.	(k) From S. D. Kanara to C. D. Kanara.
		Do.	Do.			(o) 43,424	(k) 187,821				(l) From W. D. Kanara to C. D. Kanara.
											(e) From W. D. Kanara to S. D. Kanara.

APPENDICES.

Form No. 7.—Area of Reserved Forest, 1915-1916—continued.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st July 1915.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1916.		No. and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
SOUTHERN CIRCLE—contd.											
Kánara, W.D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916 and 1st May 1916.	Kánara	Reserved	552,291	862 611	(g) 160 (d) 257,557 (j) 29,043	(r) 51 (s) 7,843 (t) 260,138 (o) 43,424	527,595	824 235	(q) 12798 1-12-1915, 10337 (r) 6274 9-6-1915, 11868 10-11-1915, 13672 22-12-1915, 577 to 580 17-1-1916 (t) 5830 & 5834 26-4-1915, 8818 18-8-1915, 10018 5-10-1915, 11328 3155 22-3-1916, 3447 (u) 6077 to 6079- 12-6-1915, 10032 13-10-1915, 1603 (v) 7678 14-7-1915. (w) 9063 10-9-1915. (x) 9652 10-9-15, 9991 20-9-1915.	(5) From Dharwar to N. D. Kánara. (d) From N. D. Kánara to W. D. Kánara. (g) From Dharwar to E. D. Kánara. (j) From E. D. Kánara to W. D. Kánara. (l) From W. D. Kánara to C. D. Kánara. (o) From W. D. Kánara to S. D. Kánara. (s) Mistakes rectified on comparison of forest records with the district land records of the Revenue Department kept up to date.
Belgaum	.....	Belgaum	Do.	434,347	678 427	(t) 972	...	435,319	680 119	(t) 5830 & 5834 26-4-1915, 8818 18-8-1915, 10018 5-10-1915, 11328 3155 22-3-1916, 3447 (u) 6077 to 6079- 12-6-1915, 10032 13-10-1915, 1603 (v) 7678 14-7-1915. (w) 9063 10-9-1915. (x) 9652 10-9-15, 9991 20-9-1915.	(g) From Dharwar to E. D. Kánara. (j) From E. D. Kánara to W. D. Kánara. (l) From W. D. Kánara to C. D. Kánara. (o) From W. D. Kánara to S. D. Kánara. (s) Mistakes rectified on comparison of forest records with the district land records of the Revenue Department kept up to date.
Dharwar	As constituted up to 31st January 1916.	Dharwar	Do.	240,552	375 553	(u) 147	(v) 185 (b) 65,874 (g) 43,870	319,054	498 61 4	(u) 6077 to 6079- 12-6-1915, 10032 13-10-1915, 1603 (v) 7678 14-7-1915. (w) 9063 10-9-1915. (x) 9652 10-9-15, 9991 20-9-1915.	(e) From W. D. Kánara to S. D. Kánara. (s) Mistakes rectified on comparison of forest records with the district land records of the Revenue Department kept up to date.
Dharwar and Bijapur.	New combined Division from 1st February 1916. As constituted up to 31st January 1916.	Bijapur	Do.	177,093	276 456	(w) 13	(x) 22			(y) 6101 10-5-1915.	* Transfers of areas from Division to Division on account of readjustments of Divisions in the Kánara, Dharwar and Bijapur Districts as per G. O. R. D., No. 1139, dated 27th October 1915.
Ratnagiri	.....	Ratnagiri	Do.	12,052	18 532	(y) 2	...	12,054	18 534	(y) 6101 10-5-1915.	
Total, Southern Circle.				2,858,753	4,466 513	897,450* 1,551	897,453* 8,236	2,852,068	4,456 228		
SIND CIRCLE.											
Sukkur	.....	Sukkur	Kutta	1,717	2 437	+98	...	1,815	2 535	Government Resolution No. 3158 of 22nd March 1916.	* Reservation.
			Adilpur	13,093	20 293	+135	-557	12,671	19 511	* Government Resolution No. 1101 of 29th January 1916.	* Disforested.
			Mohro Mari	12,363	19 223	+1,424	...	13,607	21 367	* Government Resolution No. 4158 of 15th April 1916.	+ Gained by action of the river.
			Other Forests...	204,859	320 59	+4,557	-3,372	206,044	321 804	Government Resolution No. 11631 of 2nd November 1915.	- Lost by action of the river.
		Upper Sind Frontier.	Forests	51,519	80 319	+5,475	-601	56,393	88 73		
			Total	283,571	443 51	11,689	4,530	290,730	454 170		
Larkana	.....	Sukkur	Forests	32,426	50 426	...	...	32,426	50 426	Government Resolution No. 3158 of 22nd March 1916.	Disforested.
		Larkana	Amroll	13,964	21 524	...	3	13,961	21 521		* Due to rectification.
			Other Forests...	47,738	74 378	+440	-80	48,094	75 84		+ Gained by action of the river.
		Nawáshah.	Forests	52,047	81 207	+3,021	+1,274	53,794	84 34		- Lost by action of the river.
			Total	146,175	228 255	3,461	1,361	146,275	231 435		+ Gained by action of the river.
Hyderabad	.....	Hyderabad.	Forests	79,353	123 638	+1,600	-4,317	76,636	119 476		+ Gained by action of the river.
		Karachi	Do.	29,236	45 436	...	-8	29,228	45 428		- Lost by action of the river.
		Nawáshah.	Do.	50,442	78 552	+1,070	-900	50,612	79 52		
			Total	159,031	248 611	2,670	5,225	156,476	244 316		
Jerruck	.....	Hyderabad.	Forests	17,939	28 60	+1,669	-1,293	18,360	28 440		
		Karachi	Kotri Allahra-khis.	1,882	2 602	...	1,882	...	...	Government Resolution No. 8314 of 4th August 1915.	The area notified is 1,954-37 acres but by actual survey it is 1,682 acres.
			Other Forests...	127,627	199 367	+4,763	-4,330	128,060	200 60		+ Gained by action of the river.
			Total	147,498	230 298	6,432	7,510	146,430	228 600		- Lost by action of the river.
		Total, Sind Circle.		736,275	1,150 375	24,252	18,626	741,901	1,159 141		
		GRAND TOTAL		8,977,609	14,027 330	1,032,656	1,059,560	8,951,708	13,935 306		

FORM NO. 7-A.—Area of Protected Forest, 1915-1916.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st July 1915.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1916.		No. and date of Notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.		
1	2	3	4	5	6	7	8	9	10	11	12
NORTHERN CIRCLE.											
Surat (Dangs leased)	.....	Surat	Protected	208,013	325 13	...	...	208,013	325 13	...	
North Thana	.....	Thana	Do.	93,479	146 39	...	(b) 7	93,472	146 32	(b) 11713 (b) 12330 4-11-1915, 10-11-1915, (b) 2596 7-3-1916	
Central Thana	.....	Do.	Do.	64,908	101 263	...	(b) 7	64,901	101 261	(b) 10140 24-9-1915.	
South Thana	.....	Do.	Do.	98,085	153 185	(a) 1	(b) 14	98,072	153 182	(b) 7826A (b) 7133 22-9-1915, 2-7-1915, (b) 8646 (b) 2010 11-9-1915, 14-3-1916, (b) 11565 10-11-1915.	
South Nasik	.....	Nasik	Do.	55,789	87 109	(a) 355	...	56,144	87 464	(a) 8544 (a) 2585 11-8-1915, 7-3-1916.	
Total, Northern Circle.				520,274	812 594	356	28	520,602	813 282		
CENTRAL CIRCLE.											
Satara	.....	Satara	Protected	659	1 19	...	1	658	1 18	11715 4-11-1915, 12026 9-12-1915,	
Poona	.....	A h m e d - nagar.	Do.	7,140	11 100	...	1	7,139	11 99	9869 4829 21-8-1915, 5-5-1916, 6281 6936 23-6-1916, 13-6-1916, 9c65 10661 10-4-1915, 5-10-1915, 4046 13-4-1916.	
Kolaba	.....	Kolaba	Do.	47,265	73 545	...	18	47,247	73 527		
Total, Central Circle.				55,064	86 24	...	20	55,044	86 4		
SOUTHERN CIRCLE.											
Kanara, N. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Kanara	Protected	6,349	9 589	...	...	...	...	57	0 57
		Kanara and Dhárwar.	Do.	...	...	...	(a) 6,292	...	...
Kanara, E. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Kanara	Do.	3,425	5 225	...	...	...	...	...	...
		Kanara and Dhárwar.	Do.	...	...	...	(b) 140 (f) 1	3,284	5 84		
Kanara Central	New Division from 1st February 1916.	Kanara	Do.	...	...	(b) 140 (c) 27,452 (d) 3,393	...	30,985	48 265		
Kanara, S. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Do.	Do.	69,487	108 367	...	gunthas. (e) 5	...	...	...	...
		Do.	Do.	...	...	...	(c) 27,452	42,035	65 435	(e) 504 and 506 17-1-1916.	
Kanara, W. D.	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Do.	Do.	6,206	9 446	...	...	...	...	(a) From N. D. Kanara to W. D. Kanara. (b) From E. D. Kanara to C. D. Kanara. (c) From S. D. Kanara to C. D. Kanara. (d) From W. D. Kanara to C. D. Kanara. (f) From E. D. Kanara to W. D. Kanara. (g) Mistakes rectified.	
		Do.	Do.	...	...	(a) 6,292 (f) 1	(g) 806 (d) 3,303	8,210	12 530		
Belgaum	.....	Belgaum	Do.	12	0 12	...	...	12	0 12		
Total, Southern Circle.				85,479	133 859	*37,278	* 37,278 806	84,563	133 103		
SIND CIRCLE.											
Sukkur	.....	Upper Sind Frontier.	Dickenson	585	0 585	...	...	585	0 585		
Total, Sind Circle.				585	0 585	...	...	585	0 585		
GRAND TOTAL...				661,402	1,033 282	37,634	A. G. 38,222 5	660,914	1,032 894		

FORM No. 7-B.—Area of Forest Proper, Reserved or Mixed Fuel and Fodder Reserves under the management of the Forest Department for 1915-1916.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st July 1915.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1916.		No. and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.										
Panch Mahals...	.....	P a n c h Mahals.	Reserved ...	212,199	331 359	...	...	212,199	331 359	.....
Surat ...	.....	Surat ...	Reserved and Protected .	463,507	724 147	...	...	463,507	724 147	.....
North Thana ...	.....	Thana ...	Do. ...	214,149	334 389	...	...	214,149	334 389	.....
Central Thana ...	.....	Do. ...	Do. ...	238,867	373 147	(a) 20	(b) 1	238,886	373 166	Vide Form No. 7.
South Thana ...	.....	Do. ...	Do. ...	218,333	341 93	...	...	218,333	341 93	.....
North Nasik ...	.....	Nasik ...	Reserved ...	450,144	703 224	(a) 24	107,423	342,745	535 345	* Vide Form No. 7.
South Nasik ...	.....	Do. ...	Do. ...	237,822	449 462	107,062	(b) 660	394,224	615 624	Do.
Total, Northern Circle.				2,085,021	3,257 541	167,106	103,084	2,084,043	3,256 203	
CENTRAL CIRCLE.										
East Khándesh...	.....	East Khándesh.	Reserved ...	488,634	763 314	...	19	488,615	763 295	.....
West Khándesh.	.....	West Khándesh.	Do. ...	346,655	541 415	44 *34,675	14	381,360	595 560	*G. R. No. 1834 dated 11th February 1916.
North Khándesh.	.....	Do. ...	Do. ...	555,766	868 246	34,719	...	555,766	868 246	.....
Poona ...	.....	Poona and Ahmednagar.	Reserved and Protected.	368,642	576 2	763	†2,508	366,897	573 177	*G. R. No. 3913, dated 20th April 1911.
Sátára ...	.....	Sátára ...	Do. ...	330,346	516 106	223	79	330,490	516 250	.....
Kolába ...	.....	Kolába ...	Reserved ..	269,288	420 488	40	1	269,327	420 527	.....
Total, Central Circle.				2,359,331	3,686 291	35,745	2,621	2,392,455	3,738 135	
SOUTHERN CIRCLE.										
Kánara, N. D....	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Kánara ...	Reserved and Protected.	479,095	748 375	231	21	271,130	423 410	.....
Kánara, E. D....	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Kánara and Dhárwár.	Do. ...	.....	...	†55,674	†263,849			.....
Central ...	New Division from 1st February 1916.	Kánara ...	Do. ...	417,633	652 353	18	56	410,023	640 433	.....
Kánara, S. D. ...	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Kánara and Dhárwár.	Do. ...	.....	...	†41,541	49,113	498,846	779 286	.....
Kánara, W. D....	As constituted up to 31st January 1916. As readjusted from 1st February 1916.	Do. ...	Do. ...	624,951	976 311	8	31	453,079	707 599	† Vide Form No. 7.
Belgaum ...	.....	Do. ...	Do. ...	558,497	872 417	43,424	8,790	535,805	837 125	.....
Dhárwár ...	As constituted up to 31st January 1916.	Do. ...	Do. ...	.....	...	294,893†	†306,955			.....
Dhárwár and Bijápur.	New combined Division from 1st February 1916.	Belgaum ...	Reserved ...	400,397	625 397	972	...	401,369	627 89	.....
Bijápur ...	As constituted up to 31st January 1916.	Dhárwár ...	Do. ...	144,029	225 29	147	185	186,412	291 172	.....
Ratnágiri ...	.....	Dhárwár and Bijápur.	Do. ...	.....	...	...	...			.....
		Bijápur ...	Do. ...	139,464	217 584	13	22			.....
		Ratnágiri ...	Do. ...	12,052	18 532	2	...	12,054	18 534	.....
Total, Southern Circle.				2,776,118	4,337 438	932,405† 1,551	†932,224 9,132	2,768,718	4,326 78	
SIND CIRCLE.										
Sukkur ...	.....	Sukkur and Upper Sind Frontier.	Forests ...	284,156	443 636	\$ 11,689	\$ 4,530	291,315	455 115	† Vide Form No. 7.
Larkána ...	.....	S u k k u r, L á r k á n a and Nawábshah.	Do. ...	146,175	228 255	\$ 3,461	\$ 1,361	148,275	231 435	.....
Hyderabad ...	.....	Hyderabad, Karáchi and Nawábshah.	Do. ...	159,031	248 311	\$ 2,670	\$ 5,225	156,476	244 316	.....
Jerruck ...	.....	Hyderabad and Karáchi.	Do. ...	147,474	230 274	\$ 6,492	\$ 7,510	146,396	228 476	.....
Total, Sind Circle.				736,836	1,151 196	24,252	18,626	742,462	1,160 62	
GRAND TOTAL...				7,957,306	12,432 431	1,101,059	1,070,687	7,987,678	12,480 478	

† Transferred from Revenue Department.

§ Out of these 2,400 acres transferred from Revenue Department.

FORM No. 7-C.—Area of Fodder Reserves and Pasture Lands under the management of the
Revenue Department for 1915-1916.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st July 1915.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1916.		No. and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.			Acres.	Equivalent in square miles.	
1	11	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.				Acres.	Sq.m. a.	Acres.	Acres.	Acres.	Sq.m. a.	
Surat	.....	Surat	Reserved	8,092	12 412	...	...	8,902	12 412	.....
North Thána	.....	Thána	Protected	93,479	146 39	...	(b) 7	93,472	146 32	Vide Form No. 7A.
Central Thána	.....	Do.	Do.	62,357	97 277	...	(b) 7	62,350	97 270	Do.
South Thána	.....	Do.	Do.	92,443	144 283	(a) 1	(b) 14	92,430	144 270	Do.
North Násik	.....	Násik	Do.	36,835	57 355	...	1,218†	35,617	55 417	(a) Due to correction in Survey Sind. † Transfer of Kalwan Range from North Násik to South Násik, vide G. R. No. 3506, of 24-3-15. (a) 8544 2595 11-8-15, 7-2-16- (b) 1099 29-1-15.
South Násik	.....	Do.	Reserved and Protected.	63,638	* 99 278	(a) 1,573	(b) 335	64,876	101 236	.....
Ahmedabad	.....	Ahmedabad	Reserved	12,032	18 512	...	...	12,032	18 512	.....
				368,876	576 236	1,574	1,581	368,869	576 229	
CENTRAL CIRCLE.										
East Khándesh	.....	East Khándesh.	Reserved	23,344	36 304	...	89	23,255	36 215	.....
West Khándesh	.....	West Khándesh.	Do.	147,942	231 102	...	34,675	113,267	176 627	.....
Poona	.....	Poona and Ahmednagar	Do.	284,538	444 378	2,400	175	286,763	448 43	.....
Sátara	.....	Sátara	Do.	124,971	195 171	...	131	124,840	195 40	.....
Kolába	.....	Kolába	Reserved and Protected.	65,841	102 561	...	18	65,823	102 543	.....
Ahmednagar and Sholápur.	.....	Ahmednagar and Sholápur.	Reserved	498,056	778 136	2	24,990	473,068	739 108	.....
				1,144,692	1,788 372	2,402	60,078	1,087,016	1,698 296	
SOUTHERN CIRCLE.										
Kanara E.	As constituted up to 31st January 1916.	Kánara	Reserved	.....	...	* 2,329	...	* 2,329	3 409	.....
	As readjusted from 1st February 1916.	Kánara and Dhárwár.	Do.	.....	...			
Belgaum	.....	Belgaum	Do.	33,962	53 42	...	...	33,962	53 42	
Dhárwár	As constituted up to 31st January 1916.	Dhárwár	Do.	96,523	150 523	...	* 2,510	131,842	205 442	* Transfers of areas on account of readjustment of Division, vide G. O., E. D., No. 11369 of 27-10-15.
Dhárwár and Bijápur.	New combined Division from 1st February 1916.	Dhárwár and Bijápur.	Do.	.....	...	...	...
Bijápur	As constituted up to 31st January 1916.	Bijápur	Do.	37,629	58 509	...	...	
				168,114	262 434	* 2,329	* 2,510	167,938	262 253	
SIND CIRCLE.										
Jerruck	.....	Karáchi	Malir	24	0 24	...	...	24	0 24	.....
				24	0 24	...	...	24	0 24	
GRAND TOTAL				1,681,706	2,627 426	6,305	61,169	1,628,842	2,537 162	

ABSTRACT OF FORMS Nos. 7, 7-A, 7-B and 7-C.

Division.	In charge of the Forest Department.				
	Reserved Forest.			Protected Forest.	
	Forest proper.	Pasture reserves.	Fuel and Fodder reserves.	Forest proper.	Pasture reserves.
NORTHERN CIRCLE.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.
Panch Maháls ...	331 359	.....	...	...	.....
Surat ...	399 134	.....	...	325 13	.....
North Thána ...	331 389	.....	3 0	...	.....
Central Thána ...	369 175	.....	...	3 631	.....
South Thána ...	332 211	.....	...	8 522	.....
North Násik ...	535 345	.....	...	...	.....
South Násik ...	614 634	.....	0 630	...	.....
Ahmedabad ...	.....	.....	...	...	.....
Total ...	2,914 327	.....	3 630	337 526	.....
CENTRAL CIRCLE.					
East Khándesh ...	763 295	.....	...	...	.....
West Khándesh ...	464 533	.....	131 27	...	.....
North Khándesh ...	868 246	.....	...	...	.....
Poona ...	562 78	.....	...	11 99	.....
Sátára ...	515 232	.....	...	1 18	.....
Kolába ...	417 78	.....	3 449	...	.....
Ahmednagar and Sholápur ...	.....	.....	...	...	.....
Total ...	3,591 182	.....	134 476	12 117	.....
SOUTHERN CIRCLE.					
Kánara, Northern ...	422 196	1 134	0 23	...	0 57
Kánara, Eastern ...	518 433	116 546	...	...	5 84
Kánara, Central ...	640 383	90 278	...	48 265	.....
Kánara, Southern ...	385 481	256 323	...	65 435	.....
Kánara, Western ...	761 125	63 110	...	...	12 530
Belgaum ...	627 77	.....	...	0 12	.....
Dhárwár Bijápur ...	266 512	12 326	11 614	...	.....
Ratnágiri ...	13 534	.....	5 0	...	.....
Total ...	3,636 181	540 437	16 637	114 72	18 31
SIND CIRCLE.					
Sukkur ...	454 170	.....	...	0 585	.....
Lárkána ...	231 435	.....	...	...	.....
Hyderabad ...	244 316	.....	...	...	.....
Jerruck ...	228 476	.....	...	...	.....
Total ...	1,159 117	.....	...	0 585	.....
GRAND TOTAL ...	11,301 167	540 437	155 463	465 20	18 31

7-B and 7-C for 1915-16.

In charge of the Revenue Department.				Total Forest Area.	Remarks.
Reserved Forest.			Protected Forest.		
Forest proper.	Pasture reserves.	Fuel and Fodder reserves.	Pasture reserves.		
Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	Sq.m. a.	
...	.....	...	...	331 359	
...	3 53	9 359	...	736 559	
...	.....	...	146 32	480 421	
...	.....	...	97 270	470 436	
...	.....	...	144 270	485 363	
...	55 417	...	...	591 122	
...	11 628	1 424	87 464	717 220	
...	.....	18 512	...	18 512	
...	70 458	30 15	475 396	3,832 432	
...	36 215	...	...	799 510	
...	176 627	...	...	772 547	
...	.....	...	...	868 246	
...	448 43	...	...	1,021 220	
...	189 385	5 295	...	711 290	
...	29 16	...	73 527	523 430	
...	739 108	...	...	739 108	
...	1,619 114	5 295	73 527	5,436 431	
...	.....	...	...	423 410	
...	3 409	...	...	644 192	
...	.....	...	...	779 286	
...	.....	...	...	707 599	
...	.....	...	...	837 125	
1 0	50 42	2 0	...	680 131	
...	205 422	...	...	496 614	
...	.....	...	...	18 534	
1 0	259 253	2 0	...	4,588 331	
...	.....	...	...	455 115	
...	.....	...	...	231 435	
...	.....	...	...	244 316	
0 24	.....	...	...	228 500	
0 24	.....	...	...	1,160 86	
1 24	1,949 185	37 310	549 283	15,018 0	

FORM No. 8.—Statement showing the Progress made in, and the

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	AREAS FINALLY SETTLED DURING THE YEAR.					
			Number and date of Government order according to final sanction to the Settlement.	Name of Forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
						In Forest Accounts.	In other Accounts.	
1	2	3	4	5	6	7	8	9
NORTHERN CIRCLE.		Sq. m.				Ra.	Ra.	Ra.
<i>Reserved Forest.</i>								
Panch Mahals ...	Panch Mahals ...	832	...	.....	...	...	...	...
Surat ...	Surat ...	412	...	.....	...	...	...	...
North Thana ...	Thana ...	335	...	.....	...	...	...	...
Central Thana ...	Do. ...	369	...	.....	...	...	...	...
South Thana ...	Do. ...	332	...	.....	...	...	...	...
North Nasik ...	Nasik ...	591	$\frac{13103}{7-12-15}$	Sakore ...	$\frac{24}{640}$	...	...	...
South Nasik ...	Do. ...	631	$\left\{ \begin{array}{l} \frac{8477}{9-8-15} \\ \frac{11606}{1-11-15} \\ \frac{1653}{12-2-16} \end{array} \right.$	Belgaon Dhaga ... Metkilla Trimbak ... Torangaon Igatpuri.	$\frac{13}{640}$	...	...	...
Ahmedabad ...	Ahmedabad ...	19	...	.....	...	...	...	...
Total ...		8,021	...	.....	$\frac{37}{640}$	...	...	...
<i>Protected Forest.</i>								
Surat ...	Surat ...	325	...	.....	...	...	...	...
North Thana ...	Thana ...	146	...	.....	...	...	...	...
Central do. ...	Do. ...	102	...	.....	...	...	...	...
South do. ...	Do. ...	153	...	.....	...	...	...	...
South Nasik ...	Nasik ...	87	$\left\{ \begin{array}{l} \frac{8554}{11-8-15} \\ \frac{2595}{9-8-16} \end{array} \right.$	Undhol Murunti ... Dalpatpur ...	$\frac{354}{640}$	...	...	...
Total ...		813	...	.....	$\frac{854}{640}$	...	...	...
Total, Northern Circle ...		8,834	...	.....	$\frac{391}{640}$	...	...	...

[illegible]

FORM No. 8—Statement showing the Progress made in, and the

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	AREAS FINALLY SETTLED DURING THE YEAR.					
			Number and date of Government order according to final sanction to the Settlement.	Name of Forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
						In Forest Accounts.	In other Accounts.	
1	2	3	4	5	6	7	8	9
CENTRAL CIRCLE.		Sq. m.				Rs.	Rs.	Rs.
<i>Reserved Forest.</i>								
East Khándesh ...	East Khándesh ...	800	...	.....	...	...	...	...
West Khándesh ...	West Khándesh ...	773	$\left\{ \begin{array}{l} 3887 \\ 8-4-18 \\ 9813 \\ 14-9-15 \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Mhasdi Raikot} \end{array} \right\}$	$\left\{ \begin{array}{l} 14 \\ 640 \\ 30 \\ 640 \end{array} \right\}$	...	...	...
North Khándesh ...	North Khándesh ...	868	...	.....	...	...	...	...
Poona ...	Poona ...	1,010	$\left\{ \begin{array}{l} 5832 \text{ \& } 5835 \\ 26-5-15 \\ 8819 \\ 17-8-15 \\ 11119 \\ 19-10-15 \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Kandwal, Chinchode, Aglambe, Bahuli, Dhake, and Khamande Tambe, Shirdhe, \&c.} \end{array} \right\}$	$\left\{ \begin{array}{l} 123 \\ 640 \end{array} \right\}$	...	...	...
Sátára ...	Sátára ...	711	...	.....	$\frac{224}{640}$	...	...	...
Kolába ...	Kolába ...	450	$\left\{ \begin{array}{l} 8313 \\ 4-18-15 \\ 9272 \\ 30-8-15 \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Warose Chincholi Atgav, Bid Khurd.} \end{array} \right\}$	$\frac{40}{640}$	...	...	...
Ahmednagar-Sholápur.	Ahmednagar-Sholápur.	739	...	.....	...	...	...	...
	Total ...	5,351	...	.....	$\frac{431}{640}$	...	...	...
<i>Protected Forest.</i>								
Poona ...	Poona ...	11	...	.....	...	...	...	...
Sátára ...	Sátára ...	1	...	.....	...	...	...	...
Kolába ...	Kolába ...	74	...	.....	...	...	...	...
	Total ...	86	...	.....	...	...	...	...
	Total, Central Circle ...	5,437	...	.....	$\frac{1,431}{640}$	...	...	...

Expenditure incurred on, Forest Settlements during 1915-1916—continued.

AREAS UNDERGOING SETTLEMENT.						Remarks.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing Settlement.		
Name of Tract.	Area in square miles.	Name of Tract.	Area in square miles.	In Forest Accounts.	In other Accounts.	
10	11	12	13	14	15	16
				Rs.	Rs.	
.....	
Mhasdi Pangan	$\frac{265}{640}$	...	...	...	...	Notification Nos. $\frac{10588}{8-10-15,}$ $\frac{12320}{19-11-15,}$
.....	...	Sargwi	$\frac{430}{640}$	...	...	Do. $\frac{6208}{21-6-15}$
.....	...	.....	$\frac{286}{640}$	...	...	4981 5920 370 2593 $\frac{4-5-15,}{5720}$ $\frac{24-5-15,}{9031}$ $\frac{12-1-15,}{11818}$ $\frac{7-3-15,}{1323}$ $\frac{24-5-15,}{}$ $\frac{29-8-15,}{}$ $\frac{29-10-15,}{}$ $\frac{8-12-15,}{}$
.....	$\frac{246}{640}$	.....	$\frac{45}{640}$	...	...	5721 9811 9812 9815 $\frac{24-5-15,}{9816}$ $\frac{14-9-15,}{10335}$ $\frac{14-9-15,}{5722}$ $\frac{14-9-15,}{5723}$ $\frac{14-9-15,}{11116}$ $\frac{28-9-15,}{10584}$ $\frac{24-5-15,}{1100}$ $\frac{24-5-15,}{}$ $\frac{19-10-15,}{}$ $\frac{7-10-15,}{}$ $\frac{3-3-15,}{}$
.....	
.....	
.....	$\frac{511}{640}$	.....	$\frac{121}{640}$	...	...
.....	
.....	
.....	
.....	
.....	$\frac{511}{640}$	.....	$\frac{121}{640}$	...	...

FORM No. 8.—Statement showing the Progress made in, and the

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	AREAS FINALLY SETTLED DURING THE YEAR.					
			Number and date of Government order according to final sanction to the Settlement.	Name of Forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
						In Forest Accounts.	In other Accounts.	
1	2	3	4	5	6	7	8	9
SOUTHERN CIRCLE.								
<i>Reserved Forest.</i>								
Kánara, Northern	Kánara ...	424	...	Area added by rectification of mistake.	231	...	...	...
	Kánara and Dhárwár. ...				640			
Do. Eastern.	Kánara ...	639	7742 & 5939 19-7-15 12-6-16	Do. ...	11	...	...	...
	Kánara and Dhárwár. ...				640			
Do. Central (New Division from 1-2-16).	Kánara ...	781	...	Katur and Pala...	7	...	...	...
Do. Southern	Do. ...	642	11317 26-10-16	Honawar Range ...	640	...	...	...
	Do. ...				17			
Do. Western	Do. ...	824	12978 1-12-16	Supa Range ...	1280	...	...	...
	Do. ...				160			
Belgaum ...	Belgaum ...	679	5830 & 5834 26-5-15 6087 8818 2-6-15 18-8-16 10615 & 10616 5-16-16 13328 3155 23-10-16 22-3-16 3447 28-3-16	Kánapur Ranges.	640	...	...	...
					1332			
Dhárwár ...	Dhárwár ...	497	6077 to 6079 12-3-15 10932 1803 13-10-15 16-2-16 9663 10-9-15	Dhárwár, Kalghatgi, Bankapur and Bagalkot Ranges	640	...	...	...
Bijápur ...	Bijápur ...				160			
Dhárwár Bijápur (New combined Division).	Dhárwár Bijápur (New combined Division).	19	5191 10-5-15	Dapoli ...	640	...	...	...
Ratnágiri ...	Ratnágiri ...				2			
Total, Reserved Forest ...		4,455	...	.....	271	...	...	...
<i>Protected Forest.</i>								
Kánara, Northern	Kánara ...	57	...	.....	...	...	...	...
	Kánara and Dhárwár. ...							
Do. Eastern.	Kánara ...	84	...	.....	...	...	...	...
	Kánara and Dhárwár. ...							
Do. Central (New Division from 1-2-16).	Kánara ...	265	...	.....	...	...	...	...
Do. Southern.	Do. ...	435	...	.....	...	...	...	...
	Do. ...							
Do. Western	Do. ...	530	...	.....	...	...	...	...
	Do. ...							
Belgaum ...	Belgaum ...	12	...	.....	...	...	...	...
Total, Protected Forest ...		103	...	.....	...	...	...	...
Total, Southern Circle ...		12	...	.....	271	...	...	...
		4,587	...	.....	640	...	...	...

Expenditure incurred on, Forest Settlements during 1915-1916—continued.

AREAS UNDERGOING SETTLEMENT.						Remarks.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing Settlement.		
Name of Tract.	Area in square miles.	Name of Tract.	Area in square miles.	In Forest Accounts.	In other Accounts.	
10	11	12	13	14	15	16
				Rs.	Rs.	Areas disforested during the year. Areas lost by rectification of errors in measurements and records.
.....	$\frac{76}{640}$	...	...	A. q. 21 8 A. q.
.....	$\frac{5100}{640}$	...	...	55 22 1 32
.....	$\frac{2}{640}$	...	...	27 12
.....	$\frac{91}{640}$	...	...	30 38
.....	$\frac{341}{640}$	...	...	51 14 7,843 0
.....	$\frac{64}{640}$	...	...	..... .....
.....	$\frac{272}{640}$	...	...	206 30
.....	
.....	$\frac{824}{640}$	...	...	* Areas as they stood after the readjustment of Divisions in the Kánara, Dhárwár and Bijápúr Districts as per G. O., R. D., No. 11396 27-10-15.
.....	
.....	
.....	
.....	
.....	0 5 896 0
.....	
.....	
.....	$\frac{824}{640}$	...	...

FORM No. 8.—Statement showing the Progress made in, and the

Name of Forest Division.	Name of Civil District or Territory.	Area already settled at commencement of the year.	AREAS FINALLY SETTLED DURING THE YEAR.					
			Number and date of Government order according to final sanction to the Settlement.	Name of Forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
						In Forest Accounts.	In other Accounts.	
1	2	3	4	5	6	7	8	9
SIND CIRCLE.		Sq. m.			Sq. m. a.	Rs.	Rs.	Rs.
Sukkur	Sukkur and Upper Sind Frontier.	443	11631 2-11-15	Deh Cheto Loi ..	$0\frac{300}{640}$	...	...	...
			Do.	Deh Boung ..	$1\frac{484}{640}$			
			1101 29-11-16	Deh Adilpur Bag, Mahi Chok Kaz, Shapwad Badal. }	$0\frac{135}{640}$			
			3158 22-3-16	Dubaru ..	$0\frac{74}{640}$			
				Deh Machi ..	$0\frac{25}{640}$			
			11549 30-10-15	Kacho Belo Gondak.	$4\frac{224}{640}$			
				Kacho Sundrane ..	$4\frac{103}{640}$			
	Total ...	443	...	.....	$11\frac{68}{640}$	...	...	...
Larkana ..	Sukkur, Larkana and Nawabshah.	228	...	.....	...	...	...	...
	Total ...	228	...	.....	...	...	...	...
Hyderabad ..	Hyderabad, Karachi and Nawabshah.	249	...	.....	...	...	...	...
	Total ...	249	...	.....	...	...	...	...
Jerruck	Karachi and Hyderabad.	230	...	.....	...	...	...	...
	Total ...	230	...	.....	...	...	...	...
	Total, Sind Circle ...	1,150	...	.....	$11\frac{68}{640}$	...	...	...
	GRAND TOTAL ...	$15,023\frac{12}{640}$	...	.....	$15\frac{521}{640}$	...	...	...

Expenditure incurred on, Forest Settlements during 1915-1916—concluded.

AREAS UNDERGOING SETTLEMENT.						Remarks.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing Settlement.		
Name of Tract.	Area in square miles.	Name of Tract.	Area in square miles.	In Forest Accounts.	In other Accounts.	
10	11	12	13	14	15	16
Shikárpur Táluka	2 $\frac{140}{640}$	Rs.	Rs.	The difference of four acres is due to the area shown in the notification published under sections 4 and 19 of the Indian Forest Act.
Ghotki Táluka	0 $\frac{133}{640}$			...	...
Rohri Táluka	0 $\frac{74}{640}$					
Pano Akil Táluka	0 $\frac{25}{640}$					
Kashmore Táluka	8 $\frac{330}{640}$					
.....	*11 $\frac{64}{640}$	.....	...	...	...
Mehar Táluka	0 $\frac{2}{640}$	.....	...	...	...
.....	0 $\frac{2}{640}$	.....	...	...	...
Hyderabad Táluka	*0 $\frac{197}{640}$	Deh Jhirki Táluka Hala.	0 $\frac{9}{640}$	...	...
Hala Táluka	0 $\frac{140}{640}$					
Kotri Táluka	0 $\frac{329}{640}$					
.....	1 $\frac{38}{640}$	.....	0 $\frac{9}{640}$	...	...
.....	
.....	
.....	12 $\frac{93}{640}$	.....	0 $\frac{9}{640}$	...	...
.....	12 $\frac{603}{640}$	.....	9 $\frac{134}{640}$	...	...

| * In Deh Shah Bukari Táluka Hyderabad 32 acres were notified under section 4 of the India Forest Act, vide Government Resolution No. 3567 of 4th April 1908, Revenue Department. On further enquiry it was found that this area originally belonged to Deh Gundi which after the Revision Survey was numbered Survey number 351 and 352 of Deh Shah Bukhari and was wrongly re-notified under section 4 of the Indian Forest Act. | | | | | |
| The area cannot therefore be stated to be awaiting settlement under section 19, and is therefore dropped. | | | | | |

FORM No. 9.—*Record of Demarcation and Maintenance of Boundaries, 1915-1916.*

Division.	Length of Boundaries artificially demarcated during the year.	Length of previously existing Boundaries repaired.	Length of previously existing Boundaries not repaired.	Total length of artificially marked Boundaries at the close of the year.	Length of Boundaries still to be demarcated at the close of the year.	Length of natural Boundaries not requiring artificial marks.	Total length of Boundaries at the close of the year.	EXPENDITURE ON DEMARCATION DURING THE YEAR.		Remarks.
								On new work.	On repairs.	
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs. a. p.	Rs. a. p.	
Fanch Mahals	.....	3	956	959	.....	101	1,060	.....	6 0 0	
Burat	.....	835	.....	835	.....	103	938	.....	131 0 0	
North Thána	.....	968	.....	968	.....	19	987	.....	877 0 0	
Central Thána	.....	875	.....	875	.....	114	989	.....	423 0 0	
South Thána	.....	888	.....	888	.....	59	957	.....	223 0 0	
North Násik	20	21	2,632	2,673	109	231	3,013	162 0 0	48 0 0	
South Násik	.....	3	1,167	1,170	1	91	1,262	.....	196 0 0	
Total, Northern Circle	20	3,603	4,755	6,378	109	719	9,205	162 0 0	1,947 0 0	
CENTRAL CIRCLE.										
East Khándesh	.....	2,183	.....	2,183	.....	107	3,290	.....	255 0 0	
West Khándesh	48	769	.....	817	26	67	910	192 0 0	301 0 0	74 miles of boundaries of the lands to be afforested in Nawapur and Nandurbar Ranges having been added during the year.
North Khándesh	.....	309	.....	309	.....	52	361	.....	387 0 0	
Pojra	38	5	3,713	3,756	658	615	5,029	400 0 0	429 0 0	
Sátara	.....	4	4,250	4,254	.....	80	4,334	.....	480 0 0	
Kaláha	135	1,661	.....	1,796	162	72	2,030*	2,021 0 0	709 0 0	
Total, Central Circle	221	4,031	7,963	18,115	846	993	14,954	2,613 0 0	2,561 0 0	
SOUTHERN CIRCLE.										
*Kánara, Northern	.....	1	622	623	.....	14	637	.....	16 0 0	* The difference between the last and this year's figures is due to rectification.
Do. Eastern	.....	25	1,538	1,563	.....	31	1,594	.....	148 0 0	
Do. Central	.....	.....	2,801	2,804	.....	108	3,912	.....	.....	Rs. 85-10-0 shown under A VIII-a is on account of demarcation of bettas and clearing working planlines.

FORM No. 9.—Record of Demarcation and Maintenance of Boundaries, 1915-1916—concluded.

Division.	Length of Boundaries artificially demarcated during the year.	Length of previously existing Boundaries repaired.	Length of previously existing Boundaries not repaired.	Total length of artificially marked Boundaries at the close of the year.	Length of Boundaries still to be demarcated at the close of the year.	Length of natural Boundaries not requiring artificial marks.	Total length of Boundaries at the close of the year.	EXPENDITURE ON DEMARCATION DURING THE YEAR.		Remarks.
								On new work.	On repairs.	
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE—concluded.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Rs. a. p.	Rs. a. p.	
Kánara, Southern ...	1,040	.....	2,900	3,940	.....	100	4,040	1,682 0 0	.....	Does not include Rs. 71-4-4 on account of Surveyor's contingencies.
Do. Western ...	15	.....	1,707	1,812	48	152	2,012	769 0 0	.....
Belgaum ...	11	47	1,710	1,769	120	141	2,029	269 0 0	504 0 0	Excludes charges for quarrying, carriage of demarcation stones, wages of surveyor's orderlies, carriage of surveyor's kit, etc., viz., Rs. 438-0-0.
*Dhárwār-Bijápúr.	2	593	630	1,215	8	20	1,252	24 0 0	30 0 0	
(New Combined Division.)										
Batnágiri ...	.....	.....	140	140	.....	70	210	.....	.....
Total, Southern Circle ...	1,068	656	13,141	14,865	176	645	15,636	2,743 0 0	698 0 0	
SIND CIRCLE.	Miles. ft.	Miles. ft.	Miles.	Miles. ft.	Miles.	Miles. ft.	Miles. ft.			
Sukkur ...	16 1,804	911 1,537	.....	927 3,841	.....	180 3,364	1,108 1,425	.....	.....
Lárkána ...	8 3,690	497 2,587	.....	506 1,267	.....	77 1,184	583 2,451	.....	.....
Hyderabad ...	4 1,606	342 2,444	.....	346 4,140	.....	184 2,559	581 1,419	.....	.....
Jerruck ...	4 3,060	283 3,377	.....	287 2,057	.....	106 438	483 2,405	.....	.....
Total, Sind Circle ...	34 860	2,033 4,665	.....	2,063 245	.....	438 2,265	2,706 2,510	.....	.....
GRAND TOTAL ...	1,343 860	11,223 4,665	25,659	38,423 245	1,131	3,994 2,365	42,551 2,510	5,518 0 0	5,206 0 0	

* (As re-adjusted on 1st February 1916 as per Government Order, Revenue Department, No. 11396 of 27th October 1915.)

FORM No. 10.—Statement of Forest Areas Surveyed and

AREAS SURVEYED AND UNDER SURVEY

AREAS SURVEYED AND UNDER SURVEY.																
Division.	SPECIAL SURVEYS—MAPS ON 4" SCALE OR OVER, BY SURVEY OF INDIA DEPARTMENT OF FOREST SURVEY BRANCH.									ORDINARY, INCLUDED IN DISTRICT SURVEYS.						
	With Interior Details.					Boundary Surveys.				With Interior Details.				Boundary Surveys.		
	With details of Growing Stock.		Without details of Growing Stock.		Total cost.	Previous.	Of the year.	Total Cost.	With details of Growing Stock.		Without details of Growing Stock.		Total Cost.	Previous.	Of the year.	Total Cost.
	Pre-vious.	Of the year.	Pre-vious.	Of the year.					Pre-vious.	Of the year.	Pre-vious.	Of the year.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs. a. p.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.
NORTHERN CIRCLE.																
Panch Mahals
Surat
North Thana
Central Thana
South Thana
South Nasik
North Nasik
Ahmedabad
Total, Northern Circle
CENTRAL CIRCLE.																
Reserved Forest.																
East Khândesh	229	...	...	...	...	...	...	...	497	10	Not known	...	27	...
West Khândesh	676	...	...	...	...	...	...	...	1	...	...	96	...	...
North Khândesh	645	...	...	...	...	...	...	...	...	...	...	...	...	...
Poona	525	...	...	...	...	...	...	...	...	...	...	...	...	...
Sâtara	530	...	...	...	...	...	...	...	...	...	...	...	...	...
Kolaba	450	...	...	...	...	...	...	...	...	...	...	...	...	...
Nagar & Sholapur	737	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	3,792	...	...	...	...	...	...	...	498	10	...	96	27	...
Protected Forest.																
Sâtara	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Kolaba	74	...	...	...	...	...	...	...	...	...	...	...	...	...
Poona	11	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	86	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Central Circle	3,878	...	...	...	...	...	...	...	499	10	...	96	27	...
SOUTHERN CIRCLE.																
Kânara, Northern
„ Eastern
„ Central
Kânara, Southern
„ Western.
Belgaum
Dhârwar—Bijapur
Ratnâgiri
Total, Southern Circle
SIND CIRCLE.																
Sukkur
Larkana
Hyderabad
Jerruck
Total, Sind Circle
GRAND TOTAL	3,878	...	...	...	...	...	...	...	498	10	...	96	27	...

under Survey during the year 1915-1916.

DURING THE YEAR.										COST.			Remarks.	
CHAIN AND COMPASS OR OTHER SURVEYS BY LOCAL OFFICERS.										Total Forest area at end of the year as per Forms Nos. 7 & 7A.	Previous.	Of the year.		Entire cost of all surveys to end of the year.
With Interior Details.				Boundary Surveys.			Areas remaining to be taken under Survey.							
4-inch or over.		Under 4-inch.		Total Cost.	Previous.	Of the year.		Total Cost.						
Pre-vious.	Of the year.	Pre-vious.	Of the year.											
Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs. a. p.	Rs. a. p.	Rs. a. p.		
...	332	...	...	...
...	737	...	...	...
...	431	...	...	...
...	471	...	...	...
...	435	...	...	...
...	718	...	...	...
...	591	...	...	...
...	19	...	...	...
...	3,834	...	...	...
...	37	800	24,084 0 0	Nil	24,084 0 0		
...	773	63,694 0 0		63,694 0 0		
...	223	868	1,371 0 0		1,371 0 0		
...	494	1,010	1,11,293 0 0		1,11,293 0 0		
...	181	711	62,593 0 0		62,593 0 0		
...	450	Nil		Nil	Not known.	
...	41	730	91,230 0 0		91,230 0 0		
...	906	5,351	3,54,233 0 0 *7,085 0 0 3,61,323 0 0		3,54,233 0 0 *7,085 0 0 3,61,323 0 0		
...	1	...		...
...	74	...		...
...	11	...		...
...	80	...		...
...	909	5,437	3,61,323 0 0		3,61,323 0 0		
...	3,392	3,90,231 0 0		3,90,231 0 0		
...	680	57,104 0 0		57,104 0 0		
...	276	497	15,208 0 0		15,208 0 0		
...	19	531 0 0		531 0 0		
...	276	4,588	4,63,184 0 0		4,63,184 0 0		
...	455	...		...
...	232	...		...
...	214	...		...
...	229	...		11,937 0 0		
652	9,005	209	...	2,002	...	1,160	...		11,937 0 0		
652	9,005	208	...	2,002	...	1,160	...		...
652	9,005	205	...	2,002	1,242	15 19	82,1507 0 0		82,1507 0 0		

* Represents cost of arrear mapping and cannot conveniently be distributed among the several Divisions, including South and North N.E. & S.W.

Form No. 11.—Progress made in Working Plans, 1915-1916.

Division,	AREA UNDER SANCTIONED WORKING PLANS.					AREA NOT UNDER WORKING PLANS.			Total forest area in Form No. 7 (Total of columns 5, 7, 8 and 9)	REVISIONS.			Expenditure on Working Plans during the year.	Remarks.
	At commencement of year.	Added during year.	Deducted during year.	At close of year.		Plans under preparation.	Plans not under preparation.			Due or required.	In progress at end of year.	Revised Plans sanctioned during year.		
				Actual area.	Percentage of total forest area (as shown in column 10).		Required present.	Not required at present.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Percent.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
Panch Mahals	332	...	...	332	100	...	...	...	332	333	114	...	2,393 12 5	
Surat	69	...	...	69	100	...	...	...	69	...	...	...
North Thana	335	...	...	335	100	...	...	...	335	335	335	...		
Central Thana	369	...	...	369	99	...	...	4	373	369	369	...		
South Thana	331	...	...	331	97	...	1	0	341	331	331	...		
North Nasik	467	...	...	467	65	...	...	236	703	467	...	...	57 0 0	
South Nasik	381	...	...	381	85	...	...	60	450	381	...	...	112 3 0	
Total	2,284	...	...	2,284	88	...	1	318	2,603	2,215	1,149	...	2,562 15 5	
Surat (Dangs)	158	...	...	158	24	230	1	206	655	...	...	...	1,752 9 7	
Grand Total	2,442	...	...	2,442	75	230	2	584	3,253*	2,215	1,149	...	4,315 9 0	* This is exclusive of 576 square miles of area in charge of the Revenue Department shown in Form No. 7.

FORM NO. 11—Progress made in Working Plans, 1915-1916—continued.

Division.	AREA UNDER SANCTIONED WORKING PLANS.					AREA NOT UNDER WORKING PLANS.				Total forest area in Form No. 7 (Total of col. nos. 5, 7, 8 and 9).	REVISIONS.			Expenditure on Working Plans during the year.	Remarks.
	At commencement of the year.	Added during the year.	Deducted during the year.	At close of year.		Plans under preparation.	Plans not under preparation.								
				Actual area.	Per centage of total forest area (as shown in column 10).		Required at present.	Not required at present.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
CENTRAL CIRCLE.															
East Khándesh	Sq. m. 749	Sq. m. ...	Sq. m. ...	Sq. m. 749	Sq. m. 98.2	Sq. m. ...	Sq. m. ...	Sq. m. 15	Sq. m. 764	Sq. m. ...	Sq. m. 400	Sq. m. 14	Rs. a. p. ...	*Chopda, Yawal, Raver, W. P. & 4 square miles. †Transpura Bahad Working Plan 6 square miles.	
West Khándesh	180	...	...	180	33.3	...	151	265	590	50	...	...	...	...
North Khándesh	564	...	...	564	84.9	...	304	...	868	4.3	...	...	...	...
Poona	292	40	4	328	57.2	...	13	233	573	203	169	...	...	*New W. P. of Mutal Do. Sub-Office ... 3 †Pasture handed over to Revenue Department ... 87 Disforested area ... 4 4.1
Sátara	64	...	...	64	12.2	197.2	...	354.8	516	...	...	...	...	†Wg. Plan of Sátara, Wal, etc.
Kolába	416.2	...	...	416.2	98.8	...	...	4.8	431	...	...	...	...	Honoraria Rs. 144.6.2 paid for the preparation of working Working Plan 2 square miles.
Total, Central Circle..	2,265.2	40	4	2,301.2	62.4	97.2	467	572.6	(b) 3,738*	745	639	4	...	* This is exclusive of 1,608 square miles of area in charge of the Revenue Department shown in Form No. 7.	
SOUTHERN CIRCLE.															
Kánara, Northern	350	...	...	350	82.6	42	...	32	421	174	61	(a) 7	...	(a) Plan for Block VII a Special allowance at Rs. 100 per man—total Rs. 210—was granted to the Divisional Forest Officer, Working Plan, for compiling this Plan.
Kánara, Eastern	331	...	...	331	51.4	78	...	235	614	...	167	...	5,805 0 0	(b) Block XIX of Ankola and Kumbha included in Chandawar Plan but administered by Central Division.
Kánara, Central	224	...	...	224	28.7	1	104	4.0	779	...	26	(b) 2	5,805 0 0	(c) New plan for Chandawar.
Kánara, Southern	61	(c) 10	...	71	10.0	97	...	540	708	...	...	...	...	(d) Nagaryall High Forest Plan—Rs. 2,000 honorarium was granted to the Divisional Forest Officer, Belgaum, for the compilation of this revised plan.
Kánara, Western	258	...	...	258	30.8	...	...	570	817	...	...	...	...
Belgaum	182	...	...	182	26.7	453	...	45	680	168	168	(d) 14	12 0 0	
Dhárwar, Bijápur	...	...	...	...	...	15	276	236	497	...	...	...	...
Ratnágiri	...	...	...	...	...	...	...	19	19	...	...	...	...
Total, Southern Circle.	(c) 1,406	10	...	1,416	30.9	689	380	2,106	4,598	842	442	33	11,622 0 0	(e) Includes 4 square miles less shown in column 3 last year against Kánara Northern and Eastern Divisions.	
SIND CIRCLE.															
Sukkur	Sq. m. ac. 420 464	Sq. m. ac. ...	Sq. m. ac. 40 567	Sq. m. ac. 419 517	92.23	...	Sq. m. ac. 12 332 10 685 18 277	Sq. m. ac. 21 571	Sq. m. ac. 435 115	Sq. m. ac. 433 164	Sq. m. ac. ...	Sq. m. ac. ...	...	*Disforested †Area of protected forest. Area reserved under section 19 of the Indian Forest Act. Last year's ... 1,208 This year ... 1,167 12,831
Lárkána	202 178	...	...	202 178	87.0	...	4 41	25 215	231 485	231 475	...	...	...
Hyderabad	225 142	...	...	225 142	9.11	...	7 425	11 399	248 316	...	235 563	...	5,092 0 0	
Jerruck	228 243	...	2 002	225 281	06.5	...	...	3 219	228 500	...	...	228 212	...	
Total, Sind Circle	1,076 385	...	3 519	1,072 506	92.47	...	25 106	63 114	1,100,0.6	654 619	225 563	228 212	5,092 0 0		
GRAND TOTAL	7,189 513	50	7 519	7,231 634	59.1	1,013.2	574 106	3,624 426	12,744 96	3,936 619	2,365 563	256 243	21,622 0 0	* This is exclusive of areas in Northern and Central Circles in charge of the Revenue Department shown in Form No. 7.	

Division.	NEW WORKS UNDERTAKEN DURING THE YEAR.						
	Buildings.		Roads and Paths.			Other Works.	Total expended on New Works.
	Description of Building.	Expenditure incurred.	Description of Road or Path.	Length of Road or Path.	Expenditure incurred.	Expenditure incurred.	
1	2	3	4	5	6	7	8
NORTHERN CIRCLE.							
Panch Mahals ...	.....	.....	.....	.....	.....	58 0 0	58 0 0
	Total ...					58 0 0	58 0 0
Surat ...	Completion of Depot at Fort Sorgad ... Additional Ward to Ahwa Hospital ... Halt shed at Godad ...	1,000 500 500	Cart roads ...	15	10,500 0 0	480 0 0	12,980 0 0
	Total ...	2,000		15	10,500 0 0	480 0 0	12,980 0 0
North Thana ...	Houses for Forest Subordinates ...	35	.....	.....	.....	.....	35 0 0
Centra Thana ...	.....	.....	.....	.....	.....	.....	.....
South Thana ...	Houses for Forest Subordinates ...	2,158	.....	.....	.....	.....	2,158 0 0
South Nasik ...	.....	.....	Cart roads ...	.....	507 0 0	.....	507 0 0
North Nasik ...	.....	.....	.....	.....	.....	.....	.....
	Total, Northern Circle ...	4,193		15	11,007 0 0	538 0 0	15,738 0 0
CENTRAL CIRCLE.							
East Khândesh ...	Nil ...	.....	Nil ...	.....	.....	.....	.....
	Total ...	.....		.....	.....	.....	.....

and Buildings during 1915-1916.

REPAIRS EXECUTED DURING THE YEAR.							Remarks.
Buildings.		Roads and Paths.			Other Works.	Total expended for Repairs.	
Description of Building.	Expenditure incurred.	Description of Road or Path.	Length repaired.	Expenditure incurred.	Expenditure incurred.		
9	10	11	12	13	14	15	16
	Rs.		Miles.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Divisional Forest Officer's bungalow.	87	Cart tracks ...	4	15 0 0	160 0 0	457 0 0	
Houses for Forest Subordinates ...	195						
	282		4	15 0 0	160 0 0	457 0 0	
Additions and repairs to:— Excise Inspectors' Bungalow, Rangers quarters, Police quarters, Police Line and Rest House.	5,139	Cart roads ...	127	5,055 0 0	378 0 0	10,572 0 0	
	5,139		127	5,055 0 0	378 0 0	10,572 0 0	
Houses for Forest Subordinates ...	575	Cart tracks ...	12	298 0 0	.....	873 0 0	
Do. do. ...	302	Do. ...	...	1,197 0 0	20 0 0	1,519 0 0	
Do. do. ...	80	Do. ...	...	48 0 0	30 0 0	158 0 0	
Do. do. ...	187	Do. ...	8	297 0 0	.....	484 0 0	
Do. do. ...	5	.....	...	.....	.....	5 0 0	
	6,570		151	6,910 0 0	588 0 0	14,068 0 0	Plus Rs. 1,100 paid to the Public Works Department as contribution for the maintenance of Goldart Road.
Repairs to Forest Guards' hut and quarters in the following Ranges:—	Rs.	Repairs to roads and paths in the following Ranges.					
Chálisgaon	58	Chopda . 406	47				
Chopda	13	Yáwal . 277	33				
Jamner	23	Ráver ... 538	14				
Ráver	44			1,221			
Yáwal	108						
	243						
Repairs to Depôts in the following Ranges:—	Rs.						
Chálisgaon	10						
Chopda	120						
Yáwal	91						
Ráver	138						
	349						
	595		94	1,221 0 0	.....	14,068 0 0	

Division.	NEW WORKS UNDERTAKEN DURING THE YEAR.						
	Buildings.		Roads and Paths.			Other Works.	Total expended on New Works.
	Description of Building.	Expenditure incurred.	Description of Road or Path.	Length of Road or Path.	Expenditure incurred.	Expenditure incurred.	
1	2	3	4	5	6	7	8
CENTRAL CIRCLE—contd.		Rs.		Miles.	Rs.	Rs.	Rs.
West Khândesh.	Building at Harpada completed ...	218	Naw&pur Depôt road completed 4½ furlongs.		625		
	Do. at Narayanpur completed ...	200					
	Well at Chinchpada ... ..			.....	.....	150	
	Well at Nawapur ... ..			.....	.....	25	
	Total ...	418		.....	625	175	1,218
North Khândesh.	Forest Guards' quarters completed in Taloda range.	326	Continuation of Hisala-Bhoiti road in Shirpur East Range—	1	792		
			Continuation of Wasardi-Bhurki road in Shirpur West Range—	4	778		
	Total ...	326		5	1,570	.....	1,896

and Buildings during 1915-1916—continued.

REPAIRS EXECUTED DURING THE YEAR.							Remarks.
Buildings.		Roads and Paths.			Other Works.	Total expended for repairs.	
Description of Building.	Expenditure incurred.	Description of Road or Path.	Length repaired.	Expenditure incurred.	Expenditure incurred.		
9	10	11	12	13	14	15	16
	Rs.		Miles.	Rs.	Rs.	Rs.	
Repairs to Guards' posts and huts—		Repairs to a Kalambari road.	1	104	.....	.....
Rs.		Repairs to a Borzar Charanmal road.	2	69	.....	.....
Dhaner 11							
Narayanpur Nanchol & Co. 193							
Hutti 69							
Borchak 20							
Umarpata 52							
Jambhore 32							
	377						
Repairs to a Depôts at—							
Chinchpada 40	40						
	417		3	178	.....	590	
Akrani Range—Repairs to huts for Government bulls.	5	Repairs to foot-paths to the Akrani Range.	88	231	.....	.....
Akrani Range—Repairs to Toramal bungalow.	9	Do. from Ranipur to Kalpani and Ujld to Malgaon in Shahada Range.	16	92	.....	.....
Forest Guards' Talatis' and Range Forest Officer's quarters in the following Ranges.		Repairs to Kothar-Chanseli road in the Taloda Range.	5	401	.....	.....
Rs.							
Akrani 41							
Shahada 18							
Shirpur, East 111							
Do. West 156							
Taloda 242	568						
Repairs to Depôts in the following Ranges:—							
Rs.							
Shahada 26							
Shirpur, East 1							
Do. West 26							
Taloda 20	73						
	655		109	724	.....	1,379	

and Buildings during 1915-1916—continued.

REPAIRS EXECUTED DURING THE YEAR.							Remarks.
Buildings.		Roads and Paths.			Other Works.	Total expended for Repairs.	
Description of Building.	Expenditure incurred.	Description of Roads or Path.	Length repaired.	Expenditure incurred.	Expenditure incurred.		
9	10	11	12	13	14		
Rs.			Miles.	Rs.	Rs.	Rs.	
Repairs to bungalows in the following Ranges:—		Repairs to roads and bridge paths in the following Ranges:—					
Vite bungalow in Akola Range.	95	Akola Range—	2	31	
Bhimashankar bungalow in Ambegaon Range.	105	Mchanduri Sharan Khel.	...	10	
Ambavne bungalow in Mulshi Range	7	Ambegaon Range—Bhimashankar bridge path.	9	230	
Hivre bungalow in Junnar Range	20	Khed Range—Bhimashankar bridge path.	10	230	
Repairs to Forest Guards' posts in the following Ranges:—		Lonawla Range—Kusur Shive.	10	230	
Haveli	3	Lonawla Range—Thorani Valwande Panglote.	16	275	
Junnar	5	Lonawla Range—Jambholi bridge path.	5	42	
Lonawla	10	Mawal Range—Bhimashankar, Vandra, Lonawla, Bhimashankar, bridge paths.	42	881	1,182	
Mawal	20	Rajur Range—Shirpurje Budruk to Khurd and Talegaon to Ambit paths.	38	1,947	2,376	
Rajur	25		7	85	411	
			7	85	411	
Repairs to Depôts at Taleghar in Ambegaon Range.			203	5,034	124	7,754	
			42	881	1,182	
Repairs to existing building as under:—		Repairs to already constructed portions of the following roads:—					
Jawli	33	Vang Valley and Kona Valley roads.	38	1,947	2,376	
Mahableshwar	90		124	
Patan	126						
Satara	21						
Shirala	35						
Deepening of wells as under:—		Repairs to following roads:—					
Karad and Patan		Diwanmal road and Band Tivre road, in Nagothne and Dapoli Ranges.	7	85	411	
			7	85	411	
Repairs to Forest posts such as whitewashing, turning tiles, etc.			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
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			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
			203	5,034	124	7,754	
			2				

Division.	NEW WORKS UNDERTAKEN DURING THE YEAR.						
	Buildings.		Roads and Paths.			Other Works.	Total Expend- ed on New Works.
	Description of Building.	Expenditure incurred.	Description of Road or Path.	Length of Road or Path.	Expenditure incurred.	Expenditure incurred.	
1	2	3	4	5	6	7	8
SOUTHERN CIRCLE.		Rs.		Miles.	Rs.	Rs.	Rs.
*Kánara, Northern...	Houses for Subordinate Establishment .	120	Cycle paths ...	13	130	.....	.....
	Total ...	120		13	130	.....	250
*Kánara, Eastern...	Houses for Subordinate Establishment .	579	Cart roads ...	7	507	.....	.....
			Cycle paths ...	14	32	119	.....
			Other works ...	.....	.....	.....	.....
	Total ...	579		21	539	119	1,237
*Kánara Central (New Division).	Head-quarter houses ...	2,450	.....	.....	.....	.....	.....
	Total ...	2,450		.....	.....	.....	2,450
Kánara, Southern ...	Houses for Subordinate Establishment .	582	Cart roads ...	5	1,819	.....	.....
			Other works ...	.....	.....	110	.....
	Total ...	582		5	1,819	110	2,511
Kánara, Western ...	Rest-houses ...	748	Cart roads ...	6	3,748	.....	.....
	Houses for Subordinate Establishment .	546	Cycle paths ...	5	71	.....	.....
			Other works ...	.....	.....	29	.....
	Total ...	1,294		11	3,817	29	5,140
Belgaum ...	Head-quarter houses ...	1,638	Bridges over cart	.....	6,253	.....	.....
	Rest-houses ...	5,125	roads.	.....	.....	.....	.....
	Houses for Subordinate Establishment .	300	Cycle paths ...	82	288	.....	.....
			Other works ...	.....	.....	135	.....
	Total ...	7,063		32	6,541	135	13,739
Dhárwar-Bijápur...	Houses for Subordinate Establishment .	351	.....	.....	.....	.....	.....
	Total ...	351		.....	.....	.....	351
Ratnágiri ...	.....	.....	.....	.....	.....	.....	.....
	Total, Southern Circle ..	12,439		82	12,846	398	25,678

* (As readjusted on 1st February 1916 as per Government Order, Revenue Department, No. 11396, dated 27th October 1915.)

and Buildings during 1915-1916—continued.

REPAIRS EXECUTED DURING THE YEAR.							Remarks.
Buildings.		Roads and Paths.			Other Works.	Total expended for repairs.	
Description of Building.	Expenditure incurred.	Description of Road or Path.	Length repaired.	Expenditure incurred.	Expenditure incurred.		
9	10	11	12	13	14	15	16
	Rs.		Miles.	Rs.	Rs.	Rs.	
Head-quarter houses	156	Cart roads ...	70	8,913	.....	.....	The following have been excluded:— (a) Contribution for repairs of Local Board Roads Rs. 5,000. (b) Rent of telephone line Rs. 400.
Rest-houses	190	Other works ...	...	.....	278	.....
Houses for Subordinate Establishment.	704						
	990		70	8,813	278	10,081	(c) Pay, etc., of the Executive Engineer on Special duty Rs. 2,733.
Head-quarter houses and houses for Subordinate Establishment.	708	Cart roads ...	100	5,977	.....	.....
		Other works ...	...	.....	474	.....
	708		100	5,977	474	7,159	
Head-quarter house	150	Cart roads ...	6	451	.....	.....	Exclusive of the pay of bungalow Peons Rs. 69-1-7.
		Other works ...	...	.....	223	.....
	150		6	451	223	824	
Head-quarter houses and houses for Subordinate Establishment.	469	Cart roads ...	8	243	.....	.....
		Other works ...	...	...	45	.....
	469		8	243	45	757	
Head-quarter houses and houses for Subordinate Establishment.	678	Cart roads ...	...	684	.....	.....	Items excluded:— (a) Contribution for repairs of Local Board Road Rs. 5,000. (b) Pay of temporary Establishment on Roads Rs. 257. (c) Pay of temporary Establishment on building Rs. 385.
		Other works ...	...	.....	154	.....
	678		...	684	154	1,516	
Head-quarter houses	156	Cart roads ...	66	9,398	.....	.....	Rs. 41 spent on purchase and repairs of tools have been excluded.
Rest-houses	390	Other works ...	...	.....	32	.....
Houses for Subordinate Establishment.	354						
	900		66	9,398	32	10,330	
Houses for Subordinate Establishment.	222	Cart road ...	2	1,204	.....	.....
		Other works ...	...	.....	14	.....
	222		2	1,204	14	1,440	
Houses for Subordinate Establishment.	10	.....	...	.....	.....	10	
	4,127		252	26,770	1,220	32,117	

Division.	NEW WORKS UNDERTAKEN DURING THE YEAR.						
	Buildings.		Roads and Paths.			Other Works.	Total expended on New Works.
	Description of Building.	Expenditure incurred.	Description of Road or Path.	Length of Road or Path.	Expenditure incurred.	Expenditure incurred.	
1	2	3	4	5	6	7	8
SIND CIRCLE.		Rs. a. p.		Miles.	Rs.	Rs. a. p.	Rs. a. p.
Sukkur ...	Purchase of land for the Range Forest Officer's office and quarters at Rohri.	204 3 0	.....	.....	.....	.....	420 13 0
	Construction of pucca brick floor to the Banger's quarters at Mirpur.	192 0 0					
	Other petty works	24 10 0					
	Total ...	420 13 0		.....	.....	.....	420 13 0
Larkana ..	Construction of single house at Gajidero.	182 0 0	Cutting of roads and in Sharifpur Forest.	3½	42	63 0 0	443 6 0
	Purchase of land for Range Forest Officer's office and quarters at Kamaldero.	200 0 0	Cutting of compartment lines in Mithiani forest.	5	100		
	Purchase of kacha bricks and sawing of timber for Bakhri house.	76 6 0	Cutting of roads and paths in Soi forest.	4	40		
			Cutting of roads and paths in Bagi forest.	4	40		
	Total ...	458 6 0		16½	222	63 0 0	743 6 0
Hyderabad	Nil	.....	Nil	.....	.....	.....	.....
	Total ...	.....		.....	.....	.....	.....
Berruck ...	.....	.....	.....	.....	.....	74 12 2	74 12 2
	Total ...	.....		.....	.....	74 12 2	74 12 2
	Total, Sind Circle ...	879 3 0		16½	222	137 12 2	1,238 15 2
	Grand Total ...	19,305 3 0		131½	27,318	1,243 12 2	47,766 15 2

and Buildings during 1915-1916—concluded.

REPAIRS EXECUTED DURING THE YEAR.							Remarks.
Buildings.		Roads and Paths.			Other Works.	Total expended for Repairs.	
Description of Building.	Expenditure incurred.	Description of Road or Path.	Length repaired.	Expenditure incurred.	Expenditure incurred.		
9	10	11	12	13	14	15	16
Repairs to Inspection bungalow and houses for Forest Subordinates.	Rs. s. p. 863 8 9	.....	Miles. ...	Rs.	Rs. s. p. 404 8 0	Rs. s. p. 1,208 0 9	
	863 8 9		...	.....	404 8 0	1,208 0 9	
Repairs to houses for Forest Subordinates.	583 7 10	.....	...	.....	164 8 2	748 0 0	
	583 7 10		...	.....	164 8 2	748 0 0	
Repairs to Inspection bungalow and houses for Forest Subordinates.	575 4 5	.....	...	.....	506 0 5	1,081 4 10	
	575 4 5		...	.....	506 0 5	1,081 4 10	
Repairs to houses for Forest Subordinates.	294 1 5	.....	...	.....	1,250 15 11	1,545 1 4	
	294 1 5		...	.....	1,250 15 11	1,545 1 4	
	2,316 6 5		...	.....	2,326 0 6	4,642 6 11	
	15,609 6 5		716	38,714	4,258 0 6	58,581 6 11	

FORM NO. 13.—Prosecutions for breaches of Forest Rules during 1915-1916.

Forest Division.	Cases pending from 1913-1915.	NEW CASES OF THE YEAR.					Total cases.	DISPOSED OF DURING THE YEAR.						Cases pending at close of year.	Cases withdrawn.	
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.				
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
NORTHERN CIRCLE.																
Panch Mahals ...	(A) ...	5	5	2	10	...	17	22	17	32	1	2	18	34	4	...
	(B) ...	117	7	571	853	76	1,507	1,624	1,491	3,151	...	...	1,491	3,151	133	...
	(C) ...	...	43	275	1	6	325	325	...	...	...	...	325	...	...	...
Total ...		122	55	848	864	82	1,849	1,971	1,508	3,183	1	2	1,834	3,185	137	...
Surat ...	(A) ...	1	4	2	...	...	6	7	2	2	1	1	3	3	4	...
	(B) ...	9	4	19	20	8	51	60	54	108	...	...	54	108	6	...
	(C) ...	...	4	1	...	2	7	7	...	...	...	...	7	...	...	...
Total ...		10	12	22	20	10	64	74	56	110	1	1	64	111	10	...
North Thána ...	(A) ...	1	1	13	1	1	16	17	10	17	...	...	10	17	7	...
	(B) ...	57	4	142	197	31	374	431	356	708	...	...	356	708	75	...
	(C) ...	...	57	135	...	2	194	194	...	...	...	...	194	...	...	...
Total ...		58	62	290	198	34	584	642	366	725	...	...	560	725	82	...
Central Thána ...	(A) ...	(a) 8	6	2	7	1	16	19	15	40	2	20	17	60	2	...
	(B) ...	1	1	209	235	31	476	477	477	1,004	...	...	477	1,004	...	...
	(C) ...	...	53	82	...	1	136	136	...	...	...	...	136	...	...	...
Total ...		4	60	293	242	33	628	632	492	1,044	2	20	630	1,064	2	...
South Thána ...	(A) ...	(b) 14	1	11	12	4	28	42	33	75	3	8	36	83	6	...
	(B) ...	(b) 79	5	236	334	39	614	693	642	1,720	...	...	642	1,720	51	...
	(C) ...	...	70	190	3	...	263	263	...	...	...	...	263	...	...	...
Total ...		93	76	437	349	43	905	998	675	1,795	3	8	941	1,803	57	...
North Násik ...	(A) ...	3	2	10	5	1	18	21	13	40	1	3	14	43	7	...
	(B) ...	...	4	335	499	65	903	903	903	2,072	...	...	903	2,072	...	...
	(C) ...	...	31	36	...	1	68	68	...	...	...	...	68	...	...	...
Total ...		3	37	381	504	67	989	992	916	2,112	1	3	985	2,115	7	...
South Násik ...	(A) ...	3	1	17	17	5	40	43	37	114	2	39	39	153	4	...
	(B) ...	...	7	404	341	57	809	809	809	2,498	...	...	809	2,498	...	...
	(C) ...	...	60	98	...	...	158	158	...	...	...	...	158	...	...	...
Total ...		3	68	519	358	62	1,007	1,010	846	2,612	2	39	1,006	2,651	4	...
Total ...	(A) ...	(a) 30	20	57	52	12	141	171	127	320	10	73	137	393	34	...
	(B) ...	(b) 263	32	1,916	2,479	307	4,734	4,997	4,732	11,261	...	...	4,732	11,261	265	...
	(C) ...	...	318	817	4	12	1,151	1,151	...	...	...	...	1,151	...	...	...
Total, Northern Circle ...		293	370	2,790	2,535	331	6,026	6,319	4,859	11,581	10	73	6,020	11,654	299	...
CENTRAL CIRCLE.																
East Khándesh ...	(A) ...	3	3	43	16	13	75	78	65	160	4	7	69	167	9	...
	(B) ...	...	2	215	267	95	579	579	579	1,698	...	...	579	1,698	...	...
	(C) ...	...	24	109	2	4	139	139	...	...	...	...	139	...	...	...
Total ...		3	29	367	235	112	793	796	644	1,858	4	7	787	1,865	9	...
West Khándesh...	(A) ...	7	8	4	5	3	20	27	13	16	...	...	13	16	14	...
	(B) ...	...	2	171	357	17	547	547	547	1,230	...	...	547	1,230	...	...
	(C) ...	...	45	75	5	1	126	126	...	...	...	...	126	...	...	...
Total ...		7	55	250	367	21	693	700	560	1,246	...	...	686	1,246	14	...
North Khándesh ...	(A) ...	6	1	8	5	5	19	25	19	55	...	...	19	55	4	2
	(B) ...	...	14	194	145	83	441	441	441	990	...	...	441	990	...	...
	(C) ...	...	27	96	3	4	130	130	130	...	...	...	130	...	...	...
Total ...		6	42	298	153	97	590	596	460	1,045	...	...	590	1,045	4	2

(a) 1 transferred from A to B and (b) 8 from B to A.

(A) Cases taken into Court.

(B) Cases compounded.

(C) Cases undetected.

FORM No. 13.—Prosecutions for breaches of Forest Rules during 1915-1916—continued.

Forest Division.		NEW CASES OF THE YEAR.						DISPOSED OF DURING THE YEAR.						Cases pending at close of year.	Cases withdrawn.	
		Cases pending from 1913-1915.	Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Convictions.		Acquittals.		Total.			
									Cases.	Persons.	Cases.	Persons.	Cases.			Persons.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CENTRAL CIRCLE— (continued).																
Poona ...	{ (A) ... (B) ... (C) ...	2	3 27 111	24 694 132	35 788 5	7 78 1	69 1,587 249	71 1,587 249	61 1,587 ...	131 3,504 ...	2	8	63 1,587 249	130 3,504 ...	8......	...
Total ...		2	141	850	828	86	1,905	1,907	1,648	3,635	2	8	1,890	3,043	8	...
Sátara ...	{ (A) ... (B) ... (C) ...	19	9 14 43	6 354 66	13 445 ...	3 67 1	31 860 110	50 880 110	41 880 ...	124 1,512 ...	3	5	44 880 110	129 1,512 ...	6	1
Total ...		19	66	426	456	71	1,031	1,040	921	1,636	3	5	1,034	1,041	6	1
Kolába ...	{ (A) ... (B) ... (C) ...	68	6 5 32	150 332 249	10 324 5	48 104 8	214 765 294	282 765 294	201 765 ...	392 1,426 ...	10	26	217 765 294	418 1,426 ...	65......	...
Total ...		68	43	731	339	160	1,273	1,341	966	1,818	10	26	1,276	1,844	65	...
Total ...	{ (A) ... (B) ... (C) ...	105	30 64 232	235 1,960 727	84 2,326 20	79 449 19	428 4,799 1,048	533 4,799 1,048	400 4,799 ...	878 10,360 ...	25	46	425 4,799 1,048	924 10,360 ...	105	3
Total, Central Circle ...		105	376	2,922	2,430	547	6,275	6,380	5,199	11,238	25	46	6,272	11,264	105	3
SOUTHERN CIRCLE.																
Kánara, Northern	{ (A) ... (B) ... (C) ...	4 63 7	9 14 156	7 115 27	2 182 ...	... 10 ...	18 321 183	22 384 190	13 285 ...	24 686 ...	2	2	15 285 163	26 596 ...	7 99 37	...
Total ...		74	179	149	184	10	522	596	298	710	2	2	453	712	143	...
Kánara, Eastern	{ (A) ... (B) ... (C) ...	1 31 7	3 14 118	3 231 38	1 80 ...	... 22 1	7 347 157	8 378 164	4 375 ...	45 525 ...	4	4	8 375 159	49 525 ...	... 2 4	...
Total ...		39	135	272	81	23	511	550	379	570	4	4	641	574	6	3
Kánara, Central (New Division).	{ (A) ... (B) ... (C) ...	9 73 9	1 10 156	4 247 6	... 13 ...	... 88 ...	5 358 162	14 431 171	8 321 ...	24 623 ...	4	5	12 321 171	29 623 ...	2 110...	...
Total ...		91	157	257	13	88	525	616	329	647	4	5	504	652	112	...
Kánara, Southern	{ (A) ... (B) ... (C) ...	48 348 4	3 11 74	20 1,008 72	3 52 ...	1 119 1	27 1,130 147	75 1,539 151	30 1,274 ...	81 2,403 ...	17	28	53 1,471 151	119 2,403 ...	22 274...	...
Total ...		400	88	1,100	55	121	1,364	1,764	1,310	2,484	17	38	1,478	2,522	296	...
Kánara, Western	{ (A) ... (B) ... (C) ...	5 1 ...	2 3 131	6 238 23	2 41 ...	... 13 2	10 295 166	15 296 156	6 296 ...	27 613 ...	5	5	11 296 156	32 613 ...	2	2
Total ...		6	136	267	43	15	461	467	302	640	5	5	463	645	2	2
Belgaum ...	{ (A) ... (B) ... (C) ...	13 105 7	10 14 161	13 358 127	3 713 9	2 12 5	23 1,097 302	41 1,202 302	16 1,078 ...	46 2,035 ...	3	7	15 1,078 302	53 2,035 ...	22 124...	...
Total ...		125	185	498	725	19	1,427	1,552	1,394	2,081	3	7	1,406	2,863	146	...

FORM No. 13.—Prosecutions for breaches of Forest Rules during 1915-1916—concluded.

Forest Division.	Cases pending from 1914-1915.	NEW CASES OF THE YEAR.					Total cases.	DISPOSED OF DURING THE YEAR.						Cases pending at close of year.	Cases withdrawn.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.			
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
SOUTHERN CIRCLE (continued).															
Dhárwar Bijapur (A) ...	10	...	43	10	2	15	25	21	42	8	15	24	57	...	1
(New combined (B) ...	61	2	242	242	35	521	582	501	1,547	...	...	501	1,547	81	...
Division). (C) ...	8	83	80	4	...	167	175	...	...	...	...	175	...	...	...
Total ...	79	85	325	256	37	703	782	522	1,589	8	15	700	1,604	81	1
Ratnagiri															
(A) ...	1	...	1	...	...	1	2	1	3	...	...	1	3	1	...
(B) ...	3	...	16	...	3	19	22	13	28	...	...	13	28	9	...
(C) ...	...	1	3	...	...	4	4	...	...	...	...	4	...	...	...
Total ...	4	1	20	...	3	24	28	14	31	...	...	18	31	10	...
Total															
(A) ...	91	28	57	21	5	111	202	105	292	38	76	143	368	56	1
(B) ...	685	68	2,455	1,323	302	4,148	4,833	4,143	8,450	...	...	4,143	8,460	689	3
(C) ...	42	880	876	13	9	1,278	1,320	...	...	...	...	1,277	...	41	2
Total, Southern Circle ...	818	976	2,888	1,357	316	5,537	6,355	4,248	8,752	38	76	5,563	8,828	786	6
SIND CIRCLE.															
Sukkur															
(A) ...	19	2	57	39	19	117	136	88	177	14	56	102	233	34	...
(B) ...	...	...	685	1,110	...	1,795	1,795	1,795	2,150	...	...	1,795	2,150	...	...
(C) ...	...	53	347	...	...	400	400	...	...	...	...	400	...	...	...
Total ...	19	55	1,089	1,149	19	2,312	2,331	1,883	2,327	14	56	2,297	2,383	34	...
Larkana															
(A) ...	1	...	6	3	1	10	11	8	18	2	12	...	30	1	...
(B) ...	...	...	104	217	14	335	335	335	340	...	...	335	340	...	...
(C) ...	...	47	33	...	...	79	79	...	...	...	...	79	...	...	...
Total ...	1	47	142	220	15	424	425	343	358	2	12	424	370	1	...
Hyderabad															
(A) ...	7	...	14	...	2	16	23	12	18	1	2	13	20	10	...
(B) ...	...	...	216	1,122	8	1,346	1,346	1,346	1,352	...	...	1,346	1,352	...	...
(C) ...	...	7	4	...	...	11	11	...	...	...	...	11	...	...	...
Total ...	7	7	234	1,122	10	1,373	1,380	1,358	1,317	1	2	1,370	1,372	10	...
Jerruck															
(A) ...	3	6	20	11	...	37	40	27	52	2	3	29	55	9	2
(B) ...	1	1	148	250	1	400	401	395	470	...	...	395	470	6	...
(C) ...	...	51	9	...	...	60	60	...	...	...	...	60	...	...	...
Total ...	4	58	177	261	1	497	501	422	522	2	3	484	525	15	2
Total															
(A) ...	30	8	97	53	22	180	210	135	265	19	73	154	338	54	2
(B) ...	1	1	1,153	2,699	23	3,876	3,877	3,871	4,312	...	...	3,871	4,312	6	...
(C) ...	...	158	392	...	...	550	550	...	...	...	...	550	...	...	...
Total, Sind Circle ...	31	167	1,642	2,752	45	4,608	4,637	4,006	4,577	19	78	4,575	4,650	60	2
GRAND TOTAL...															
(A) ...	256	86	446	210	118	860	1,116	767	1,755	92	263	859	2,023	249	6
(B) ...	949	165	7,484	8,827	1,081	17,557	18,506	17,545	34,383	...	...	17,545	34,393	960	3
(C) ...	42	1,638	2,312	37	40	4,227	4,009	...	...	...	...	4,026	...	41	2
Total ...	1,247	1,889	10,242	9,074	1,239	22,444	23,691	18,312	36,148	92	268	22,430	36,416	1,250	11

* Out of 40 A Cases one was transferred to B Cases as the order for prosecution was withdrawn and the case dealt with under Section 67 of the Indian Forest Act. One case was withdrawn as the offender died.

(A) Means cases taken to Court.

(B) " " Compounded and let off with warnings.

(C) " " Undetected.

FORM No. 14.—Area of Forest Tracts protected from fire during 1915-1916.

Division.	Forest Ranges.	Year in which protection commenced.	Area protected during 1913-1914.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9
NORTHERN CIRCLE.								
Panch Mahals	Godhra	...	88,042	89,258	715	88,541	3,520 0 0	
	Katol	...	20,063	21,533	100	21,433		
	Halol	...	25,805	28,306	398	27,908		
	Dohad	...	41,812	46,242	2,623	43,619		
	Jhalod	...	25,949	26,862	1,038	25,824		
	Total	...	201,471	212,199	4,874	207,325	3,520 0 0	
Surat	Dangs	...	407,975	419,908	1,089	418,719	6,168 0 0	
	Mandvi	...	40,887	40,887	5	40,882		
	Bulsar-Chikhali	...	2,810	2,810	...	2,810		
	Total	...	451,672	463,505	1,094	462,411	6,168 0 0	
North Thana	Mahim	...	71,861	76,440	1,775	74,665	3,216 0 0	
	Dahanu	...	78,842	79,484	1,713	77,771		
	Umbargaon	...	56,356	58,225	452	57,773		
	Total	...	207,059	214,149	3,940	210,209	3,216 0 0	
Central Thana	Bassein	...	53,462	54,855	885	53,470	4,894 0 0	
	Wada	...	77,219	79,723	1,194	78,534		
	Khardi	...	66,367	68,765	494	68,271		
	Mokhada	...	85,573	86,038	168	85,870	4,894 0 0	
South Thana	Total	...	232,621	238,886	2,741	236,145	4,894 0 0	
	Salsette	...	14,264	14,733	337	14,396	3,839 0 0	
	Kalyan	...	31,139	31,691	846	31,345		
	Bhiwandi	...	38,926	40,151	2,410	37,741		
	Shahapur	...	61,543	70,250	7,277	62,973		
	Murbad	...	55,469	55,864	1,255	54,609		
	Total	...	201,341	212,689	11,625	201,064	3,839 0 0	
North Nasik	Malegaon	...	109,471	109,581	330	109,251	59 0 0	
	Nandgaon	...	64,427	65,495	3,037	62,458		
	Baglan	...	120,004	120,029	4,997	115,032		
	Chandwad	...	21,800	21,805	558	21,249		
	Yeola	...	25,728	25,833	84	25,749		
	Total	...	341,430	342,743	9,004	333,739	59 0 0	
South Nasik	Nasik	...	40,722	40,890	816	40,074	1,325 0 0	
	Igatpuri	...	58,053	53,630	752	52,878		
	Sinhar	...	31,522	31,607	...	31,607		
	Dindori	...	51,838	53,724	3,557	50,177		
	North Point	...	107,159	107,267	96	107,171		
	South Point	...	106,719	107,049	77	106,972		
	Kalwan	...						
	Total	...	391,012	394,177	5,293	388,879	1,325 0 0	
Total, Northern Circle.			2,026,606	2,078,348	33,576	2,039,772	23,019 0 0	

FORM No. 14.—Area of Forest Tracts protected from fire during 1915-1916—continued.

Division.	Forest Ranges.	Year in which protection commenced.	Area protected during 1914-1915.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9
CENTRAL CIRCLE.								
East Khândesh	Châlisgaon	Acres. 37,140	Acres. 33,250	Acres. 1,521	Acres. 36,729	Rs. a. p. 354 8 0	Include Erandol Taluka. Do. Bhusawal Taluka.
	Chopda ...	...	99,660	107,700	1,234	106,466	1,100 8 0
	Edalabad ...	...	39,687	41,346	4,859	36,487	199 8 0
	Jalgaon ...	...	36,044	38,799	1,379	37,420	.....
	Jâmner ...	...	63,562	64,390	834	63,556	118 12 0
	Parola ...	...	43,409	43,920	78	43,842	.....
	Râver ...	...	59,282	76,210	11,329	64,881	469 2 0
	Yâwal ...	...	65,750	78,000	49,000	29,000	822 4 0
	Total	444,534	488,615	70,234	418,381	3,071 6 9	Miscellaneous charges.
West Khândesh	Dhulia	75,334	75,818	1,692	74,156	4,507 0 0	Includes Sindkheda Taluka.
	Sâkri ...	...	121,380	180,606	11,792	168,814	
	Pimpalner ...	...	60,541	63,558	671	62,887	
	Nandurbâr ...	...	57,828	61,378	3,049	58,329	
	Navâpur ...	...					
	Total	315,083	381,360	17,174	364,186	4,507 0 0	
North Khândesh	Akrâni	129,404	134,684	30,550	164,134	2,156 0 0	
	Taloda ...	...	56,864	71,160	14,204	56,956	1,190 0 0
	Shâhâda ...	...	73,015	83,581	5,416	78,165	1,328 0 0
	Shirpur, East	...	192,582	206,341	816	195,250	1,000 0 0	
	Do. West	...			1,075		2,167 0 0	
	Total	451,865	555,766	61,261	494,505	7,841 0 0	
Kolâba	Alibâg	27,407	27,489	76	27,413	201 0 0	
	Pen ...	...	29,812	29,964	13	29,951	259 0 0
	Panvel ...	...	27,172	27,572	36	27,536	192 0 0
	Karjat ...	...	32,120	32,520	270	32,250	474 0 0
	Khâlapur ...	...	21,740	21,879	283	21,596	86 0 0
	Nâgôthna ...	...	35,110	35,226	8	35,218	395 0 0
	Roha ...	...	39,151	39,281	62	39,219	450 0 0
	Mângaon ...	...	26,271	26,290	16	26,274	366 0 0
	Mahâd ...	...	25,731	25,877	69	25,808	114 0 0
	Dâpoli ...	...	2,121	2,122	...	2,122	150 0 0
	Mâtherân ...	...	1,088	1,107	...	1,107	52 0 0
	Total ...	...	267,723	269,327	833	268,494	2,739 0 0
Poona	Akola (A'nagar Dist.)	...	66,822	66,859	262	66,597	Includes part of Sangamne Taluka of A'nagar District.
	Ambeagaon ...	...	38,704	38,942	231	38,711	.....
	Dhond ...	...	12,835	10,993	...	10,993	.....
	Haveli	25,870	26,610	2,231	24,379	126 0 0	Includes parts of Indâpur and Shirur Talukas of Poona District and part of Shrigonda Taluka of Ahmednagar District.
	Junnar ...	...	38,819	39,117	81	39,036	10 0 0
	Khed ...	...	34,289	35,493	808	34,685	.....
	Lonâvâ	46,884	47,158	695	46,174	24 0 0	Includes part of Bhîmthadi Taluka.
	Mâval ...	...	26,093	26,549	19	26,530	.....
	Mulshi ...	...	10,576	10,089	276	9,313	.....
	Purandhar ...	...	65,059	65,087	72	65,015	.....
	Total	365,951	366,897	4,964	361,933	160 0 0	

FORM No. 14.—Area of Forest Tracts protected from fire during 1915-1916—continued.

Division.	Forest Ranges.	Year in which protection commenced.	Area protected during 1914-1915.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	Remarks.	
1	2	3	4	5	6	7	8	9	
CENTRAL CIRCLE —concluded.			Acres.	Acres.	Acres.	Acres.	Rs. a. p.		
Sátara ...	Jávli	58,320	58,523	2	58,521	Includes part of Tasgaon Taluka.	
	Karád ...	...	33,541	33,541	23	33,518	.....	
	Mahábleshwar ...	...	43,121	43,222	57	43,165	150 0 0	
	Pátan	74,717	75,048	171	74,877	Includes part of Khatao Taluka.	
	Sátara ...	...	50,458	50,681	548	50,133	.....	
	Shirála ...	...	36,191	36,211	41	36,170	.....	
	Wái ...	...	33,234	33,264	163	33,101	.....	
Total	329,582	330,490	1,005	329,485	150 0 0		
Total, Central Circle...		...	2,174,738	2,392,455	155,471	2,236,984	18,468 6 9		
SOUTHERN CIRCLE.									
Kánara, Northern ...	Haliyál ...	1887-88 ...	41,665	41,665	3,011	38,654	1,143 0 0	Rs. 158 spent on account of Supa and Gund Ranges transferred to Kánara, W. D., have been excluded.	
	Sambrani ...	" ...	46,646	46,646	14,193	32,453	392 0 0		
	Kulgi ...	" ...	28,413	28,413	4,614	23,799	249 0 0		
	Dandeli ...	" ...	46,610	46,610	34,695	11,915	148 0 0		
	Virnoli ...	" ...	40,470	40,470	6,631	33,839	379 0 0		
	Kalghatgi ...	1888-89 ...	43,714	55,674	11,037	44,637	1,115 0 0		
	Total	247,518	259,478	74,181	135,297		3,426 0 0
Kánara, Eastern ...	Yellápur Block 13.	1888-89 ...	135,989	89,378	2,057	87,321	228 0 0		
	Do. 17.	1897-98 ...							
	Unorganized forests 1914-15 ...	...						
	Kirwatti Block 13	1888-89 ...	70,919	87,759	9,684	78,075	1,601 0 0		
	Do. 14.	" ...							
	Do. 15.	1894-95 ...							
	Do. 16.	1902-03 ...	91,657	91,972	2,583	89,339	344 0 0		
	Unorganized area portion of Kalghatgi (Tambur) ...	1914-15 ...							
	Bhartnalli Block 18.	1894-95 ...							
	Do. 16.	1902-03 ...	113,228	114,305	30,639	84,166	2,064 0 0		
	Do. 21.	" ...							
	Unorganized area ...	1914-5 ...							
Mundgod and Katur Block 22.	1888-89 ...	19,744	26,109	238	25,871	425 0 0			
Do. 23.	1902-03 ...								
Do. 17.	" ...								
Teak pole area ...	1909-10 ...	166,535	182,397	24,405	157,992	889 0 0			
Unorganized area ...	1914-15 ...								
Bankápur Blocks I to X ...	1888-89 ...								
Total	431,531	410,023	45,201	364,822	4,662 0 0		
Kánara Central (New Division) ...	Sirsi ...	1906-07 ...	3,643	3,666	105	3,561	40 0 0		
	Ankola ...	1888-89 ...	156,443	172,371	24,300	148,071	505 0 0		
	Kumta ...	1899-00 ...	6,449	6,360	...	6,360	344 0 0		
Total	166,535	182,397	24,405	157,992	889 0 0		
Kánara, Southern ...	Siddápur ...	1910-11 ...	190	204,448	2,727	201,721	20 0 0		
	Honávar ...	1900-01 ...	6,597	124,592	286	124,306	277 0 0		
	Bhatkal ...	1899-00 ...	4,029	124,040	240	123,800	211 0 0		
	Total	10,816	463,080	3,253	449,827		508 0 0
Kánara, Western ...	Kárwár ...	1887-88 ...	7,644	81,656	557	81,099	590 0 0	Rs. 59 spent on account of Ankola and Kumta Ranges transferred to Kánara, C. D., have been excluded.	
	Kadra ...	" ...	28,661	198,575	6,511	192,064	604 0 0		
	Supa ...	1888-89 ...	118,406	232,291	13,098	219,193	276 0 0		
	Gund ...	" ...	22,325	23,301	2,934	20,367	23 0 0		
	Total	177,036	535,823	23,100	512,723		1,493 0 0
Belgaum ...	Belgaum ...	1888-89 ...	84,128	84,424	593	83,841	1,242 0 0	Rs. 415 spent on fire flags, printing notices and rewards to helpers in fire protection have been excluded.	
	Khánápur, Eastern ...	1886-87 ...	45,535	47,278	12,047	35,231	1,578 0 0		
	Khánápur, Central ...	1910-11 ...	75,742	77,560	9,007	68,553	1,592 0 0		
	Khánápur, Western ...	1889-90 ...	96,782	97,707	275	97,432	767 0 0		
	Gokák ...	1894-95 ...	94,249	94,401	344	94,057	851 0 0		
	Total	396,436	401,370	22,256	379,114		6,030 0 0

FORM No. 14.—Area of Forest Tracts protected from fire during 1915-1916—concluded.

Division.	Forest Ranges.	Year in which protection commenced.	Area protected during 1914-1915.	Area attempted to be protected.	Failures.	Area actually protected.	Cost.	Remarks.
1	2	3	4	5	6	7	8	9
SOUTHERN CIRCLE—continued.								
Dhárwar-Bijapur (New Division) ...	Dhárwar and Gadag...	1888-89 ...	42,280	19,423	6,326	13,097	149 0 0	Rs. 16 spent on account of Bankapur Range transferred to Kánara, E. D., have been excluded.
	Hangal ...	" ...	12,911	9,487	153	9,345	56 0 0	
	Kod ...	1907-08 ...	14,636	18,052	1,174	16,878	112 0 0	
	Bágalkot ...	1889-90 ...	2,635	2,500	201	2,299	130 0 0	
	Bádami ...	" ...	10,965	2,154	786	1,368	81 0 0	
	Total ...	...	83,377	51,616	8,640	42,976	528 0 0	
Ratnágiri ...	Dápoli ...	1889-90 ...	474	476	...	476	8 0 0	
	Khed ...	1892-93 ...	6,435	6,435	...	6,435		
	Chiplún ...	" ...	788	798	...	798		
	Sangameshvar ...	" ...	3,101	3,101	1	3,100	10 0 0	
	Ratnágiri ...	" ...	277	277	...	277		
	Bájapur ...	" ...	322	322	...	322		
	Devgad ...	" ...	11	11	...	11	10 0 0	
	Málvan ...	" ...	625	625	...	625		
	Vengurla ...	" ...	9	9	...	9		
	Total ...	...	12,042	12,054	1	12,053	28 0 0	
	Total, Southern Circle.	...	1,525,291	2,305,841	201,037	2,104,804	17,564 0 0	
SIND CIRCLE.								
Sukkur ...	Mirpur ...	Not known	44,377	43,806	1,207	42,599	.....
	Ghotki ...		31,094	30,685	40	30,645	.....
	Sadhuja ...		58,288	58,103	978	57,125	.....
	Rohri ...		30,540	30,538	211	30,427	.....
	Abad ...		40,020	42,527	281	42,246	.....
	Sukkur ...		27,735	28,199	911	27,288	.....
	Kot Sultán ...	1885-86 & 1887-88.	23,254	23,255	4	23,251	.....
	Kashmore ...	1895-96 ...	28,760	34,102	12	34,090	.....
	Total ...	...	284,068	291,315	3,644	287,671	.....
Lárkána ...	Garhi Yásin ...	Not known	32,426	32,426	28	32,398	.....
	Lárkána ...		25,133	25,884	368	25,466	.....
	Radhan ...		22,618	22,615	4	22,611	.....
	Schwán ...		22,883	23,623	617	23,006	.....
	Kandiáro ...		42,760	43,777	230	43,547	.....
	Total ...	...	145,815	148,275	1,247	147,028	.....
Hyderabad ...	Sakrand ...	Not known	50,442	50,612	90	50,522	.....
	Hála ...		50,935	51,481	25	51,456	.....
	Miáni ...		26,166	22,932	30	22,902	.....
	Hyderabad ...		2,223	2,223	...	2,223	.....
	Unerpur ...		29,236	29,228	97	29,131	.....
	Total ...	...	159,002	156,476	242	156,234	.....
Jerruck ...	Tatta ...	1912-13	35,779	53,191	359	52,832	226 1 9	
	Sháhbandar ...		20,049	24,965	425	24,540	57 3 10	
	Mulchand ...		47,910	47,476	534	46,942	688 7 2	
	Katiar ...	Not known.	43,191	20,788	...	20,788	.....
	Total ...	...	146,929	146,420	1,318	145,102	971 12 9	
	Total, Sind Circle	...	735,814	742,486	6,451	736,035	971 12 9	
	GRAND TOTAL	...	6,462,449	7,519,130	401,635	7,117,595	60,022 12 9	

FORM No. 15.

Division or Circle.	(A)		(B)		(C) FIRES BEGINNING INSIDE THE							
	Fires caused by accident or through carelessness in burning fire lines.		Fires entering the forests by crossing exterior fire-traces.		Owing to carelessness or accident.							
					By workmen employed in the forests, by purchasers, outters, etc.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire-balloons.	
	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
NORTHERN CIRCLE.												
Panch Mahals ...	6	18	1	4	...	...	12	366	2	49	...	...
Surat ...	4	24	...	...	...	...	6	364	...	...	...	...
North Thána ...	5	167	8	582	...	...	7	132	2	31	...	...
Central do. ...	4	62	3	370	1	5	2	210	1	7	...	...
South do. ...	...	...	4	688	3	44	4	141	2	128	...	...
North Násik ...	...	...	10	1,615	...	...	6	228	...	...	...	...
South Násik ...	1	3	17	1,434	...	...	33	2,832	...	...	...	...
Total ...	20	274	43	4,693	4	49	70	4,323	7	215	...	...
CENTRAL CIRCLE.												
East Khándesh ...	17	24,181	7	10,404	19	1,770	4†	12	2	175	...	...
West do. ...	...	...	...	...	...	...	2	310	...	...	...	...
North do. ...	2	3,050	5	29,015	7*	998	2†	1,060	...	...	...	...
Kolába ...	3	49	...	...	1	1	12§	5,416	...	...	...	...
Poona ...	1	2	30	1,190	2	15	20	180	6	114	...	...
Satára ...	...	...	...	...	...	...	72	2,081	24	70	...	...
Total ...	23	27,282	42	40,809	29	2,784	135	9,182	10	359	...	...
SOUTHERN CIRCLE.												
‡ Kánara, Northern ...	...	...	12	9,262	1	939	17	2,310	1	66	...	...
Do. Eastern ...	5	2,152	2	65	4	...	3	21	...	240	...	...
Do. Central (New Division). ...	...	...	5	400	1	1	85	8,607	...	44	4	53
Do. Southern ...	...	...	3	16	...	...	19	260	...	368	...	...
Do. Western ...	...	...	5	3,469	...	...	77	11,396	1	1	...	...
Belgaum ...	1	2	18	791	3	178	10	79	9	9	...	...
Dhárwár—Bijápur (New combined Division). ...	6	71	13	1,842	...	...	15	1,613	6	6	...	...
Batnágiri ...	...	...	1	1	...	...	...	...	...	...	...	...
Total ...	12	2,225	59	15,846	9	1,118	226	24,286	17	718	4	53
SIND CIRCLE.												
Sukkur ...	...	...	4	849	...	...	...	...	2	12	...	...
Lárkána ...	...	...	...	...	...	...	...	...	1	10	...	...
Hyderabad ...	...	...	...	...	...	...	...	...	...	...	...	...
Jerruck ...	3	80	...	...	8	275	13	171	...	...	...	...
Total ...	3	80	4	849	8	275	13	171	3	22	...	...
Grand Total ...	58	29,861	148	61,497	50	4,226	444	37,962	37	1,314	4	53

Forest Fires during 1915-16.

RESERVE OR FIRE-TRACED AREA.								Causes Unknown.		Total (A), (B) and (C).		Remarks.
By Intentional Firing.												
In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total.		No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	
No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.	No. of fires.	Area burnt in acres.					
14	15	16	17	18	19	20	21	22	23	24	25	26
...	5	975	19	1,390	21	3,462	47	4,874	Plus 3 on account of breaches of Rules in which no area was burnt. * Include 1 on account of breaches of Rules in which no area was burnt. † In the areas in charge of contractors. ‡ Include 1 case on account of breaches of Rules in which no area was burnt. § Include 2 cases de. ¶ In the areas in charge of contractors. * Include 56 cases not accounted for in Form 13.
...	...	...	...	...	...	6	364	2	706	12	1,094
...	...	...	...	...	...	9	163	40	3,028	62	3,940
...	...	7	388	4	95	15	705	38	1,604	60	2,741	
...	...	...	...	...	...	9	313	63	10,624	76	11,625
...	...	...	...	...	...	6	228	21	7,161	37	9,004
...	...	10	388	...	...	43	3,270	7	591	68	5,298
...	...	17	776	9	1,070	107	6,433	192	27,176	362	33,576	
...	...	2	2	...	...	27	1,959	21	33,690	72	70,234
...	...	1	1,600	7	3,575	12	6,545	45	10,629	57	17,174	
...	...	6	2,275	10	7,007	35	15,696	2	13,500	44	61,281	
...	...	...	...	...	...	27	295	17	489	47	833
1	20	5	133	27	1,315	109	3,634	6	138	146	4,964	
...	...	...	...	...	...	23	123	43	882	66	1,005
1	20	14	4,010	44	11,897	233	28,252	134	59,328	432*	155,471	
25	7,750	44	11,065	124	53,854	180†	74,181	† Includes 1 fire not dealt with under the Forest Act. ‡ Includes 5 fires not dealt with under the Indian Forest Act, Contractors and Forest Subordinates who were responsible for the same being dealt with separately.
5	724	...	...	2	3,425	18	4,223	110	38,761	135	45,201
1	5	2	21	18	21,202	107	29,836	55	4,765	167	35,001	
...	...	3	1	...	...	22	261	63	2,976	88	3,253
32	2,115	...	...	...	...	110	13,751	21	5,880	136	23,100
...	...	1	1	115	20,254	138	20,556	28	907	185	22,256	
...	...	...	...	21	5,624	42	7,605	29	1,448	90‡	10,966
...	...	...	...	...	...	...	...	...	...	1	1
63	10,594	6	23	156	50,505	481	87,297	430	108,591	982	218,959||	
2	515	...	...	2	50	6	577	45	2,718	55	3,644
...	...	...	...	...	...	1	10	46	1,237	47	1,247
...	...	...	...	...	...	...	...	7	242	7	242
26	571	2	130	2	91	51	1,238	...	...	54§	1,818
28	1,086	2	130	4	141	53	1,825	98	4,197	163	6,451	
92	11,703	39	4,939	213	63,613	879	123,807	854	199,292	1,939	414,457	

|| This is the total forest area burnt in the Southern Circle while the area shown in Form No. 14 represents the area burnt out of the area specially protected.

FORM No. 16.—Area closed and open to Grazing during 1915-1916.

Division.	AREA IN SQUARE MILES.						Remarks.
	Closed to all animals.		Closed only to browsers (camels, goats or sheep).		Open to all animals.	Total forest area.	
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.		
1	2	3	4	5	6	7	8
NORTHERN CIRCLE.							
RESERVED FOREST.							
Panch Maháls	Sq.m. a. 21 0	Sq.m. a. 82 0	Sq.m. a. 229 0	Sq.m. a.	Sq.m. a.	Sq.m. a. 332 0	*Owing to the scanty rainfall and the scarcity of fodder all the coupes except the two (one under exploitation and that of previous year and plantation area) were thrown open in the latter part of the year.
Surat	11 0	57 0	.....	331 0	13 0	412 0
North Thána	104 0	3 0	228 0	.....	.....	335 0
Central do.	93 0	.....	276 0	.....	.....	369 0
South do.	98 0	.....	234 0	.....	.....	332 0
North Násik	85 0	.....	311 0	.....	195 0	591 0
South do.	100 0	13 0	495 0	.....	22 0	630 0
Ahmedabad ... ..	.....	.....	.....	.....	19 0	19 0
Total, Reserved Forest ...	512 0	155 0	1,773 0	331 0	249 0	3,020 0	
PROTECTED FOREST.							
Surat ... ..	.....	.....	.....	.....	325 0	325 0
North Thána ... ..	.....	.....	.....	.....	146 0	146 0
Central do. ... ..	.....	.....	4 0	.....	97 0	101 0
South do. ... ..	.....	.....	9 0	.....	144 0	153 0
South Násik ... ..	.....	.....	.....	.....	88 0	88 0
Total, Protected Forest ...	.....	.....	13 0	.....	800 0	813 0
Total, Northern Circle ...	512 0	155 0	1,786 0	331 0	1,049 0	3,833 0	
CENTRAL CIRCLE.							
RESERVED FOREST.							
East Khándesh	209 0	58 0	497 0	.....	36 0	800 0
West do.	93 0	.....	503 0	.....	177 0	773 0
North do.	185 0	.....	733 0	.....	.....	868 0
Poona	27 0	62 0	473 0	.....	448 0	1,010 0
Sátára	106 0	.....	410 0	.....	195 0	711 0
Kolába	54 0	1 0	366 0	.....	29 0	450 0
Ahmednagar-Sholapur ...	.....	.....	.....	.....	739 0	739 0
Total, Reserved Forest ...	624 0	121 0	2,982 0	.....	1,624 0	5,351 0
PROTECTED FOREST.							
Poona ... ..	.....	.....	11 0	.....	.....	11 0
Sátára ... ..	.....	.....	.....	.....	1 0	1 0
Kolába ... ..	.....	.....	.....	.....	74 0	74 0
Total, Protected Forest ...	.....	.....	11 0	.....	75 0	86 0
Total, Central Circle ...	624 0	121 0	2,993 0	.....	1,699 0	5,437 0
SOUTHERN CIRCLE.							
Kanara, Northern... ..	213 0	.....	211 0	.....	.....	424 0
Do. Eastern	254 0	.....	390 0	.....	.....	644 0
Do. Central (New Division)...	48 0	.....	731 0	.....	.....	779 0
Do. Southern	18 0	.....	960 0	.....	.....	708 0
Do. Western	39 0	.....	798 0	.....	.....	837 0
Pelgaum	104 0	.....	523 0	.....	53 0	680 0
Dhárwar-Bijápur (New combined Division).	19 0	15 0	257 0	.....	206 0	497 0
Ratnágiri	9 0	.....	10 0	.....	.....	19 0
Total, Southern Circle ...	704 0	15 0	3,610 0	.....	259 0	4,588 0
SIND CIRCLE.							
Sukkur	38 575	.....	232 422	.....	183 398	455 115
Larkana	12 510	.....	76 73	.....	142 492	231 435
Hyderabad... ..	8 179	.....	54 525	.....	181 252	244 316
Jerruck	3 490	.....	111 392	.....	113 358	228 500
Total, Sind Circle ...	63 474	.....	475 132	.....	621 120	1,160 86
GRAND TOTAL ...	1,903 474	291 0	8,864 132	331 0	3,628 120	15,018 86	

FORM No. 17.

Division.	GRAZING ON PAYMENT—NUMBER OF ANIMALS.												
	At full rates.						At privileged rates.						
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Fees received.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Fees received.	
												Actual.	Value at full rates.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
NORTHERN CIRCLE.						Rs. a. p.						Rs. a. p.	Rs. a. p.
Panch Mahals ...	1,285	3,414	...	...	...	2,992 0 0	1,192	3,804	...	...	...	676 0 0	3,094 0 0
Surat ...	...	...	...	...	...	.....	...	11,351	...	...	...	1,880 0 0	11,351 0 0
North Thana ...	...	61	...	...	...	38 0 0	69	325	...	...	...	78 0 0	289 0 0
Central do. ...	83	3,998	...	...	...	2,603 0 0	538	2,646	...	...	...	642 0 0	2,326 0 0
South do. ...	151	1,112	...	...	...	884 0 0	2,398	3,043	...	...	...	1,687 0 0	4,899 0 0
North Nasik ...	67	649	...	...	451	1,167 0 0	13,449	114,730	125,866	...	1,842	23,700 0 0	1,60,467 0 0
South do. ...	33	62	...	...	...	95 0 0	29,430	104,754	30,431	...	408	21,994 0 0	1,42,200 0 0
Total, Northern Circle ...	1,619	9,296	...	...	451	7,779 0 0	47,076	240,653	156,297	...	2,230	55,657 0 0	3,24,626 0 0
CENTRAL CIRCLE.													
East Khandesh ...	1,547	11,010	...	...	87	12,644 0 0	34,955	194,218	...	...	573	30,922 0 0	2,29,746 0 0
West do. ...	113	295	...	...	91	499 0 0	11,411	82,492	...	...	994	12,167 0 0	94,897 0 0
North do. ...	9,905	69,800	...	...	1,365	29,118 0 0	...	...	...	...	...	.....	.....
Poona ...	7	75	...	...	...	82 0 0	19,780	141,241	45,949	...	895	24,881 0 0	1,64,781 0 0
Satara ...	10	...	...	...	...	10 0 0	40,562	90,633	200	...	125	17,402 0 0	1,31,520 0 0
Kolaba ...	41	46	...	...	...	87 0 0	2,141	86,353	142	...	16	14,471 0 0	1,06,544 0 0
Total, Central Circle ...	11,621	81,226	...	...	1,543	42,440 0 0	126,848	594,937	46,291	...	2,063	1,00,643 0 0	7,27,488 0 0
SOUTHERN CIRCLE.													
Kanara, Northern Division ...	235	...	...	...	...	235 0 0	34,897	...	...	...	...	5,386 0 0	34,897 0 0
Do. Eastern do. ...	...	...	...	...	...	1 0 0	20,203	...	2	...	...	3,157 0 0	20,204 0 0
Do. Central (New Division) ...	...	...	...	...	...	.....	39,435	...	...	...	...	4,953 0 0	39,435 0 0
Do. Southern do. ...	1	...	...	...	...	1 0 0	112,943	...	127	...	...	14,862 0 0	1,12,975 0 0
Do. Western do. ...	...	...	...	...	...	.....	38,008	...	...	...	...	5,269 0 0	38,008 0 0
Belgaum ...	1,177	...	...	...	...	1,177 0 0	57,123	...	...	...	...	9,655 0 0	57,123 0 0
Dharwar—Bijapur (New combined Division). ...	1,554	1,756	...	...	18	1,860 0 0	130,315	...	4,443	...	686	20,451 0 0	1,31,669 0 0
Ratnagiri ...	...	...	...	...	...	.....	15	...	...	...	...	2 0 0	15 0 0
Total, Southern Circle ...	2,967	1,756	...	...	18	3,273 0 0	432,939	...	4,572	...	686	63,735 0 0	4,34,326 0 0
SIND CIRCLE.													
Sukkur ...	7,371	10,324	23,029	338	256	13,136 0 0	...	...	...	...	...	.....	.....
Larkana ...	4,609	3,123	18,101	455	124	6,797 0 0	...	...	...	...	...	.....	.....
Hyderabad ...	3,969	6,273	61,289	772	16	14,815 0 0	...	...	...	...	...	.....	.....
Jerruck ...	5,138	5,888	18,072	1,395	4	11,435 0 0	...	...	...	...	...	.....	.....
Total, Sind Circle ...	21,087	25,608	120,491	2,960	400	46,183 0 0	...	...	...	...	...	.....	.....
GRAND TOTAL ...	153,424	122,247	2,960	2,412	99,675	0 0	1,442,453	207,160	...	4,999	2,20,035	0 0	14,86,440 0 0

in the State Forests during 1915-1916.

GRAZING FREE—NUMBER OF ANIMALS.													
By right under Settlement.						During pleasure of Government, or otherwise than under Settlement.						Total Value of Fees at full rates.	Grand Total of Value at full rates.
Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Value of Fees at full rates.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other Animals.	Value of Fees at full rates.		
15	16	17	18	19	20	21	22	23	24	25	26	27	28
					Rs. a. p.						Rs. a. p.	Rs. a. p.	Rs. a. p.
...	...	...	...	...	.....	31,618	114,982	...	...	...	89,104 0 0	89,104 0 0	95,190 0 0
...	...	...	...	...	.....	1,719	25,551	4,217	...	71	31,558 0 0	31,558 0 0	42,909 0 0
...	...	...	...	...	.....	9,540	65,650	...	...	...	52,956 0 0	52,956 0 0	53,283 0 0
...	...	...	...	...	.....	10,950	45,710	...	...	29	42,274 0 0	42,274 0 0	47,203 0 0
...	...	...	...	...	.....	19,600	80,860	...	...	...	75,038 0 0	75,038 0 0	80,821 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	1,61,634 0 0
1,050	4,500	...	...	300	5,850 0 0	...	...	...	...	...	.....	5,850 0 0	1,48,145 0 0
1,050	4,500	...	...	300	5,850 0 0	73,422	332,753	4,217	...	100	2,90,930 0 0	2,96,780 0 0	6,29,185 0 0
...	...	...	...	...	...	3,317	11,449	...	...	61	14,827 0 0	14,827 0 0	2,57,217 0 0
...	...	...	...	...	.....	960	16,508	5	...	80	17,551 0 0	17,551 0 0	1,12,047 0 0
...	...	...	...	...	.....	2,874	25,208	...	...	79	3,520 0 0	3,520 0 0	32,638 0 0
...	...	...	...	...	.....	25	121	...	...	...	146 0 0	146 0 0	1,65,009 0 0
...	...	...	...	...	.....	...	...	...	...	...	.....	.....	1,31,530 0 0
525	1,925	...	...	...	2,450 0 0	1,008	2,557	...	...	...	3,565 0 0	6,015 0 0	1,12,646 0 0
525	1,925	...	...	...	2,450 0 0	8,184	55,841	5	...	220	39,609 0 0	42,059 0 0	8,11,987 0 0
...	...	...	...	...	.....	7,369	...	...	...	...	7,369 0 0	7,369 0 0	42,501 0 0
...	...	...	...	...	.....	12,342	...	...	...	...	12,342 0 0	12,342 0 0	32,546 0 0
...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	39,435 0 0
...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	1,12,976 0 0
...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	38,008 0 0
...	...	...	...	...	.....	13,374	...	...	...	...	13,374 0 0	13,374 0 0	71,674 0 0
...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	1,33,529 0 0
...	...	...	...	...	.....	.....	...	...	...	...	.....	.....	15 0 0
...	...	...	...	...	.....	33,035	...	...	...	...	33,035 0 0	33,035 0 0	4,70,634 0 0
1,224	4,696	...	...	38	2,632 0 0	11	82	...	...	...	39 0 0	2,671 0 0	15,807 0 0
1,155	3,033	...	...	11	937 0 0	16	21	...	26	675	143 0 0	1,050 0 0	7,847 0 0
9	12	...	...	...	11 0 0	65	326	...	1,141	955	1,948 0 0	1,959 0 0	16,774 0 0
401	245	61	2	9	341 0 0	1,768	5,445	951	347	2,897	2,683 0 0	3,024 0 0	14,459 0 0
2,789	7,986	61	2	53	3,891 0 0	1,880	5,874	951	1,514	4,527	4,813 0 0	8,704 0 0	54,857 0 0
4,364	14,411	61	2	358	12,191 0 0	511,039	...	5,173	1,514	4,847	3,68,437 0 0	3,80,628 0 0	19,66,743 0 0

FORM No. 18.—Statement showing Area of Plantations in the Bombay Presidency, including Sind, for the year 1915-1916.

Division.	Kind of Plantation.	AREA IN ACRES.				EXPENDITURE DURING THE YEAR.		TOTAL EXPENDITURE FROM COMMENCEMENT.		Revenue during the year.	Total revenue from date of creation of plantation.	Remarks.	
		On 1st July 1915.	Added during the year.	Excluded during the year.	Area on 30th June 1916.	Creation.	Upkeep.	Creation.	Upkeep.				
1	2	3	4	5	6	7	8	9	10	11	12	13	
NORTHERN CIRCLE.													
Panch Mahals ...	Regular plantations ...	4,703	186	...	4,889	132	537 0 0	9,793	13,501	*Area transferred under cultural operations.	
Surat ...	Do. ...	1,422	...	1,410*	12	...	...	...	...	...	...
North Thana ...	Do. ...	22	16	...	38	301	652 0 0	1,149	1,149	...	...
Central do. ...	Do. ...	9	...	...	9	44	353 0 0	1,338	7,231	...	...
South do. ...	Do. ...	90	...	...	90	...	73 0 0	1,955	9,569	...	...
South Nasik ...	Do. ...	100	...	100	...	90	...	217	119	...	...
	Total ...	6,346	202	1,510	5,038	567	1,615 0 0	14,452	31,569		
Panch Mahals ...	Cultural operations ...	172	...	172	130	† 411 acres treated under Agriculture cum Forestry.	
Surat ...	Do. ...	...	1,410	...	1,410	1,230	523 0 0	...	...	...	...
North Thana ...	Do. ...	1,055	94	...	1,149	30	...	1,821	...	...	...
Central do. ...	Do. ...	241	344	241	344	58	...	...	111	...	...
South do. ...	Do. ...	673	...	673	...	...	6 0 0	...	48	...	...
North Nasik ...	Do. ...	157	451	285	323	54	...	319	...	...	...
	Total ...	2,297	2,299	1,371	3,226	1,372	529 0 0	2,270	159		
	Total, Northern Circle...	8,644	2,501	2,881	8,264	1,939	2,144 0 0	16,722	31,728		
CENTRAL CIRCLE.													
East Khándesh ...	Regular plantations	(a) Charged in Kanara, W. D. (b) Charged in Kanara, C. D.	
West do. ...	Do. ...	...	...	...	...	...	...	...	...	...	...
North do. ...	Do. ...	...	...	...	...	...	...	...	...	...	...
Poona ...	Do. ...	...	...	...	...	...	...	...	...	...	...
Sátára ...	Do. ...	239	8	...	247	237	...	...	...	...	...
Kolába ...	Do. ...	91	13	1	103	259	430 0 0	2,064	1,806	426	1,387		
	Total ...	330	21	1	350	496	430 0 0	2,064	1,806	426	1,387		
East Khándesh ...	Cultural operations ...	49	55	49	55	102	(a) Charged in Kanara, W. D. (b) Charged in Kanara, C. D.	
West do. ...	Do. ...	623	435	623	435	177	...	...	...	...	...
North do. ...	Do. ...	...	...	...	...	10	...	...	...	...	...
Poona ...	Do. ...	1,133	3,870	1,633	3,870	1,158	...	...	...	...	...
Sátára ...	Do. ...	1,079	911	1,079	911	1,421	...	...	...	...	...
Kolába ...	Do. ...	...	...	...	...	...	...	...	...	...	...
	Total ...	3,384	5,271	3,384	5,271	2,868		
	Total, Central Circle ...	3,714	5,292	3,385	5,621	3,364	430 0 0	2,064	1,806	426	1,387		
SOUTHERN CIRCLE.													
Kánara Central (New Division) ...	Regular plantations ...	148	13	...	161	...	(a) 1,260 0 0 (b) 923 0 0	1,590	10,424	(a) Charged in Kanara, W. D. (b) Charged in Kanara, C. D.	
Kánara Southern ...	Do. ...	603	9	...	612	3,056	...	67,641	...	1,473	15,759		
Do. Western ...	Do. ...	170	17	...	187	...	1,692 0 0	1,285	11,555	...	5		
Dhárwár-Bijápur (New combined Division) ...	Do. ...	10	...	...	10	...	...	43	...	50	481
Ratnágiri ...	Do. ...	150	2	...	152	156	340 0 0	3,795	3,414	142	6,582		
	Total ...	1,081	41	...	1,122	3,214	4,220 0 0	74,354	25,393	1,670	22,827		
Kánara, Eastern Division ...	Cultural operations	15,298	...	15,298	2,978	...	2,978	(a) Charged in Kanara, W. D. (b) Charged in Kanara, C. D.	
Do. ...	Do. ...	...	1,171	...	1,171	244	...	244	...	...	...
	Total ...	...	16,469	...	16,469	3,222	...	3,222	...	...	...
	Total, Southern Circle ...	1,081	16,510	...	17,591	6,436	4,220 0 0	77,576	25,393	1,670	22,827		
SIND CIRCLE.													
Sukkur ...	Regular plantations ...	233	233	375	1,964 0 0	3,895	50,871	407	7,344		(a) Charged in Kanara, W. D. (b) Charged in Kanara, C. D.
Lárkána ...	Do. ...	13	3	...	16	...	313 0 0	56	2,818	...	...
Hyderabad ...	Do. ...	30	...	...	30	29	1,372 0 0	974	10,489	405	3,784
Jerruck ...	Do. ...	22	...	...	22	15	467 0 0	416	4,147	...	...
	Total ...	298	3	...	301	419	4,116 0 0	5,341	67,825	812	10,828		
Sukkur ...	Cultural operations ...	8,752	1,465	5,500	4,717	1	...	1,159	39	...	...
Lárkána ...	Do. ...	2,463	1,543	1,977	2,029	170	119 0 0	796	2,897	...	...
Hyderabad ...	Do. ...	5,405	75	373	5,107	...	1,616 0 0	2,323	10,812	...	...
Jerruck ...	Do. ...	13,335	1,463	3,232	11,566	440	1,480 0 0	4,398	5,266	...	...
	Total ...	29,955	4,546	11,082	23,419	611	3,215 0 0	8,676	19,014		
	Total, Sind Circle ...	30,253	4,549	11,082	23,720	1,030	7,331 0 0	14,017	86,389	812	10,828		
	GRAND TOTAL ...	43,692	28,852	17,348	55,196	12,769	14,125 0 0	1,10,379	1,45,316	2,918	35,042		

FORM No. 19.

FORM No. 19.—*Outturn (in cubic feet, solid) of Timber and Fuel*

Division.	TIMBER IN THE ROUGH : LOGS.					TIMBER IN THE ROUGH : POLES.					SAWN OR SQUARED TIMBER.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NORTHERN CIRCLE.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
<i>Reserved Forest.</i>															
Panch Mahals ... ..	...	23,144	11	...	20,155	2,105	87,123	55	...	89,283	...	...	...	...	...
Surat ... ..	...	52,596	1,642	...	54,358	...	...	...	...	...	...	...	...	...	...
North Thána ... ..	...	25,110	...	...	25,110	4,385	473,269	...	...	477,654	...	...	...	...	...
Central Thána ... ..	...	15,713	...	...	15,713	656	230,466	8	...	231,130	...	28,740	...	...	28,740
South Thána ... ..	...	27,836	...	...	27,836	87	151,783	...	...	151,870	...	51,641	...	...	51,641
North Násik ... ..	...	...	...	...	...	...	18,000	2,770	...	20,770	...	...	...	...	...
South Násik ... ..	...	126,122	58	...	126,180	692	205,153	800	...	206,645	...	...	...	...	...
Total, Reserved Forest ...	...	267,521	1,831	...	269,352	7,925	1,165,794	3,633	...	1,177,352	...	80,381	...	...	80,381
<i>Protected Forest.</i>															
North Thána ... ..	...	23,648	...	...	23,648	...	158,475	229	...	158,704	...	...	...	...	...
Central Thána ... ..	...	1,397	...	...	1,397	...	20,950	868	...	21,818	...	8,364	...	...	8,364
South Thána ... ..	...	51,372	...	...	51,372	...	83,848	2,142	...	85,990	694	61,456	...	...	62,150
South Násik ... ..	...	136,426	...	...	136,426	...	214,447	...	...	214,447	...	...	...	...	...
Total, Protected Forest ...	...	212,843	...	...	212,843	...	477,720	3,239	...	480,959	694	69,820	...	...	70,514
<i>Unclassed Forest.</i>															
North Thána ... ..	...	...	...	...	...	...	9,933	...	...	9,933	...	...	...	...	...
Central Thána ... ..	...	151	...	...	151	...	877	...	...	877	...	89	...	...	89
South Násik ... ..	...	115,795	...	...	115,795	...	194,632	...	...	194,632	...	...	...	...	...
Total, Unclassed Forest ...	...	115,946	...	...	115,946	...	205,442	...	...	205,442	...	89	...	...	89
<i>Leased Forest.</i>															
Surat	48,748	40,223	...	76,220	165,191	...	...	...	...	...	31,883	...	...	...	31,883
Total, Northern Circle ...	48,748	686,533	1,831	76,220	763,332	7,925	1,848,956	6,872	...	1,863,753	32,577	150,290	182,867

APPENDICES.

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during the year 1915-1916, and Agency of Exploitation.

MISCELLANEOUS.					TOTAL TIMBER.					FUEL.					Total Outturn.
Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
...	...	...	...	...	2,105	107,267	66	...	109,438	300	575,300	80	1,533,100	2,168,780	2,218,218
...	...	...	...	...	...	52,596	1,762	...	54,358	8,680	74,240	...	...	82,920	137,278
...	...	...	...	...	4,385	498,379	...	...	502,764	1,050	1,494,725	...	1,166,587	2,662,362	3,165,126
...	3,668	...	...	3,668	656	278,587	8	...	279,251	...	1,154,324	...	737,980	1,892,304	2,171,665
...	...	...	...	...	87	231,260	...	...	231,347	3,640	1,613,325	...	2,521,680	4,138,645	4,369,992
...	...	...	...	...	...	18,000	2,770	...	20,770	2,430	120,584	...	...	123,014	143,784
...	...	19	...	19	692	331,275	877	...	332,844	65,494	31,660	...	22,906	120,060	452,904
...	3,668	19	...	3,687	7,925	1,517,364	5,483	...	1,530,772	81,594	5,064,158	80	5,982,253	11,128,085	12,658,867
...	...	...	...	...	...	182,123	229	...	182,352	...	158,475	...	118,000	276,475	458,827
...	518	...	...	518	...	31,229	868	...	32,097	...	9,471	...	21,650	81,121	63,218
...	...	...	...	...	694	196,676	2,142	...	199,512	...	201,780	...	...	201,780	401,292
...	...	...	...	...	...	350,873	...	...	350,873	...	...	...	...	...	450,873
...	518	...	...	518	694	760,901	3,239	...	764,834	...	369,726	...	139,650	509,376	1,274,120
...	...	...	...	...	...	9,933	...	...	9,933	...	7,925	...	...	7,925	17,858
...	...	...	...	...	...	1,117	...	...	1,117	...	...	...	...	...	1,117
...	...	...	...	...	...	310,427	...	...	310,427	...	...	...	...	...	310,427
...	...	...	...	...	...	321,477	...	...	321,477	...	7,925	...	...	7,925	329,402
...	...	...	...	...	80,631	40,223	...	76,220	197,074	17,150	...	...	1,500,000	1,517,150	1,714,224
...	4,186	19	...	4,205	89,250	2,639,965	8,722	76,220	2,814,157	98,744	5,441,809	80	7,621,903	13,162,536	15,976,093

FORM NO. 19.—*Outturn (in cubic feet, solid) of Timber and Fuel*

Division.	TIMBER IN THE ROUGH : LOGS.					TIMBER IN THE ROUGH : POLES.					SAWN OR SQAURED TIMBER.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
CENTRAL CIRCLE.															
East Khándesh ... ..	...	...	...	...	...	138	172,537	48	...	172,723	...	...	...	...	...
West Khándesh	1,440	...	...	...	1,440	...	127,830	5,140	...	132,970	...	...	...	...	...
North Khándesh	39	11,481	...	35	11,555	...	81,067	72	11,484	82,623	...	6,745	...	...	6,745
Kolába	232	32,663	...	...	32,895	743	156,355	2,811	...	159,909	...	...	...	...	...
Poona	53	8,794	...	...	8,847	4,455	93,883	7,656	...	105,994	...	...	...	...	...
Sátára ... ..	...	...	...	...	...	10	54,361	3,985	...	58,356	...	...	...	...	...
Total, Central Circle ...	1,764	52,938	...	35	54,737	5,546	686,033	19,712	1,484	712,775	...	6,745	...	...	6,745

during the year 1915-1916, and Agency of Exploitation—continued.

MISCELLANEOUS.					TOTAL TIMBER.					FUEL.					TOTAL.
Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
...	...	...	...	...	138	172,537	48	...	172,723	3,720	336,210	27,371	...	307,301	540,024
...	...	...	...	...	1,440	127,830	5,140	...	134,410	...	185,125	40	10,000	195,165	329,575
...	...	...	...	...	39	99,293	164	1,427	100,923	52	330,723	80	19,522	400,377	501,800
37	5,057	...	...	5,094	1,012	194,075	2,811	...	197,898	46,070	1,232,833	...	378,891	1,652,294	1,850,192
...	...	...	...	...	4,508	102,677	7,656	...	114,841	136,284	869,860	1,600	...	1,007,744	1,122,585
...	...	...	...	...	10	54,361	3,985	...	58,356	100,157	3,750	...	100,000	203,907	262,203
37	5,057	...	...	5,094	7,147	750,773	19,804	1,427	779,151	286,283	3,008,501	29,091	502,913	3,826,783	4,605,939

FORM No. 19.—*Outturn (in cubic feet, solid) of Timber and Fuel*

Division. *(As readjusted on 1st February 1916 as per Government Order No. 11396 of 27th October 1915, Revenue Department).	TIMBER IN THE ROUGH: LOGS.					TIMBER IN THE ROUGH: POLES.				
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Kánara, Northern* ...	454,069	123,221	...	...	577,290	3,180	149,876	462	...	153,468
Kánara, Eastern* ...	121,198	25,156	25	...	146,319	8,828	66,834	2,856	...	78,513
Kánara, Central* ... (New Division from 1st February 1916).	107,467	7,533	2,829	...	117,829	...	14	...	...	14
Kánara, Southern* ...	18,109	36,838	10,589	...	65,536	...	...	...	...	...
Kánara, Western* ...	58,808	87,394	3,911	...	150,113	1,174	592	1,874	...	3,640
Belgaum ...	6,761	165,491	774	...	173,026	5,953	44,979	2,265	...	53,197
Dhárwár—Bijápur* ... (New Combined Division).	1,937	...	...	...	1,937	1,632	27,300	184	...	29,116
Ratnágiri ...	...	585	137	...	672	...	1,147	254	...	1,401
Total, Southern Circle ...	768,289	446,168	18,265	...	1,232,722	20,712	290,742	7,895	...	319,349

APPENDICES.

during the year 1915-1916 and Agency of Exploitation—continued.

SAWN OR SQUARED TIMBER.					MISCELLANEOUS.		
Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.
12	13	14	15	16	17	18	19
C. ft.	C. ft.	C.ft.	C.ft.	C. ft.		C. ft.	
77,984	...	...	...	77,984	.....	.....	.....
110,853	...	...	...	110,853	..... Sandalwood— Kh. mds. lbs. 8 15 27 Rejected billets No. 176, Chips stacks 4.	.....	.....
...	...	...	...	...	..... Sandalwood— Kh. mds. lbs. 23 6 21	.....	.....
...	...	...	...	...	..... Sandalwood— Kh. mds. lbs. 9 2 1	.....	.....
470	...	...	...	470	.....	560	.....
2,115	10,228	...	...	12,343	..... Sandalwood— trees 333, billets 167, pieces and stumps 148.	.....	.....
...	...	...	...	...	..... Sandalwood— trees 174, billets and pieces Kh. mds. lbs. 76 15 19 Chips stacks 35, Chips bags 109.	256	.....
...
191,422	10,228	...	...	201,650	..... Sandal trees 507, Wood Kh. mds. lbs. 118 0 12 Rejected billets stumps and pieces 491, Chips stacks 39, Chips bags 100.	560 Sandal trees 256	.....

APPENDICES.

FORM No. 19.—Outturn (in cubic feet, solid) of Timber and Fuel

MISCELLANEOUS—continued.		TOTAL TIMBER.		
Right-holders	Total.	Government.	Purchasers.	Free grantees.
20	21	22	23	24
	C. ft.	C. ft.	C. ft.	C. ft.
.....	.....	535,183	273,097	462
.....	.....	240,814	91,990	2,881
	Sandalwood— Kh. mds. lbs. 8 15 27 Rejected billets No. 176, Chips stacks 4.	Sandalwood— Kh. mds. lbs. 8 15 27 Rejected billets No. 176, Chips stacks 4.		
.....	.....	107,467	7,547	2,829
	Sandalwood— Kh. mds. lbs. 23 6 21	Sandalwood— Kh. mds. lbs. 23 6 21		
.....	Sandalwood— Kh. mds. lbs. 9 2 1	Sandalwood— Kh. mds. lbs. 9 2 1	36,838	10,589
.....	560	60,452	88,546	5,785
.....	Sandalwood— Trees 333, billets 167, pieces and stumps 148.	Sandalwood— Trees 333, billets 197, pieces and stumps 148.	220,698	8,039
.....	Sandalwood Trees 430, billets and pieces Kh. mds. lbs. 76 15 19 Chips Chips bags 100.	Sandalwood— Trees 174 Kh. mds. lbs. 76 15 19 Chips stacks 35, Chips bags 100.	27,300 256	184
.....	.....	.....	1,682	391
.....	560 Sandal Trees 763, Wood Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 10.	980,423 Sandal trees 507, Wood Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.	747,698 256	26,160

during the year 1915-1916 and Agency of Exploitation—continued.

TOTAL TIMBER—continued.		FUEL.					Total Outturn.
Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	
25	26	27	28	29	30	31	32
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
.....	808,742	102,400	284,822	...	447	387,222	1,195,964
.....	835,685 Sandalwood— Kh. mds. lbs. 8 15 27 Rejected billets No. 176, Chips stacks 4.	1,200	185,873	15,750	...	202,823	538,508 Sandalwood— Kh. mds. lbs. 8 15 27 Rejected billets No. 176, Chips stacks 4.
.....	117,843 Sandalwood— Kh. mds. lbs. 23 6 21	...	71,182	11,100	...	82,232	200,125 Sandalwood— Kh. mds. lbs. 23 6 21
.....	65,536 Sandalwood— Kh. mds. lbs. 9 2 1	58,357	4,585,508	500	...	4,644,365	4,709,901 Sandalwood— Kh. mds. lbs. 9 2 1
.....	154,783	506,152	1,260,683	1,840	...	1,768,675	1,923,458
.....	238,566 Sandalwood— Trees 233, billets 167, Pieces and stumps 148.	2,975,504	1,289,038	11,250	...	4,255,792	4,491,358 Sandalwood— Trees 333, Billets 167, Pieces and stumps 148
.....	31,053 Sandalwood— Trees 430, Billets and pieces Kh. mds. lbs. 76 15 19 Chips stacks 35, Chips bags 100.	17,028	244,312	1,750	...	263,090	294,143 Sandalwood— Trees 430, Billets and pieces Chips stacks 35, Chips bags 100.
.....	2,078	...	13,075	...	...	13,075	15,148
.....	1,754,281 Sandal trees 763, Sandalwood billets— Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.	3,660,641	7,914,498	42,190	...	11,617,324	13,371,605* Sandal trees 763, Sandalwood— Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.

* This is exclusive of 300,000 c. ft. of Timber and 3,041,686 c. ft. of Fuel shown under Privilege holders in the statement for the Southern Circle in Chapter II, Section 5 (c)—Outturn and sources of forest produce.

APPENDICES.

during the year 1915-1916 and Agency of Exploitation—concluded.

SAWN OR SQUARED TIMBER.					MISCELLANEOUS.		
Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.
12	13	14	15	16	17	18	19.
C. ft.	C. ft.	C.ft.	C.ft.	C. ft.	C. ft.	C. ft.	C. ft.
...
...
...
...
...
19	19	...	15,298	8
19	19	...	15,298	8
...
...
...
...
...
...
...
19	19	...	15,298	8
224,018	167,263	...	...	391,281	87 Sandal trees 507, Wood: Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chipsstacks 39, Chips bags 100.	25,101 Sandal trees 256	27

APPENDICES.

FORM No. 19.—*Outturn (in cubic feet solid) of Timber and Pulp*

Miscellaneous—continued.		TOTAL TIMBER.		
Right-holders.	Total.	Government.	Purchasers.	Free grantees.
20	21	22	23	24
C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
.....	.....	868	161	163
.....	.....	1,552	40,561	870
.....	.....	1,920	40,712	538
.....	.....	.....	451	3,928
.....	15,306	1,230	46,228	2,194
.....	15,306	1,230	46,679	6,122
.....	.....	93	9,201	20
.....	.....	189	52,160	130
.....	.....	282	61,861	150
.....	.....	731	540	718
.....	.....	391	53,510	150
.....	.....	1,122	54,050	898
.....	15,306	4,554	22,802	7,673
.....	25,165 Sandal trees 768, Wood : Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.	1,081,374 Sandal trees 507, Wood : Kh. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.	4,341,238 Sandal trees 256	62,859

during the year 1915-1916 and Agency of Exploitation—concluded.

TOTAL TIMBER—continued.		FUEL.					TOTAL.
Right holders.	Total.	Government.	Purchaser.	Free grantees.	Right holders.	Total.	Outturn.
25	26	27	28	29	30	31	32
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
.....	692	47,988	3,070,500	...	...	3,118,488	3,119,180
.....	42,473	2,720	906,464	...	...	909,184	951,657
.....	48,165	50,708	3,976,964	...	...	4,027,672	4,070,897
.....	4,879	39,300	.....	...	...	39,300	43,679
.....	49,652	...	1,153,998	...	18,282	1,172,280	1,321,932
.....	54,031	39,300	1,153,998	...	18,282	1,211,580	1,265,611
.....	9,314	154,336	.....	...	...	154,336	163,650
.....	52,479	621	5,264,848	...	...	5,265,469	5,817,948
.....	61,793	154,957	5,264,848	...	...	5,419,605	5,481,598
.....	1,989	33,841	2,624,066	...	...	2,657,907	2,659,896
.....	54,051	7,458	2,691,090	...	...	2,698,548	2,762,599
.....	56,040	41,299	5,315,156	...	...	5,356,455	5,412,495
.....	215,029	286,264	15,710,966	...	18,282	16,015,512	16,230,541
77,647	5,562,618 Sandal trees 763, Wood: Kb. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.	4,531,932	32,075,769	71,361	8,148,098	44,822,160	50,184,778* Sandal trees 763, Wood Kb. mds. lbs. 118 0 12 Rejected billets, stumps and pieces 491, Chips stacks 39, Chips bags 100.

* This is exclusive of 300,000 c. ft. of Timber and 3,041,686 c. ft. of Fuel shown under Privilege holders in the statement for the Southern Circle in Chapter II, Section 5 (c)—Outturn and sources of forest produce.

FORM No. 20.—*Outturn of Minor Forest Produce during the year 1915-1916.*

Description of Produce.	PRODUCE REMOVED OR UTILIZED.									
	By Government Agency.		By purchasers.		By free-grants.		By right-holders.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11
		Rs.		Rs.		Rs.		Rs.		Rs.
NORTHERN CIRCLE.										
<i>State Forests.</i>										
Palm leaves	1,079	...	5	...	...	...	1,084
Karvi	1,213	...	...	...	...	...	1,213
Grass and grazing	...	68,120	...	1,02,887	...	...	...	2,58,251	...	4,29,258
Bamboos	84,437	...	...	...	5,048	...	39,475
Apta and Tembhorni leaves	17,259	...	...	...	...	...	17,259
Hirda nuts	3,476	...	...	...	...	...	3,474
Chilhari bark	496	...	...	...	...	...	496
Mhowra seed	...	8,149	...	2,277	...	...	...	...	...	10,426
Stones	768	...	...	...	...	...	768
Sali wood	58	...	1	...	...	...	59
Manganese	1,139	...	...	...	...	...	1,139
Kusari flowers	36	...	...	...	...	...	36
Rapping fees	26	...	...	...	...	...	26
Rosha grass	785	...	...	...	...	...	785
Tarwad Bark	3,696	...	...	...	...	...	3,696
Babul Pods	277	...	...	...	...	...	277
Miscellaneous	...	650	...	864	...	...	...	43,224	...	44,788
Total, State Forests	...	76,919	...	1,70,761	...	6	...	3,06,523	...	5,54,209
<i>Leased Forests.</i>										
A'pta and Tembhorni leaves	188	...	...	...	...	...	188
Grass and grazing	2,259	...	...	...	38,529	...	38,529
Miscellaneous	13,776	...	16,065
Total, Leased Forests	2,477	...	...	...	52,305	...	54,782
Total, Northern Circle	...	76,919	...	1,73,238	...	6	...	3,58,828	...	6,08,991
CENTRAL CIRCLE.										
Hirda and Shikakai	...	6,094	...	10,379	...	...	...	...	...	16,473
Silk cotton	31	...	...	...	...	...	31
Mhowra seed	...	391,286	...	...	...	...	...	...	...	...
Rosha grass	...	12,484	...	...	...	...	...	...	...	12,484
Leaves, pods, bark, etc.	2,617	...	...	...	...	...	2,617
Fruits	6,800	...	48	...	...	...	6,848
Earth, stone, murrum, etc.	947	...	...	...	...	...	947
Grass and grazing	...	26	...	3,153	...	554	...	...	...	3,707
Bamboos	...	94	...	2,45,516	...	...	...	27,688	...	2,73,230
Miscellaneous	...	825	...	8,301	...	85	...	...	...	8,480
	117	...	67	...	4,659	...	5,668
Total, Central Circle	Lbs. 391,286	19,523	...	2,77,861	...	754	...	32,347	Lbs. 391,286	3,30,485
SOUTHERN CIRCLE.										
Bamboos	2,233,369	47,943	30,472	185	...	...	22,63,841	48,128
Grass and grazing	...	796	...	71,028	...	4,136	...	...	...	75,960
Hirda, Shikakai, Cinnamon, Honey, Wax, Surgiflower, Nuxvomica, Ramfal and Rampatri.	48,536	...	...	...	...	...	48,536
Quarrying fees	7,058	...	511	...	...	...	7,569
Tapping fees	824	...	...	...	...	...	824
Caves	552	...	151	...	...	...	803
Skins, horns and vension	9	...	...	...	...	...	9
Tali palm leaves and Shindoli leaves.	824	...	...	...	...	...	824

FORM No. 20.—*Outturn of Minor Forest Produce during the year 1915-1916—continued.*

Description of Produce.	PRODUCE REMOVED OR UTILIZED.									
	By Government Agency.		By purchasers.		By free-grants.		By right-holders.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
		Rs.		Rs.		Rs.		Rs.		Rs.
SOUTHERN CIRCLE— continued.										
Tali palm trees	3,444	...	1,096	...	...	...	4,540
Baini trees	371	...	...	...	...	...	371
Stakes	42	...	29	...	...	...	71
Creepers	54	...	8	...	...	...	62
Thorns	391	...	9	...	...	...	400
Undi seeds	16	...	...	...	...	...	16
Hulgal seed	1,672	...	...	...	...	...	1,672
Tumri leaves	1,217	...	...	...	...	...	1,217
Muttal leaves	1	...	...	...	...	...	1
Gum	680	...	...	...	...	...	680
Bandurbi	453	...	...	...	...	...	453
Cocoanuts	12	...	...	...	...	...	12
Mangoes*	105	...	...	...	...	...	105
Bori fruits	11	...	...	...	...	...	11
Tamarind fruits	19	...	...	...	...	...	19
Tarvad bark	2,748	...	...	...	...	...	2,748
Bābul pods	406	...	...	...	...	...	406
Manure	10	...	...	...	...	...	10
Tali Chekke	2	...	...	...	...	...	2
Soppu	12	...	...	...	...	...	12
Waividung	14	...	...	...	...	...	14
Dagadful	22	...	...	...	...	...	22
Karvi	125	...	5	...	...	...	130
Prickly pear	19	...	...	...	...	...	19
Broom grass	324	...	...	...	...	...	324
Miscellaneous	45	...	...	...	...	...	45
Total, Southern Circle	...	796	...	1,89,089	...	6,130	...	...	...	1,96,015*
SIND CIRCLE.	M. s.									
Vegetables, fruit and flowers.	...	29	...	...	...	...	...	...	...	29
Bābul seed	4 10	5	...	...	...	...	...	...	4 10	5
Rahuja garden contract.	...	250	...	...	...	...	...	...	...	250
Sur-reed	Contract.	2,204	...	...	...	...	...	2,204
Lopping of Bahan Kandi branches.	691	35	...	...	...	...	691	35
Jaw brushwood	353	22	...	...	...	...	353	22
Dubh grass	102 bundles.	13	...	...	...	...	102	13
Straws	2 cart loads and 50 head loads.	4	...	...	...	...	52	4
Sur-reed.	5 bundles.	1	...	...	...	...	5	1
Kanh.	385 bundles.	24	16 bundles.	1	...	...	401	25
Mango fruit Dickenson Forest.	Contract.	150	...	...	...	...	Contract.	150
Paban	Do.	120	...	...	...	...	Do.	120
Hides	2	6	...	...	...	...	2	6
Bark	8	...	...	...	...	...	8
Fruit of date trees	2	...	...	...	...	...	2
Bābul and Kandi pods.	Contract.	800	...	...	...	...	Contract.	800
Pan	12	...	...	...	...	...	12
Grazing	13,136	...	39	...	2,632	...	15,807
Total	...	284	...	16,632	...	40	...	2,632	...	19,488
Larkana.										
Bābul pods	Contract.	1,610	...	...	...	...	...	1,610
Kana Sur	Do.	970	...	...	...	...	...	970
Kanh grass	Do.	56	...	...	...	...	...	56
Bābul seed	...	51	...	20	...	...	...	...	...	71
Ber fruit	8	...	...	...	...	...	8
Dato fruit	4	...	...	...	...	...	4
Kanh grass bundles	550	34	...	550	...	34
Bābul and Kandi branches.	15	...	...	...	...	...	15
Jaw brushwood	70	4	...	70	...	4
Grazing	6,797	...	143	...	907	...	7,847
Manure	50 loads.	8	...	50	...	8
Total	...	51	...	9,480	670	184	...	907	670	10,622

* This is exclusive of Rs. 36,761 on account of Sandalwood shown under Government Agency and Rs. 15,000, Rs. 1,80,000 and Rs. 3,00,387 on account of Bamboos, Minor Forest Produce and Grazing shown under Privilege holders in the statement for the Southern Circle in Chapter II, Section 5 (c) outturn and sources of forest produce.

FORM No. 20.—Outturn of Minor Forest Produce during the year 1915-1916—concluded.

Description of Produce.	PRODUCE REMOVED OR UTILIZED.									
	By Government Agency.		By purchasers.		By free-grants.		By right-holders.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11
	Mds. s.	Rs.		Rs.		Rs.		Rs.	Mds. s.	Rs.
SIND CIRCLE— continued.										
Hyderabad. Fruit of Miani Bungalow garden.	Contract.	45.	.....	.....	...	...	...	...	Contract.	45
Juari produced in Bungalow garden.	4 mds.	10	.....	.....	...	...	...	...	4 mds.	10
Fruit of Mango Garden.	Contract.	190	.....	.....	...	...	...	...	Contract.	190
Do. Kathri garden.	Do.	150	.....	.....	...	...	...	...	Do.	150
Babul pods	...	...	Contract.	15,445	...	...	...	...	Do.	15,445
Kanh and Sur grass	...	...	Do.	590	...	...	...	...	Do.	590
Do.	40 bundles.	10	.....	.....	...	...	...	...	40	10
Jaw brushwood	...	...	450 bundles.	28	...	...	...	...	450 bundles.	28
Lopping of kandi, babul, and bahian branches.	...	...	1,648	103	...	...	...	...	1,648	103
Lac	...	...	Contract.	525	...	...	...	...	Contract.	525
Grazing	...	...	.....	14,815	...	1,948	...	11	.....	16,774
Total	...	405	.....	81,506	...	1,948	...	11	.....	83,870
Jerruck. Babul pods	...	...	Contract.	6,429	...	...	...	...	Contract.	6,429
Sur and Kanh grass	...	...	Do.	40	...	...	...	...	Do.	40
Mango fruit	...	...	Do.	2	...	...	...	...	Do.	2
Lac	...	...	Do.	4,405	...	...	...	...	Do.	4,405
Grazing	...	...	.....	11,435	...	2,683	...	341	.....	14,459
Total	...	...	.....	22,311	...	2,683	...	341	.....	25,335
Total, Sind Circle	...	740	.....	79,829	...	4,855	...	3,891	.....	89,315
GRAND TOTAL	...	97,978	.....	7,20,017	...	11,745	...	3,95,066	.....	12,24,806

FORM No. 21.—Account of Timber and other Produce cut or collected by Government Agency and brought to Depôts, sold locally, or otherwise disposed of during the year 1915-1916.

Name of Division or Range.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.	Name of Division or Range.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.
1	2	3	4	5	6	1	2	3	4	5	6
NORTHERN CIRCLE.						SOUTHERN CIRCLE.					
<i>Timber.</i>						<i>Timber.</i>					
Panch Mahals	...	2,105	2,105	2,105	...	*Kánara, Northern Division—	...	...	...	...	...
Surat	56,550	80,031	137,181	115,063	21,218	Teak	240,236	386,233	637,610	281,038	356,451
North Thána	502	4,385	4,887	4,312	575	Blackwood	61,471	42,135	103,806	48,190	55,416
Central Thána	...	659	659	646	10	Junglewood	34,859	104,818	139,672	93,802	45,870
South Thána	...	781	781	781	...	Total	345,516	535,181	880,707	425,030	455,767
North Násik	...	...	...	...	...	
South Násik	7,453	602	8,145	859	7,286						
Total	64,505	89,250	153,755	124,666	29,089						
<i>Fuel.</i>						*Kánara, Eastern Division—					
Panch Mahals	...	300	300	300	...	Teak	132,006	266,153	398,159	232,220	165,970
Surat	21,725	25,830	47,555	35,405	12,150	Blackwood	2,227	1,477	3,704	2,643	1,101
North Thána	502	1,060	1,412	1,309	103	Junglewood	37,065	33,184	70,249	61,402	8,817
South Thána	...	3,640	3,640	3,640	...	Total	171,298	240,814	412,112	296,174(a)	115,038
North Násik	...	2,430	2,430	2,430	...						
South Násik	9,255	65,494	74,749	74,183	560						
Total	31,312	98,744	130,056	117,273	12,813	*Kánara, Central Division—					
<i>Minor Forest Produce.</i>						Teak	...	69,217	60,217	7,207	62,010
Panch Mahals	...	18	18	18	...	Blackwood	...	3,217	3,217	64	3,153
Surat	1,156	5,430	6,586	1,328	5,258	Junglewood	...	92,989	92,988	19,357	73,632
South Násik	584	740	1,324	1,324	...	Total	...	105,423(a)	105,423	26,628	138,705
Total	1,740	6,188	7,928	2,670	5,258						
Total, Northern Circle	C. ft. 95,947 Rs. 1,740	C. ft. 187,994 Rs. 6,188	C. ft. 283,841 Rs. 7,928	C. ft. 241,939 Rs. 2,670	C. ft. 41,902 Rs. 5,258	*Kánara, Southern Division—					
CENTRAL CIRCLE.						Teak	321	6,298	6,609	346	6,263
<i>Timber.</i>						Junglewood	18,065	11,821	29,886	23,305	6,581
East Khándesh	1,399	138	1,537	302	1,235	Total	18,386	18,109	36,495	23,651(a)	12,844
West Khándesh	...	1,440	1,440	1,440	...						
North Khándesh	...	39	39	39	...	*Kánara, Western Division—					
Kolaba	50	1,012	1,062	889	173	Teak	8,070	34,575	42,645	41,042	1,543
Poona	220	4,608	4,728	4,672	56	Blackwood	774	1,871	2,645	2,394	261
Sátara	27	10	37	37	...	Junglewood	35,316	24,008	59,322	50,253	9,069
Total	1,696	7,147	8,843	7,379	1,464	Total	44,160	60,452	104,612	93,700(a)	10,003
<i>Firewood.</i>											
East Khándesh	80	3,720	3,800	3,720	80	Bolgaum Division—					
North Khándesh	...	52	52	23	29	Teak	2,210	6,399	8,638	7,910	728
Kolaba	1,755	46,070	47,825	42,874	4,951	Blackwood	608	302	908	853	115
Poona	10,948	136,234	147,232	139,144	8,088	Junglewood	7,925	8,069	15,993	15,815	678
Sátara	26,273	100,167	126,430	91,180	35,250	Total	10,770	14,829	25,599	24,078	1,521
Total	39,056	286,283	325,339	276,941	48,398						
<i>Minor Forest Produce.</i>						*Dhárwár—Bijápur (new combined Division—					
West Khándesh	...	11,050	11,050	11,050	...	Teak	3,340	3,562	6,902	2,926	3,976
North Khándesh	...	2,258	2,258	2,258	...	Junglewood	...	...	...	...	...
Kolaba	...	26	26	26	...	Total	3,340	3,569	6,900	2,933	3,976
Poona	...	6,094	6,094	6,094	...						
Total	...	19,428	19,428	19,428	...	Total, Southern Circle—					
<i>Famine Fodder.</i>						Teak	395,262	714,427	1,109,869	672,718	536,971
West Khándesh	...	36,760	36,760	36,760	...	Blackwood	65,078	49,062	114,140	64,944	60,096
Kolaba	...	848	848	848	...	Junglewood	138,230	274,898	408,118	285,441	142,677
Total	...	37,608	37,608	37,608	...	Total	593,570	1,038,377	1,631,047	992,203(a)	739,744
Total, Central Circle	C. ft. 40,752 Rs. 57,034	C. ft. 2,93,430 Rs. 57,034	C. ft. 3,34,182 Rs. 57,034	C. ft. 2,84,320 Rs. 57,034	C. ft. 49,862 Rs. ...	<i>Fuel.</i>					
						*Kánara, Northern Division.	14,040	102,400	116,440	116,440	...
						*Kánara, Eastern do.	...	1,200	1,200	1,100	...
						*Kánara Southern do.	...	58,357	58,357	17,900	40,367
						*Kánara Western do.	1,333	500,162	507,185	242,152	265,338
						Bolgaum Division	541,772	2,675,504	3,617,226	3,045,109	472,117
						*Dhárwár—Bijápur Division.	...	17,028	17,028	14,687	2,341
						Total	557,085	3,680,041	4,217,736	3,437,478	7,80,258

(a) Includes 57,954 cubic feet transferred to the new Kánara Central Division, on 1st February 1916, from Kánara Eastern, Southern and Western Divisions.
* (As readjusted on 1st February 1916 as per G. O. E. D. No. 11396, dated 27th October 1915.)

FORM NO. 21.—Account of Timber and other Produce cut or collected by Government Agency and brought to Depôts, sold locally, or otherwise disposed of during the year 1915-1916—concluded.

Name of Division or Range.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.	Name of Division or Range.	Balance at commencement of the year in Forests and Sale Depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in Forests and Sale Depôts.
1	2	3	4	5	6	1	2	3	4	5	6
SOUTHERN CIRCLE —continued.	Rs.	Rs.	Rs.	Rs.	Rs.	SIND CIRCLE.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
<i>Sandalwood.</i>						<i>Timber.</i>					
*Kánara, Northern Division ... Value.	...	12	12	12	...	Sukkur ...	176	1,020	2,086	1,337	759
*Kánara, Eastern Division ...	...	2,395	2,395	2,395	...	Lárkána ...	50	1,230	1,250	1,187	93
*Kánara, Central Division ...	...	6,073	6,073	6,073	...	Hyderabad ...	113	262	395	267	128
Kánara, Southern Division ...	...	5	2,307	2,372	2,397	Jerruck ...	...	1,122	1,122	1,122	.....
Belgaum Division ...	50	4,714	4,761	2,764	2,200	Total ...	339	4,554	4,993	3,913	680
*Dhárwár-Bijápúr Division ...	...	23,150	23,150	23,150	...						
Total ... Value.	55	38,711	38,766	36,761	2,005	<i>Fuel.</i>					
<i>Minor Forest Produce.</i>						Sukkur ...	769	50,768	51,477	50,917	560
Belgaum Division ... Value.	181	1,125	1,306	796	510	Lárkána ...	23,090	89,300	62,990	40,680	22,300
						Hyderabad ...	31,843	154,957	186,800	160,978	25,822
<i>Drift and waif wood and confiscated Forest Produce.</i>						Jerruck ...	963	41,299	42,262	40,262	2,000
*Kánara, Northern Division ... Value.	...	1	1	1	...	Total ...	57,265	286,264	343,529	292,847	50,682
*Kánara, Eastern Division ...	...	59	59	59	...	<i>Minor Forest Produce.</i>	Rs.	Rs.	Rs.	Rs.	Rs.
*Kánara, Central Division ...	...	22	22	...	23	Sukkur ... Value.	50	503	562	250	312
*Kánara, Western Division ...	108	125	233	233	...	Lárkána ...	58	1,058	1,116	876	240
Belgaum Division ...	35	144	179	109	70	Hyderabad ...	28	724	750	744	6
*Dhárwár-Bijápúr Division ...	...	55	55	55	...	Jerruck ...	...	646	646	506	140
Ratnágiri Division ...	...	2	2	2	...	Total ... Value.	143	2,931	3,074	2,376	693
Total ...	143	408	551	459	92	Total, Sind Circle ...	C. ft. 57,604 + Rs. 143	C. ft. 2,931 + Rs. 4,931	C. ft. 348,422 + Rs. 3,074	C. ft. 296,760 + Rs. 2,376	C. ft. 51,662 + Rs. 693
Total, Southern Circle ...	C. ft. 11,50,605 + Rs. 379	C. ft. 46,99,019 + Rs. 47,244	C. ft. 58,49,683 + Rs. 40,623	C. ft. 43,29,631 + Rs. 38,016	C. ft. 16,20,002 + Rs. 2,607	GRAND TOTAL ...	C. ft. 13,44,568 + Rs. 2,262	C. ft. 54,71,260 + Rs. 1,06,397	C. ft. 68,16,128 + Rs. 1,08,659	C. ft. 51,52,700 + Rs. 1,00,066	C. ft. 16,63,428 + Rs. 8,563

FORM No. 22.—*Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1915-1916.*

Description of Timber and other Forest Produce.	ON HAND AT COMMENCEMENT OF THE YEAR.			ON HAND AT CLOSE OF THE YEAR.			DIFFERENCE IN VALUE.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.									
			Rs.			Rs.	Rs.	Rs.	
Timber ... ..	...	64,505	47,780	...	29,089	24,495	...	23,285	Net difference against the year—Rs. 21,044.
Fuel ... ..	...	31,342	2,925	...	12,813	1,648	...	1,277	
Minor Forest Produce...	...	...	1,740	...	...	5,258	3,518	...	
Total, Northern Circle ...	...	95,847	52,445	...	41,902	31,401	3,518	24,502	
CENTRAL CIRCLE.									
<i>Timber.</i>									
East Khándesh... ..	1,305	1,399	363	1,297	1,235	356	...	7	
Kolába	24	50	24	57	173	63	89	...	
Poona	209	220	14	25	56	3	...	11	
Sátára	16	27	5	...	...	...	...	5	
Total, Timber ...	1,554	1,696	406	1,379	1,464	422	39	23	
<i>Firewood.</i>									
East Khándesh	4	80	12	4	80	12	...	...
North Khándesh ... ..	...	...	...	1	29	10	10	...	
Poona ... ..	...	1,755	658	...	4,951	1,818	1,160	...	
Sátára ... ..	...	10,948	674	...	8,086	505	...	169	
Kolába ... ..	...	26,273	1,580	...	35,250	2,150	570	...	
Total, Firewood ...	4	39,056	2,924	5	48,398	4,495	1,740	169	
<i>Mhowra.</i>									
		Lbs.			Lbs.				
West Khándesh ... ..	...	75,337	3,000	...	7,073	300	...	2,700	
North Khándesh ... ..	...	19,870	373	...	15,798	300	...	73	
Total, Mhowra ...	...	95,207	3,373	...	22,871	600	...	2,773	
<i>Seeds.</i>									
	K. m. lbs.			K. m. lbs.					
East Khándesh... ..	4 3 19	...	...	3 19 27	...	...	...	...
West Khándesh	1 5 26	...	...	0 1 0	...	...	...	...
Poona	54 3 0	...	...	16 18 26	...	...	...	...
Sátára ... ..	...	...	...	0 22 24	...	...	...	...
Total, Seeds ...	61 1 21	...	...	21 6 21	...	...	...	...	Net difference against the year—Rs. 1,186.
Total, Central Circle ...	...	...	6,703	...	...	5,517	1,779	2,965	
SOUTHERN CIRCLE.									
<i>Timber.</i>									
Teak	91,602	395,262	6,22,535	131,982	596,971	8,70,167	...	...
Blackwood	3,439	65,078	77,480	4,051	60,096	43,942	...	...
Junglewood	5,410	133,230	1,06,586	5,606	142,677	1,17,949	...	...
Total, Timber ...	1,00,451	593,570	8,06,001	141,639	739,744	10,32,058	225,457	...	
Fuel ... ..	...	557,095	41,962	...	780,258	50,985	9,023	...	
Sandalwood Value.	...	...	55	...	...	2,005	1,950	...	
Minor Forest Produce ... Value.	...	...	181	...	...	510	329	...	
Confiscated Forest Produce ...	...	...	143	...	...	92	...	51	
Total, Southern Circle ...	...	...	8,48,942	...	...	10,85,650	2,36,708	...	Net difference in favour of the year —Rs. 2,36,708.

Form No. 22.—Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1915-1916—concluded.

Description of Timber and other Produce.	ON HAND AT COMMENCEMENT OF THE YEAR.			ON HAND AT CLOSE OF THE YEAR.			DIFFERENCE IN VALUE.		Remarks.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8	9	10
SIND CIRCLE.			Rs.			Rs.	Rs.	Rs.	
<i>Timber.</i>									
Babul logs	13	134	33	21	107	26	...	...
Tali logs	8	8	6	...	...	...	...	...
Kandi logs	46	50	13	71	213	40	...	...
Asri logs	1	3	1	76	192	24	...	...
Jaw rafters	211	105	7	340	181	42	...	...
Bahan posts	15	15	4	15	15	4	...	...
Kandi cart axles	9	9	3	1	1	...	...	...
Babul cart axles	15	15	4	7	7	2	...	...
Kandi stakes ... ..	...	...	...	4	2	...	...	...
Bahan logs ... ..	...	...	...	26	78	19	...	...
Bahan Varas ... ..	...	...	...	1	3	1	...	...
Lai props ... ..	...	...	...	8	24	3	...	...
Khandi props ... ..	...	...	...	26	78	15	...	...
Lai Manghas ... ..	...	...	...	80	40	2	...	...
Kandi Varas ... ..	...	...	...	4	12	3	...	...
Lai Varas ... ..	...	...	...	9	27	3	...	...
Total, Timber ...	318	339	71	689	980	184	113	...	
<i>Firewood and Charcoal.</i>	Mds.			Mds.					
Loco-fuel ... ..	...	55,917	1,602	...	49,805	1,663	...	...
Firewood	200	1,348	19	130	877	25	...	...
Total, Fuel ...	200	57,265	1,621	130	50,682	1,691	70	...	
<i>Minor Forest Produce.</i>	Mds.								
Babul, Kandi and other seeds ...	159	...	143	934	...	697	...	...
Jam brush wood ... ..	...	...	...	20	...	1	...	...
Total ...	159	...	143	954	...	698	...	...
Total, Sind Circle ...	159	...	1,835	...	...	2,573	738	...	Net difference in favour of the year—Rs. 738.
GRAND TOTAL ...	...	...	9,09,925	...	...	11,25,141	2,42,743	27,527	Net difference in favour of the year—Rs. 2,15,216.

FORM No. 23.—Abstract showing the value of the Live and Dead Stock for the year 1915-16.

Description of Live and Dead Stock.	ON HAND AT COMMENCEMENT OF THE YEAR.		ON HAND AT CLOSE OF THE YEAR.		DIFFERENCE IN VALUE.		Remarks.
	No.	Value.	No.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8
NORTHERN CIRCLE.							
<i>Live Stock.</i>		Rs.		Rs.	Rs.	Rs.	
Bullocks	4	394	3	294	...	100	
<i>Dead Stock.</i>							
Buildings	282	2,95,116	284	2,97,153	2,087	...	
Tents and rahutis	34*	4,500*	34	4,400	...	100	* Mistake corrected.
Stores, tools, plant and office furniture ... ..	...	63,895	...	63,987	152	...	
Remington Typewriters	6	...	6	...	...	...
Empire Typewriters	4	800	3	600	...	200	
Copying machines	8	...	8	...	...	...
Cyclostyles	7	...	7	...	...	...
Carts	7	133	7	133	...	...
Hay presses ... ..	...	...	111	...	...	...
Steel wire Ropes ... ..	...	...	12	...	...	...
Total, Dead Stock ...	348	3,64,384	472	3,66,273	2,189	300	
Total, Northern Circle ...	352	3,64,778	475	3,66,567	2,189	400	Net difference in favour of the year—Rs. 1,789.
CENTRAL CIRCLE.							
<i>Dead Stock.</i>			<i>Live Stock—Nil.</i>				
Buildings	146	1,70,152	147	1,71,724	1,572	...	
Tents	8	2,140	8	2,138	...	2	
Rahutis (Kabul pal fan)	28	2,100	27	2,172	72	...	
Tools, plant and office furniture ... ..	...	33,775	...	34,598	823	...	
Remington Typewriters	8*	...	9*	...	...	...	* Price not known.
Empire Typewriters	1*	...	2*	...	...	...
Copying machines	5*	...	5*	...	...	...
Cyclostyles	4*	...	5*	...	...	...
Boat with fittings	1	1,371	1	1,371	...	...
Boon furniture ... ..	...	815	...	700	...	115	
Total, Dead Stock ...	201	2,10,353	204	2,12,703	2,467	117	Net difference in favour of the year—Rs. 2,350.
Total, Central Circle ...	201	2,10,353	204	2,12,703	2,467	117	

FORM No. 23.—Abstract showing the value of the Live and Dead Stock for the year 1915-16—concluded.

Description of Live and Dead Stock.	ON HAND AT COMMENCEMENT OF THE YEAR.		ON HAND AT CLOSE OF THE YEAR.		DIFFERENCE IN VALUE.		Remarks.
	No.	Value.	No.	Value.	In favour of the year.	Against the year.	
1	2	3	4	5	6	7	8
SOUTHERN CIRCLE.							
<i>Live Stock.</i>		Rs.		Rs.	Rs.	Rs.	
Elephants ...	2*	6,000	...	...	...	...	* Were sold for Rs. 6,500.
Buffaloes and bullocks ...	52	2,690	57	2,952	...	...
Total, Live Stock ...	54	8,690	57	2,952	...	5,738	
<i>Dead Stock.</i>							
Buildings ...	382	2,96,357	392	3,02,314	...	...
Tents ...	9	2,212	9	2,212	...	...
Rahutis ...	20	1,732	22	1,838	...	...
Tools, plant and office furniture ...	...	91,860	...	90,082	...	...
Typewriters ...	7	...	10	...	...	...
Duplicators ...	6	...	6	...	...	...
Monorail materials ...	...	25,382	...	25,382	...	...
Carts ...	29	1,816	38	2,162	...	...
Guns ...	4	133	4	133	...	...
Bicycle ...	1	129	1	129	...	...
Iron safes ...	4	535	4	535	...	...
Total, Dead Stock ...	462	4,20,156	486	4,24,787	4,631	...	
Total, Southern Circle ...	516	4,28,846	543	4,27,739	4,631	5,738	Net difference against the year—Rs. 1,107.
SIND CIRCLE.							
<i>Live Stock.</i>							
Bullocks ...	12	274	11	246	...	...
Camels ...	36	1,390	32	1,160	...	...
Total, Live Stock ...	48	1,664	43	1,406	...	258	
<i>Dead Stock.</i>							
Buildings ...	103	49,409	96	47,764	...	...
Tents ...	14	2,954	14	2,954	...	...
Stores, Mathematerial ...	646	5,361	643	5,346	...	...
Tools, plant and office furniture ...	2,699	13,344	2,533	13,896	...	...
Remington Typewriters ...	5	...	5	...	...	...
Empire Typewriters ...	1	...	1	...	...	...
Copying machine ...	1	...	1	...	...	...
Miscellaneous ...	467	1,401	522	1,403	...	...
Iron safes ...	...	...	1	201	...	...
Total, Dead Stock ...	3,936	72,465	3,816	71,564	...	901	
Total, Sind Circle ...	3,984	74,129	3,859	72,970	...	1,159	
GRAND TOTAL ..	5,053	10,78,106	5,081	10,79,979	9,287	7,414	Net difference in favour of the year—Rs. 1,873.

FORM No. 24.

FORM No. 24.—Summary of Revenue and Expenditure of the

Budget Head.	Direction.	North Thána Division.	Central Thána Division.	South Thána Division.	Panch Mahals Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
NORTHERN CIRCLE.					
REVENUE.					
<i>I.—Timber and other Produce removed from the Forests by Government Agency—</i>					
a. Timber ...	.....	1,180 4 0	142 4 0	137 8 0	161 10 0
b. Firewood and charcoal... ..	.....	68 15 0	.....	490 8 6	2 12 0
c. Bamboos ...	.....	.....	.....	.....	563 14 0
d. Sandalwood ...	.....	.....	.....	.....	.....
e. Grass and other minor produce...	.....	.....	.....	.....	.....
f. Famine fodder ...	.....	.....	.....	.....	.....
Total, I ...	.....	1,249 3 0	142 4 0	598 0 6	728 4 0
<i>II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—</i>					
a. Timber ...	.....	5,33,239 0 3	2,36,882 15 1	1,91,233 9 9	79,667 3 1
b. Firewood and charcoal... ..	.....	421 14 1	552 11 3	261 9 0	509 2 6
c. Bamboos ...	.....	9,414 8 10	3,043 5 0	62 2 0	1,637 0 0
d. Grazing and fodder grass ...	.....	6,122 5 0	3,690 13 0	2,619 6 0	12,426 7 3
e. Other minor produce ...	.....	123 12 0	3,976 10 6	3,560 12 9	11,195 3 0
f. Other items ...	.....	.....	.....	.....	.....
g. Commutation fees ...	.....	.....	.....	.....	.....
Total, II ...	.....	5,49,511 6 2	2,49,046 6 10	1,97,787 7 6	1,06,434 15 10
<i>III.—Drift and Waif Wood and Confiscated Forest Produce...</i>					
.....	.....	7 6 0	1 4 0	8 14 0	.....
Total, III ...	.....	7 6 0	1 4 0	8 14 0	.....
<i>IV.—Revenue from Forests not managed by Government—</i>					
a. Duty on foreign timber and other forest produce...	.....	.....	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	428 14 1	36 3 4	.....
Total, IV ...	.....	.....	428 14 1	36 3 4	.....
<i>V.—Miscellaneous—</i>					
a. Fines and forfeitures ...	.....	614 7 6	2,729 12 1	1,372 8 0	71 14 0
b. Refunds ...	.....	188 0 6	2 5 0	107 13 11	17 15 7
c. Other sources ...	330 12 0	2,407 2 3	3,691 11 0	3,577 4 9	7,769 8 9
Total, V ...	330 12 0	3,409 10 3	6,466 13 1	5,057 10 8	7,858 8 4
Grand Total, Revenue.	330 12 0	5,54,037 9 5	2,56,083 9 0	2,08,468 4 0	1,14,028 10 3
EXPENDITURE.					
A.—CONSERVANCY AND WORKS.					
<i>i.—Timber and other Produce removed from the Forests by Government Agency—</i>					
a. Timber ...	.....	229 9 0	59 0 0	203 4 6	3 13 0
b. Firewood and charcoal... ..	.....	5 2 0	.....	142 11 6	91 0 0
c. Bamboos ...	.....	.....	.....	.....	.....
d. Sandalwood ...	.....	.....	.....	.....	.....
e. Grass and other minor produce...	700 0 0	.....	.....	.....	.....
f. Famine fodder ...	32 10 0	.....	.....	.....	.....
Total, A-I ...	732 10 0	234 11 0	59 0 0	346 0 0	94 13 0
<i>II.—Timber and other Produce removed from the Forests by Consumers or Purchasers ...</i>					
.....	228 11 0	19,006 0 1	4,444 8 8	4,193 2 2	2,992 1 11
Total, A-II ...	228 11 0	19,006 0 1	4,444 8 8	4,193 2 2	2,992 1 11
<i>III.—Drift and Waif Wood and Confiscated Forest Produce ...</i>					
.....	.....	2 6 0	10 0 0	5 12 0	0 6 0
Total, A-III ...	.....	2 6 0	10 0 0	5 12 0	0 6 0
<i>IV.—Revenue from Forests not managed by Government—</i>					
a. Duty on foreign timber and other forest produce...	.....	.....	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	.....	.....	.....
Total, A-IV ...	.....	.....	.....	.....	.....

different Divisions for the Forest year 1915-1916.

North Násik Division.	South Násik Division.	Surat Division.	Working Plains Division.	South Násik Famine Fodder Division.	Direction Famine Fodder Division.	Total for the Forest year 1914-1915.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	8 8 0	1,55,928 10 0	.....	.....	.....	1,57,528 12 0
95 8 0	1,092 11 3	3,272 8 0	.....	.....	.....	5,022 9 9
.....	88 8 0	.....	.....	.....	.....	380 6 0
.....	8,148 13 1	.....	.....	.....	68,120 4 0	8,148 13 1
.....	.....	.....	.....	.....	.....	68,120 4 0
95 8 0	9,336 8 4	1,69,200 13 0	.....	.....	68,120 4 0	2,39,470 12 10
.....
836 0 0	99,248 8 0	50,325 9 9	.....	.....	.....	11,01,532 13 11
6,502 2 8	3,350 10 3	258 10 0	.....	.....	.....	11,754 11 4
33 0 0	6,174 4 0	13,182 12 8	.....	.....	.....	34,426 14 6
38,058 13 6	37,212 14 0	2,756 4 0	.....	.....	.....	1,02,886 14 9
5,348 14 0	7,514 10 0	4,208 4 11	.....	.....	.....	35,924 8 2
.....
50,776 13 9	1,63,400 14 3	70,707 9 4	.....	.....	.....	18,70,525 9 8
.....
77 10 3	261 9 3	10 11 0	.....	.....	.....	367 6 0
77 10 3	261 9 3	10 11 0	.....	.....	.....	367 6 0
.....
.....	.....	61 11 6	.....	.....	.....	526 12 11
.....	.....	61 11 6	.....	.....	.....	526 12 11
.....
415 0 0	1,793 5 0	757 12 6	.....	.....	.....	7,901 11 1
0 13 1	24 12 6	530 8 3	.....	.....	.....	871 15 10
8,453 13 5	3,324 15 4	1,334 5 2	3 8 1	.....	.....	81,215 11 0
8,869 10 6	5,443 0 10	2,622 4 11	3 3 1	.....	.....	40,112 6 8
59,819 10 6	1,69,442 0 8	2,32,603 1 9	3 3 1	.....	69,120 4 0	16,57,003 0 7
.....
.....	51 5 0	51,092 12 1	.....	.....	.....	51,039 10 7
38 8 0	580 9 9	841 2 3	.....	.....	.....	1,097 1 6
.....	15 6 0	.....	.....	.....	.....	15 6 0
.....
1 8 0	1,439 5 7	573 6 0	.....	.....	.....	2,714 3 7
.....	.....	.....	.....	.....	1,53,329 10 4	1,53,302 4 4
38 0 0	2,083 10 4	52,507 4 4	.....	.....	1,53,329 10 4	2,09,428 10 0
.....
275 3 9	2,420 1 6	5,905 13 7	.....	.....	.....	38,560 10 8
275 3 9	2,420 1 6	5,905 13 7	.....	.....	.....	38,560 10 8
.....
.....	17 7 0	.....	.....	.....	.....	35 15 0
.....	17 7 0	.....	.....	.....	.....	35 15 0
.....
.....
.....
.....

FORM No. 24.—Summary of Revenue and Expenditure of the

Budget Heads.	Direction.	North Thana Division.	Central Thana Division.	South Thana Division.	Panch Mahals Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
EXPENDITURE—continued.					
A.—CONSERVANCY AND WORKS—continued.					
<i>V.—Rent of leased Forests and Payments to Shareholders in Forests managed by Government ...</i>	.....	.....	.....	450 11 3	.....
Total, A-V ...	.....	.....	.....	450 11 3	.....
VI.—Live-Stock, Stores, Tools and Plant—					
<i>a. Purchase of cattle ...</i>	.....	.....	.....	.....	.....
<i>b. Food and keep of cattle ...</i>	.....	.....	.....	.....	81 8 8
<i>c. Purchase of stores, tools and plant ...</i>	1,635 13 6	7 8 0	7 8 5	801 11 0	21 1 0
Total, A-VI ...	1,635 13 6	7 8 0	7 8 5	801 11 0	102 9 8
VII.—Communications and Buildings—					
<i>a. Roads and bridges ...</i>	.....	237 14 0	1,197 0 6	49 6 0	15 0 0
<i>b. Buildings ...</i>	.....	609 8 2	803 5 6	2,338 10 6	281 9 0
<i>c. Other works ...</i>	.....	.....	20 4 6	309 9 6	217 10 6
Total, A-VII ...	.....	907 6 2	1,519 10 6	2,817 9 6	514 3 6
VIII.—Organization, Improvement and Extension of Forest—					
<i>a. Demarcation ...</i>	.....	878 14 0	463 7 0	223 6 3	43 13 4
<i>b. Cost of Forest Settlements and Compensation for land and rights ...</i>	.....	2 5 0	.....	.....	45 3 10
<i>c. Surveys ...</i>	.....	510 2 1	442 9 2	385 6 10	108 6 0
<i>d. Working-plans ...</i>	.....	1,093 13 10	455 7 10	79 6 0	669 14 9
<i>e. Sowing and planting ...</i>	96 0 0	3,215 10 0	4,394 4 4	3,839 6 6	3,519 8 8
<i>f. Protection from fire ...</i>	.....	539 0 0	.....	21 2 0	10 0 0
<i>g. Other works ...</i>	.....	.....	.....	.....	.....
Total, A-VIII ...	96 0 0	6,287 14 11	6,355 13 4	4,547 13 7	4,893 14 7
IX.—Miscellaneous—					
<i>a. Law charges ...</i>	203 8 0	3 0 0	.....	.....	.....
<i>b. Other charges ...</i>	.....	1,331 14 10	2,021 1 0	2,555 14 11	2,638 13 6
Total, A-IX ...	203 8 0	1,335 4 10	2,021 1 0	2,555 14 11	2,638 13 6
TOTAL, A.—CONSERVANCY AND WORKS ...	2,806 10 6	23,281 8 0	14,817 8 11	14,923 10 5	10,926 11 9
B.—ESTABLISHMENTS.					
I.—Salaries—					
<i>a. Conservators ...</i>	17,816 10 8	.....	.....	.....	.....
<i>b. Superior Officers ...</i>	268 14 2	14,595 0 11	10,603 0 0	18,719 6 7	13,321 3 11
<i>c. Subordinate Forest and Depot Establishments ...</i>	.....	24,336 5 1	24,050 7 8	29,570 7 10	20,068 7 0
<i>d. Office Establishments ...</i>	7,864 13 3	6,348 10 5	6,261 2 10	6,877 13 1	6,331 1 5
<i>e. Deputation and Special Allowances ...</i>	.....	96 2 0	561 9 11	840 5 8	2 14 8
<i>f. Exchange Compensation Allowance—</i>					
<i>1. Conservators ...</i>	.....	.....	.....	.....	.....
<i>2. Deputy Conservators ...</i>	.....	.....	.....	.....	.....
<i>3. Assistant Conservators ...</i>	.....	.....	.....	.....	.....
<i>4. Extra Assistant Conservators ...</i>	.....	.....	.....	.....	.....
Total, B-I ...	20,026 8 1	46,874 2 5	42,865 4 0	55,009 1 2	40,528 10 10
II.—Travelling Allowances—					
<i>a. Conservators ...</i>	2,481 12 11	.....	.....	.....	.....
<i>b. Superior Officers ...</i>	15 5 0	2,372 9 6	1,891 6 8	2,613 10 2	2,784 12 4
<i>c. Subordinate Forest and Depot Establishments ...</i>	.....	2,618 6 8	2,568 7 5	2,194 3 7	2,406 4 4
<i>d. Office Establishments ...</i>	1,081 2 0	933 7 2	795 12 9	669 6 11	663 9 10
<i>e. Forest School (Dahra-Dun) ...</i>	.....	.....	.....	317 5 0	.....
<i>f. Plague allowances ...</i>	60 0 0	80 0 0	.....	25 0 0	2 8 0
Total, B-II ...	3,640 3 11	5,949 1 4	5,246 10 10	5,819 9 8	5,923 2 6
III.—Contingencies—					
<i>a. Stationery ...</i>	34 3 0	324 7 8	343 15 8	337 12 6	304 3 3
<i>b. Carriage of Tents and Records ...</i>	260 7 8	205 1 1	459 10 8	225 0 2	278 9 4
<i>c. Rents, rates and taxes ...</i>	937 14 5	830 0 0	.....	764 2 10	13 0 0
<i>d. Pay of Police Guards ...</i>	.....	.....	.....	.....	.....
<i>e. Official postage ...</i>	455 4 0	1,016 6 0	860 2 6	1,037 9 6	908 14 0
<i>f. Sundries ...</i>	241 3 6	350 2 4	340 9 8	293 5 0	515 4 8
<i>Payments to Officers of other Provinces ...</i>	.....	.....	.....	.....	.....
Total, B-III ...	1,930 0 7	2,717 1 1	2,144 6 1	2,697 14 8	2,203 15 3
TOTAL, B.—ESTABLISHMENT ...	31,596 12 7	54,539 4 10	49,756 4 11	63,525 0 1	48,640 13 7
GRAND TOTAL OF EXPENDITURE ...	34,465 7 1	82,820 7 10	64,073 13 10	78,448 3 6	59,576 8 4

different Divisions for the Forest year 1915-1916—contd.

North Nāsik Division.	South Nāsik Division.	Surat Division.	Working Plans Division.	South Nāsik Famine Fodder Division.	Direction Famine Fodder Division.	Total for the Forest year 1915-1916.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	4,477 8 0	17,999 11 8				22,037 14 11
	4,477 8 0	17,999 11 8				22,037 14 11
		800 0 0				800 0 0
24 0 0	187 15 0	1,080 11 4				8,445 4 8
24 0 0	187 15 0	1,808 11 4				3,635 12 0
	1,004 9 9	15,554 10 1				10,077 8 4
5 5 6	188 12 0	7,180 4 2				10,703 0 10
		837 11 10				1,126 8 10
5 5 6	2,091 5 9	28,551 10 1				30,007 3 0
100 7 8	541 5 0	133 15 3				2,462 6 7
		730 0 11				730 15 9
312 0 2	783 14 0	910 6 6	133 3 0			3,502 15 0
57 0 0	112 3 0	1,752 9 7				4,315 9 0
58 14 6	1,325 2 0	0,106 15 0				23,018 18 0
42 11 6	15 8 0	251 3 8				920 8 8
607 1 5	2,782 0 0	9,902 8 0	133 8 0			35,120 4 10
1,453 0 6	2,000 6 0	1,801 2 9	0 14 0			209 6 0
1,453 0 6	2,000 6 0	1,802 10 9	0 14 0			14,003 2
2,402 11 2	10,123 6 1	1,12,298 6 8	134 1 0			14,871 8 0
						3,55,003 15 5
5,199 5 4						17,810 10 8
10,453 2 6	14,743 0 0	10,053 5 4	6,913 7 2			1,01,108 11 5
4,800 6 9	25,49 12 8	22,101 7 3	928 0 0			1,05,188 1 7
	5,934 9 0	0,534 0 2	1,340 5 6			51,366 1 2
	730 6 3	8,002 5 8				10,323 12 0
26,448 14 7	40,762 12 8	53,681 2 5	9,190 12 8			3,45,883 4 10
1,298 3 4	2,578 2 8	2,713 0 0	1,918 12 0			2,482 12 11
						18,111 13 8
1,084 4 6	2,383 5 7	3,152 8 7	182 13 5			17,270 0 1
490 13 1	467 0 9	992 8 1	563 5 4			6,070 1 10
		90 5 2				407 10 2
81 4 6	200 13 1					412 9 7
3,542 9 5	5,635 6 0	6,949 5 10	2,002 14 0			45,307 0 3
188 1 11	388 6 11	255 1 3	10 1 6			2,105 1 10
99 15 6	186 1 0	454 0 1	187 9 6			2,402 13 1
54 0 0	36 0 0	2 0 0				2,007 1 3
570 1 6	708 8 6	800 13 0	30 0 0			6,501 11 0
138 3 0	379 3 6	585 14 10	64 4 0			2,909 2 1
1,059 5 11	1,044 3 11	2,104 3 2	200 15			10,795 1 3
31,050 13 11	54,040 6 7	62,733 11 5	12,154 10 5			4,08,045 0 4
33,513 9 1	70,169 12 8	1,75,032 1 8	12,248 11 5		1,53,320 10 4	7,03,780 5 9

FORM No. 24.—Summary of Revenue and Expenditure of the

Budget Head.	Direction.	North Khândesh Division.	West Khândesh Division.	East Khândesh Division.	Kolaba Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
CENTRAL CIRCLE.					
REVENUE.					
<i>I.—Timber and other Produce removed from the Forests by Government Agency—</i>					
a. Timber	9 0 0	72 0 0	21 0 0	310 5 0
b. Firewood and charcoal	5,319 9 0
c. Bamboos	84 2 4	.....	1 0 0	.....
d. Sandalwood
e. Grass and other minor produce	2,268 13 6	11,050 0 0	.....	28 0 0
f. Famine fodder
Total, I	2,351 13 10	11,122 0 0	22 0 0	5,256 14 0
<i>II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—</i>					
a. Timber	19,494 9 2	1,02,267 6 10	11,349 14 0	1,43,505 4 0
b. Firewood and charcoal	5,548 10 6	4,022 8 0	20,141 2 6	665 0 0
c. Bamboos	381 14 0	346 4 0	7,444 0 0	.....
d. Grazing and fodder-grass	35,636 10 6	24,852 6 8	66,408 3 2	15,638 4 0
e. Other minor produce	1,797 13 0	3,424 7 6	2,535 1 9	3,579 0 0
f. Other items
g. Commutation fees
Total, II	63,859 9 2	1,35,003 0 2	1,27,872 4 5	1,63,387 8 0
<i>III.—Drift and Waif Wood and Confiscated Forest Produce</i>					
	223 9 9	256 2 9	233 12 9	730 3 7
Total, III	223 9 9	256 2 9	233 12 9	730 3 7
<i>IV.—Revenue from Forests not managed by Government—</i>					
a. Duty on foreign timber and other forest produce	2,390 13 0	.....	2,616 0 0	.....
b. Revenue from shared and private Forests	137 1 10
Total, IV	2,390 13 0	.....	2,616 0 0	137 1 10
<i>F.—Miscellaneous—</i>					
a. Fines and forfeitures	570 6 0	804 4 0	2,084 12 7	1,433 0 0
b. Refunds	1 4 0	24 6 1	.....	3 2 0	11 4 8
c. Other sources	-194 3 0	8,326 14 7	9,137 7 6	6,748 7 4	7,264 5 11
Total, V	-192 15 0	8,921 10 8	10,031 11 6	8,436 5 11	8,768 10 7
Grand Total, Revenue	-192 15 0	76,747 10 5	1,56,412 14 5	1,39,180 7 1	1,78,669 6 0
EXPENDITURE.					
A.—CONSERVANCY AND WORKS.					
<i>I.—Timber and other Produce removed from the Forests by Government Agency—</i>					
a. Timber	1 8 0	.....	.....	71 2 3
b. Firewood and charcoal	10 15 0	.....	69 12 0	3,486 8 9
c. Bamboos	45 15 6	.....	.....	.....
d. Sandalwood
e. Grass and other minor produce	1,529 15 9	5,903 1 3	.....	.....
f. Famine fodder
Total, A-I	1,586 6 3	5,903 1 3	69 12 0	3,557 11 0
<i>II.—Timber and other Produce removed from the Forests by Consumers or Purchasers.</i>					
	5,503 1 6	2,577 4 8	2,427 14 4	3,345 13 6
Total, A-II	5,503 1 6	2,577 4 8	2,427 14 4	3,345 13 6
<i>III.—Drift and Waif Wood and Confiscated Forest Produce</i>					
	3 6 0	.....	4 3 0	27 5 11
Total, A-III	3 6 0	.....	4 3 0	27 5 11
<i>IV.—Revenue from Forests not managed by Government—</i>					
a. Duty on foreign timber and other forest produce
b. Revenue from shared and private Forests
Total, A-IV

different Divisions for the Forest year 1915-1916—contd.

Sátara Division.	Poona Division.	Working Plans, Central Circle, Division.	West Khândesh Famine Fodder Division.	Kolâba Famine Fodder Division.	Total for the Forest year 1915-16.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
12 8 0	432 3 6	.....	.....	.....	907 0 0
.....	9,181 6 0	.....	.....	.....	22,328 7 2
.....	9 0 0	.....	.....	.....	94 2 4
.....	480 14 0	.....	.....	.....	480 14 0
.....	6,094 2 8	.....	.....	.....	10,429 0 2
.....	.....	.....	36,760 9 7	846 1 2	87,008 10 9
12 8 0	16,250 10 2	.....	36,760 9 7	846 1 2	60,746 3 11
7,887 4 3	24,681 2 6	.....	.....	.....	9,06,409 7 11
316 8 0	40,514 8 9	.....	.....	.....	71,208 6 0
123 12 0	4 10 0	.....	.....	.....	8,300 8 0
29,835 9 6	53,045 5 6	.....	.....	.....	2,45,510 7 4
6,864 15 0	5,812 8 9	.....	.....	.....	24,043 13 0
.....
45,028 0 9	1,24,388 3 6	.....	.....	.....	6,58,538 10 0
245 11 6	551 3 9	.....	.....	.....	2,340 12 1
245 11 6	551 3 9	.....	.....	.....	2,240 12 1
.....
.....	.....	.....	.....	.....	5,006 13 0
.....	22 5 7	.....	.....	.....	159 7 5
.....	22 5 7	.....	.....	.....	5,166 4 5
191 0 0	660 6 0	.....	.....	.....	6,483 12 7
1 8 1	2 0 8	.....	.....	.....	43 9 5
5,418 3 5	20,904 8 10	0 1 0	.....	.....	56,605 13 7
5,610 11 5	21,566 15 6	0 1 0	.....	.....	63,183 3 7
58,621 7 10	1,62,779 6 6	0 1 0	36,760 9 7	846 1 2	8,09,825 1 0
52 14 0	7 2 0	.....	.....	.....	133 10 3
4,233 2 3	1,158 15 0	.....	.....	.....	8,959 5 0
.....	1 8 0	.....	.....	.....	47 7 6
.....	17 11 0	.....	.....	.....	17 11 0
.....	1,792 9 1	.....	.....	.....	9,225 10 1
.....	.....	.....	52,540 7 9	162 3 0	52,692 10 9
4,286 0 3	2,977 13 1	.....	52,540 7 9	162 3 0	71,075 6 7
65 3 9	493 6 3	.....	.....	.....	14,412 12 0
65 3 9	493 6 3	.....	.....	.....	14,412 12 0
.....	66 2 0	.....	.....	.....	101 0 11
.....	66 2 0	.....	.....	.....	101 0 11
.....
.....
.....
.....

FORM No. 24.—Summary of Revenue and Expenditure of the

Budget Head.	Direction.	North Khandesh Division.	West Khandesh Division.	East Khandesh Division.	Kolaba Division.
EXPENDITURE— continued.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS—continued.					
V.—Rent of leased Forests and Payments to Shareholders in Forests managed by Government ...	.....	.....	.....	.....	6,691 12 11
Total, A-V ...	.....	.....	.....	.....	6,691 12 11
VI.—Live-stock, Stores, Tools and Plant—					
a. Purchase of cattle ...	.....	.....	.....	.....	.....
b. Feed and keep of cattle ...	.....	.....	.....	.....	.....
c. Purchase of stores, tools and plant...	4 12 0	157 3 0	233 15 6	142 6 0	0 12 0
Total, A-VI ...	4 12 0	157 3 0	233 15 6	142 6 0	0 12 0
VII.—Communications and Buildings—					
a. Roads and Bridges ...	.....	2,293 14 3	813 11 3	1,220 9 0	84 14 0
b. Buildings...	.....	980 7 9	819 13 9	595 6 5	328 5 11
c. Other works ...	.....	.....	175 0 0	.....	.....
Total, A-VII ...	.....	3,274 6 0	1,809 9 0	1,815 15 5	411 3 11
VIII.—Organization, Improvement and Extension of Forest—					
a. Demarcation ...	.....	387 0 0	498 2 0	254 12 10	2,729 15 9
b. Cost of Forest Settlements and Compensation for land and rights ...	.....	.....	92 0 0	.....	1,224 11 11
c. Surveys ...	.....	.....	.....	.....	.....
d. Working Plans ...	.....	520 9 9	258 1 4	580 9 3	474 4 9
e. Sowing and Plant- ing ...	.....	9 11 6	177 5 0	101 11 9	639 11 9
f. Protection from Fire ...	.....	7,840 9 7	4,506 13 0	3,071 6 9	2,789 6 0
g. Other works ...	.....	.....	.....	0 4 0	6 4 0
Total, A-VIII ...	.....	8,757 14 10	5,527 5 4	4,008 12 7	7,864 6 2
IX.—Miscellaneous—					
a. Law charges ...	.....	.....	.....	.....	.....
b. Other charges ...	.....	1,020 2 1	1,245 10 9	2,293 14 4	3,818 13 8
Total, A-IX ...	.....	1,020 2 1	1,245 10 9	2,293 14 4	3,818 13 3
TOTAL A.—CONSER- VANCY AND WORKS...	4 12 0	20,304 7 8	17,295 14 6	10,762 13 8	25,717 14 8
B.—ESTABLISHMENTS.					
I.—Salaries—					
a. Conservators ...	19,877 6 9	.....	.....	.....	.....
b. Superior Officers ...	900 0 0	9,914 10 8	10,014 13 6	10,477 5 4	10,554 14 9
c. Subordinate Forest and Depôt Establishments ...	.....	20,317 15 4	22,480 2 5	29,559 14 0	39,337 3 10
d. Office Establish- ments ...	8,850 8 3	6,104 6 9	5,283 3 2	6,460 7 8	8,344 11 4
e. Deputation and Special Allow- ances ...	5,765 14 5	2,020 5 0	2,090 5 8	46 10 8	126 10 6
f. Exchange Com- pensation Allow- ance—	.....	.....	.....	.....	.....
1. Conservators ...	.....	.....	.....	.....	.....
2. Deputy Conser- vators...	.....	.....	.....	.....	.....
3. Assistant Con- servators ...	.....	.....	.....	.....	.....
4. Extra Assistant Conservators ...	.....	.....	.....	.....	.....
Total, B-I ...	35,893 13 5	39,357 5 9	39,872 8 9	46,544 5 8	58,363 8 5
II.—Travelling Allow- ances—					
a. Conservators ...	2,765 1 4	.....	.....	.....	.....
b. Superior Officers ...	371 1 0	2,625 8 0	2,690 12 7	2,916 2 4	1,920 0 0
c. Subordinate Forest and Depôt Establishments ...	.....	2,938 9 2	2,931 9 6	2,999 3 2	2,606 12 7
d. Office Establish- ments ...	721 10 1	797 1 11	664 6 2	728 0 2	796 1 2
e. Forest 'School', Dehra Dun ...	194 15 9	.....	.....	50 0 0	.....
f. Plague allowances.	.....	.....	.....	.....	180 0 0
Total, B-II ...	4,062 12 2	6,361 3 1	6,286 12 3	6,693 5 8	5,482 13 9
III.—Contingencies—					
a. Stationery ...	19 4 0	319 3 4	245 7 5	401 7 10	479 14 0
b. Carriage of Tents and Records ...	221 6 0	320 9 6	209 4 0	130 14 6	211 0 6
c. Rents, rates and taxes ...	1,844 12 0	141 0 0	140 0 0	36 0 0	.....
d. Pay of Police guards ...	.....	.....	.....	.....	.....
e. Official postage...	401 12 0	501 3 0	790 14 6	988 1 6	962 10 0
f. Sundries ...	444 8 0	467 12 9	367 4 0	521 1 6	271 2 3
Payments to Officers of other Provinces.	.....	.....	.....	.....	.....
Total, B-III ...	2,931 10 0	1,779 12 7	1,748 13 11	2,077 9 4	1,924 10 9
TOTAL, B.—ESTABLISH- MENTS...	42,378 3 7	46,498 5 5	47,909 2 11	55,315 4 8	65,771 0 11
GRAND TOTAL OF EXPENDITURE ...	42,382 15 7	66,802 13 1	65,205 1 5	60,078 2 4	61,468 15 7

different Divisions for the Forest year 1915-1916—continued.

Satara Division.	Poona Division.	Working Plans Central Circle Division.	West Khandesh Famine Fodder Division.	Kolaba Famine Fodder Division.	Total for the Forest year 1915-1916.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
3,480 2 5	689 14 5	.....	.....	.....	10,841 13 9
3,480 2 5	689 14 5	.....	.....	.....	10,841 13 9
.....
.....
209 14 0	139 8 0	38 1 0	.....	.....	926 5 6
209 14 0	139 8 0	38 1 0	.....	.....	926 5 6
.....
2,523 2 11	1,356 7 0	.....	.....	.....	8,202 10 5
1,255 9 9	298 2 9	.....	.....	.....	4,175 5 4
123 13 0	.....	.....	.....	.....	298 13 0
3,902 0 8	1,654 9 9	.....	.....	.....	12,866 12 9
.....
480 1 6	828 12 11	.....	.....	.....	5,178 13 0
.....
443 0 7	.....	.....	.....	.....	1,759 12 6
50 15 9	174 3 3	782 10 10	.....	.....	2,841 6 11
1,657 9 10	1,158 5 6	.....	.....	.....	3,794 7 4
150 0 0	160 0 0	.....	.....	.....	18,468 9 4
113 13 6	469 13 11	.....	.....	.....	590 8 5
2,895 9 2	2,791 3 7	782 10 10	.....	.....	32,827 14 6
.....
2,143 4 10	3,595 1 1	83 6 10	.....	.....	14,205 5 2
2,143 4 10	3,595 1 1	83 6 10	.....	.....	14,205 5 2
16,962 3 1	12,407 8 2	909 2 8	52,540 7 9	152 3 0	1,67,037 7 2
.....
11,786 13 3	21,557 6 8	9,037 15 6	.....	.....	19,877 6 9
.....	.....	.....	.....	.....	84,293 15 8
24,281 14 10	37,054 4 5	2,300 9 5	.....	.....	1,75,382 0 3
6,139 0 4	6,998 12 5	1,436 13 0	.....	.....	49,622 14 11
1,505 10 11	418 0 8	150 0 0	.....	.....	12,123 9 10
.....
.....
.....
43,713 7 4	66,028 8 2	12,975 5 11	.....	.....	3,41,249 15 5
.....
.....
2,243 8 7	221 10 8	1,341 6 0	.....	.....	2,086 12 0
.....	3,112 11 1	.....	.....	.....	17,221 1 7
2,790 9 5	3,133 5 4	775 14 3	.....	.....	18,175 15 5
694 9 4	878 14 7	439 11 3	.....	.....	5,710 6 9
.....	87 8 0	.....	.....	.....	832 7 9
17 0 0	71 8 0	.....	.....	.....	248 8 0
5,735 11 4	7,505 9 8	2,556 15 6	.....	.....	44,675 3 5
.....
353 12 7	495 8 7	4 9 0	.....	.....	2,319 2 9
230 4 0	256 0 9	119 0 0	.....	.....	1,698 7 3
15 6 0	144 0 0	.....	.....	.....	2,327 2 0
.....
798 0 0	1,259 8 6	70 1 0	.....	.....	5,762 2 6
350 12 9	405 3 0	101 3 0	.....	.....	2,958 15 3
.....
1,7 3 4	2,560 4 10	284 13 0	.....	.....	15,065 13 9
.....
51,197 8 0	76,094 6 8	15,827 2 5	.....	.....	4,00,991 0 7
65,199 9 1	88,501 14 10	10,736 5 1	52,540 7 9	152 3 0	5,58,049 7 9

FORM No. 24.—Summary of Revenue and Expenditure of the

Budget Head.	Direction.	Working Plans Division.	Dhárwar and Bijapur Division.	Belgaum Division.	Ratnagiri Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
SOUTHERN CIRCLE.					
REVENUE.					
I.—Timber and other Produce removed from the Forests by Government Agency—					
a. Timber	.....	.....	2,081 6 0	12,516 4 5	.....
b. Firewood and charcoal	.....	.....	311 4 0	2,05,204 8 9	.....
c. Bamboos	.....	.....	.....	.....	.....
d. Sandalwood	.....	.....	23,140 10 3	2,764 8 4	.....
e. Grass and other minor produce	.....	.....	.....	796 4 5	.....
Total, I	.....	.....	25,542 4 3	2,21,371 7 11	.....
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers—					
a. Timber	.....	.....	27,040 15 0	63,009 13 4	270 12 3
b. Firewood and charcoal	.....	.....	7,945 3 4	25,631 2 2	375 4 0
c. Bamboos	.....	.....	684 0 0	6,883 4 8	4 8 0
d. Grazing and fodder grass	.....	.....	25,169 0 0	11,797 10 9	122 8 0
e. Other minor produce	.....	.....	13,618 2 8	34,745 8 3	15 15 0
f. Other items	.....	.....	.....	.....	.....
g. Commutation fees	.....	.....	.....	.....	.....
Total, II	.....	.....	73,368 14 0	1,62,067 6 9	798 15 3
III.—Drift and Waif Wood and Confiscated Forest Produce					
Total, III	.....	.....	55 1 0	100 5 6	2 1 0
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....
b. Revenue from shared and private Forests	.....	.....	.....	.....	10 9 6
Total, IV	.....	.....	.....	.....	10 9 6
V.—Miscellaneous—					
a. Fines and forfeitures	.....	.....	558 6 0	1,020 8 3	.....
b. Refunds	19 5 0	0 5 6	4 6 0	86 15 0	12 12 6
c. Other sources	1,384 12 0	.....	2,466 3 10	17,611 11 2	138 4 10
Total, V	1,404 1 0	0 5 6	3,023 15 10	18,719 3 2	161 1 4
Grand Total, Revenue	1,404 1 0	0 5 6	1,01,993 3 1	4,02,267 7 4	962 11 1
EXPENDITURE.					
A.—CONSERVANCY AND WORKS.					
I.—Timber and other Produce removed from the Forests by Government Agency—					
a. Timber	.....	.....	403 13 5	2,750 14 8	.....
b. Firewood and charcoal	.....	.....	108 6 0	1,04,221 7 3	.....
c. Bamboos	.....	.....	.....	.....	.....
d. Sandalwood	.....	.....	604 9 8	455 15 5	.....
e. Grass and other minor produce	.....	.....	.....	959 1 10	.....
Total, A-I	.....	.....	1,176 13 1	1,08,387 7 2	.....
II.—Timber and other Produce removed from the Forests by Consumers or Purchasers					
Total, A-II	.....	.....	425 13 4	2,044 8 9	8 1 0
III.—Drift and Waif Wood and Confiscated Forest Produce					
Total, A-III	.....	.....	11 11 0	13 6 0	.....
IV.—Revenue from Forests not managed by Government—					
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....
b. Revenue from shared and private Forests	.....	.....	.....	.....	.....
Total, A-IV	.....	.....	.....	.....	.....

different Divisions for the Forest year 1915-1916—contd.

Kánara, Eastern Division.	Kánara, Northern Division.	Kánara, Southern Division.	Kánara, Western Division.	Kánara Central Division.	Total for the Forest year 1915-1916.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
3,72,707 9 10	6,04,681 7 7	4,229 4 0	85,310 10 6	20,535 3 5	11,02,063 13 9
88 0 9	3,843 14 5	1,449 0 3	23,359 0 9	384 13 1	2,34,710 9 3
2,395 2 4	12 0 0	2,367 8 0	.....	6,072 8 9	30,761 3 8
.....	.....	.....	.....	.....	706 4 5
3,75,100 12 2	6,08,539 8 0	8,045 12 3	1,08,669 11 3	26,973 9 2	13,74,331 15 1
.....
18,003 12 2	1,47,971 2 10	3,205 9 5	1,468 10 8	1,950 13 8	2,83,535 8 11
5,054 13 8	910 9 8	8,905 11 9	33,885 2 8	8,505 4 4	96,113 3 2
11,574 13 0	24,079 5 0	700 5 0	3,084 14 1	431 12 3	47,942 13 7
3,166 12 0	5,672 10 0	14,866 14 0	5,268 0 0	4,953 14 0	71,027 13 9
2,670 0 0	607 10 0	8,798 2 9	9,630 6 2	832 10 5	70,118 7 3
.....
41,075 2 5	1,79,741 5 6	36,476 10 11	53,598 1 7	16,673 6 3	5,68,737 14 8
.....
59 4 0	0 9 6	.....	233 0 11	.....	459 5 11
59 4 0	0 9 6	.....	233 0 11	.....	459 5 11
.....
.....	.....	.....	.....	.....	10 9 6
.....	.....	.....	.....	.....	10 9 6
169 14 0	144 0 6	795 15 9	3,289 15 1	1,063 4 3	7,039 15 4
133 7 5	101 8 2	—0 6 9	33 11 5	.....	393 1 0
4,769 1 9	2,897 15 2	9,207 7 6	3,992 15 11	2,256 0 2	44,714 8 4
5,072 7 3	3,143 7 4	10,003 0 6	7,803 10 5	3,319 4 5	52,145 8 8
4,21,397 9 9	7,91,434 12 4	54,525 7 8	1,74,744 8 2	46,965 3 11	10,95,695 5 10
.....
1,21,976 5 11	2,74,896 14 8	1,745 7 9	41,256 14 6	22,372 14 5	4,65,403 5 4
.....	5,205 15 2	2,160 4 2	10,643 11 1	.....	1,22,339 11 8
886 5 11	194 2 1	273 9 5	.....	474 0 11	2,449 11 5
.....	.....	.....	.....	.....	959 1 10
1,22,302 11 10	2,80,298 15 11	4,179 5 4	51,000 9 7	22,846 15 4	5,91,150 14 3
.....
368 5 2	583 1 9	1,410 6 9	513 0 3	796 7 7	7,049 12 7
368 5 2	583 1 9	1,410 6 9	513 0 3	796 7 7	7,049 12 7
.....
3 10 0	2 2 0	2 2 0	27 10 0	1 0 0	61 9 0
3 10 0	2 2 0	2 2 0	27 10 0	1 0 0	61 9 0
.....
.....
.....

FORM No. 24.—Summary of Revenue and Expenditure of the

Budget Head.	Direction.	Working Plans Division.	Dhárwār and Bijāpur Division.	Belgaum Division.	Ratnāgiri Division.
EXPENDITURE—contd.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. a.
A.—CONSERVANCY AND WORKS—contd.					
<i>V.—Rent of leased Forests and Payments to Shareholders in Forests managed by Government ...</i>	.....	.....	.....	.....	.....
Total, A-V ...	.....	.....	.....	.....	.....
<i>VI.—Live-stock Stores, Tools and Plant—</i>					
a. Purchase of cattle ...	.....	.....	.....	.....	.....
b. Feed and keep of cattle ...	.....	.....	.....	.....	.....
c. Purchase of stores, tools and plant ...	3,057 11 8	.....	35 1 0	321 3 0	11 0 0
Total, A-VI ...	3,057 11 8	.....	35 1 0	321 3 0	11 0 0
<i>VII.—Communications and Buildings—</i>					
a. Roads and bridges ...	.....	.....	1,203 13 10	15,080 11 3	.....
b. Buildings ...	.....	.....	578 8 1	7,871 9 7	10 0 0
c. Other works ...	.....	.....	13 8 0	258 2 8	.....
Total, A-VII ...	.....	.....	1,790 14 11	24,110 7 1	10 0 0
<i>VIII.—Organization, Improvement and Extension of Forest—</i>					
a. Demarcation ...	.....	.....	54 0 8	1,211 1 1	.....
b. Cost of Forest Settlements and Compensation for land and rights ...	.....	.....	23 1 8	790 0 9	.....
c. Surveys ...	.....	.....	.....	12 8 0	.....
d. Working-plans ...	.....	3,409 6 0	.....	.....	.....
e. Sowing and planting ...	.....	.....	244 6 9	1,071 12 2	455 9 8
f. Protection from fire ...	.....	.....	543 7 9	6,445 0 0	28 0 0
g. Other works ...	.....	.....	99 14 0	853 0 6	.....
Total, A-VIII ...	.....	3,409 6 0	964 14 8	10,383 6 6	483 9 8
<i>IX.—Miscellaneous—</i>					
a. Law charges ...	.....	.....	1 13 6	0 8 0	.....
b. Other charges ...	—18 7 6	—38 1 4	2,569 7 2	3,170 13 8	132 11 0
Total, A-IX ...	—18 7 6	—38 1 4	2,571 3 8	3,171 5 8	132 11 0
TOTAL, A.—CONSERVANCY AND WORKS ...	3,039 4 2	3,371 4 8	6,976 7 8	49,331 12 2	645 5 8
B.—ESTABLISHMENTS.					
<i>I.—Salaries—</i>					
a. Conservators ...	22,277 6 9	.....	.....	.....	.....
b. Superior Officers ...	3,139 5 4	7,640 0 0	17,570 5 2	13,729 14 9	.....
c. Subordinate Forest and Depot Establishments ...	720 0 0	2,220 0 0	22,469 10 3	30,055 13 2	2,701 1 6
d. Office Establishments ...	7,531 10 0	1,241 0 0	7,124 0 2	5,511 4 3	547 6 11
e. Deputation and Special Allowances ...	2 14 5	310 0 0	270 6 7	773 7 9	.....
f. Exchange Compensation Allowance—					
1. Conservators ...	.....	.....	.....	.....	.....
2. Deputy Conservators ...	.....	.....	.....	.....	.....
3. Assistant Conservators ...	.....	.....	.....	.....	.....
4. Extra Assistant Conservators ...	.....	.....	.....	.....	.....
Total, B-I ...	33,671 4 6	11,411 0 0	47,421 6 2	50,069 7 11	3,338 10 5
<i>II.—Travelling Allowances—</i>					
a. Conservators ...	3,014 14 8	.....	.....	.....	.....
b. Superior Officers ...	805 2 0	1,800 0 0	2,744 4 9	1,850 14 5	.....
c. Subordinate Forest and Depot Establishments ...	159 3 1	520 8 10	1,778 8 8	3,292 1 5	399 10 4
d. Office Establishments ...	1,084 3 11	374 0 4	679 10 0	716 14 1	40 14 0
e. Forest School (Dehra Dun) ...	.....	.....	135 0 0	.....	.....
f. Plague allowances ...	43 9 5	.....	16 0 0	45 0 0	.....
g. Grain Compensation ...	.....	.....	.....	.....	.....
Total, B-II ...	5,107 1 1	2,694 4 2	5,362 7 5	5,904 13 11	431 8 4
<i>III.—Contingencies—</i>					
a. Stationery ...	9 5 3	.....	192 7 11	268 9 0	71 0 0
b. Carriage of Tents and Records ...	314 3 8	.....	327 15 7	217 1 6	15 14 6
c. Rents, Rates and Taxes ...	910 0 0	.....	2 0 0	.....	.....
d. Pay of Police-guards ...	.....	.....	.....	.....	.....
e. Official Postage ...	226 13 6	40 10 0	1,030 13 6	971 8 6	82 0 0
f. Sundries ...	1,053 12 11	.....	392 2 3	660 3 5	20 15 8
Payments to Officers of other Provinces ...	.....	.....	.....	.....	.....
Total, B-III ...	2,914 3 4	40 10 0	1,995 7 8	2,117 6 5	199 14 2
TOTAL, B.—ESTABLISHMENTS ...	41,692 8 11	14,145 14 2	54,772 4 10	68,091 12 3	3,980 0 11
GRAND TOTAL OF EXPENDITURE ...	45,631 13 1	17,517 2 10	61,748 12 6	2,07,423 8 5	4,065 6 7

different Divisions for the Forest year 1915-1916—contd.

Kánara, Eastern Division.	Kánara, Northern Division.	Kánara, Southern Division.	Kánara, Western Division.	Khánara Central Division.	Total for the Forest year 1915-1916.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....
.....
357 0 0	350 0 0	.....	.....	.....	707 0 0
1,731 10 2	3,648 1 2	.....	308 4 6	.....	5,000 15 10
343 10 0	733 13 3	234 10 6	217 1 3	18 0 0	5,807 2 8
2,440 4 2	4,931 14 5	234 10 6	525 5 9	18 0 0	12,475 2 8
6,516 4 2	18,075 14 1	2,001 10 6	9,758 9 5	451 7 0	52,048 3 3
1,287 5 10	1,110 0 10	1,051 7 8	2,358 15 2	2,663 11 5	10,039 10 7
593 1 4	698 7 3	154 15 8	183 9 0	222 12 0	2,123 8 6
8,396 8 4	18,484 6 2	3,203 1 10	12,298 1 7	3,342 14 5	71,701 6 4
143 1 0	16 4 1	1,758 4 4	767 14 3	55 10 0	4,096 3 3
.....	.....	1,516 4 5	17 4 0	247 4 0	2,503 14 10
.....	.....	.....	.....	.....	3,421 14 0
2,078 0 8	1,749 8 6	3,301 2 6	2,570 1 4	923 1 8	13,208 11 3
4,662 5 5	3,583 2 10	507 8 11	1,552 1 2	508 8 7	17,930 2 8
1,618 12 6	38 0 0	.....	.....	280 10 9	1,600 5 0
8,407 3 7	5,356 15 5	7,073 4 2	4,907 4 9	2,150 3 0	43,171 3 0
660 14 4	-575 7 10	2,595 12 10	675 2 3	640 10 0	2 4 5
660 14 4	-575 7 10	2,595 12 10	675 2 3	694 10 0	9,867 6 7
1,42,639 9 5	3,00,109 15 10	18,768 11 5	70,847 2 2	29,850 2 4	9,869 11 1
.....	.....	.....	.....	.....	7,35,479 11 6
19,541 10 2	19,091 13 5	11,269 5 8	10,048 1 1	5,148 1 2	22,277 6 9
.....	.....	.....	.....	5,083 10 10	1,07,781 8 0
22,543 12 4	33,217 2 7	18,193 7 6	20,195 1 3	1,410 5 6	1,53,385 11
5,541 14 6	6,408 8 1	4,302 3 6	6,300 4 9	156 0 0	44,024 11 8
6,068 15 6	4,032 7 3	19 8 10	763 6 3	.....	12,396 2 7
.....
.....
.....
53,695 4 6	63,352 15 4	33,789 9 6	36,312 13 4	12,700 1 6	3,45,765 9 2
2,768 5 3	2,520 0 0	2,409 11 9	3,817 0 1	1,103 11 5	3,014 14 8
1,899 10 10	3,760 0 1	2,289 15 9	2,047 0 10	528 9 1	18,909 1 8
319 10 0	808 14 3	586 8 9	518 8 4	550 15 6	16,668 15 11
75 0 0	125 0 0	.....	385 7 11	.....	5,714 1 2
.....	.....	.....	.....	.....	720 7 11
.....	.....	.....	.....	.....	103 9 5
5,002 10 1	7,211 14 4	5,378 4 3	5,797 15 2	2,277 4 0	45,216 2 9
66 0 9	259 15 8	262 12 5	136 11 0	17 6 4	1,284 4 4
66 4 5	451 2 6	440 15 3	249 13 2	237 3 4	2,351 9 11
.....	0 8 0	.....	.....	.....	912 6 0
014 12 0	689 8 0	1,002 10 0	405 2 0	282 0 0	5,785 13 6
232 12 10	244 7 3	262 11 2	203 2 6	33 7 7	3,103 11 7
.....
901 14 0	1,045 9 5	1,978 0 10	994 12 8	670 1 3	13,473 15 4
59,749 12 7	72,210 7 1	41,143 14 7	43,105 9 2	15,547 6 9	4,04,419 11 3
2,02,369 6 0	3,31,320 6 11	59,912 10 0	1,13,952 11 4	45,397 9 1	11,30,699 6 9

FORM No. 24.—*Summary of Revenue and Expenditure of the different divisions for forest year 1915-1916—contd.*

[illegible]

FORM No. 24.—Summary of Revenue and Expenditure of the different divisions
for forest year 1915-1916—concl'd.

Budget Head.	Direction.	Larkana Division.	Jerruck Division.	Hyderabad Division.	Sukkur Division.	Thar and Parkar Division.	Working Plans Division.	Total for forest year 1915-16.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
EXPENDITURE—contd.								
A.—CONSERVANCY AND WORKS—contd.								
V.—Rent of leased forests and payment to shareholders in forests managed by Government ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, A-V ...	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live Stock, Stores, Tools and Plant—								
a. Purchase of cattle ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Feed and keep of cattle ...	.....	24 4 0	2 3 0	20 10 2	200 9 11	.....	.....	340 11 1
c. Purchase of stores, tools and plant ...	306 5 0	106 7 0	534 12 0	287 8 0	273 15 8	.....	.....	1,548 15 8
Total, A-VI ...	306 5 0	130 11 0	536 15 0	287 2 2	504 9 2	.....	.....	1,805 10 4
VII.—Communications and Buildings—								
a. Roads and bridges ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Buildings ...	.....	1,041 13 10	207 1 5	576 4 5	1,234 5 9	.....	.....	3,108 0 5
c. Other works ...	.....	227 8 2	1,325 12 1	506 0 5	404 8 0	.....	.....	2,403 12 8
Total, A-VII ...	.....	1,269 6 0	1,622 13 6	1,081 4 10	1,088 13 9	.....	.....	5,002 6 1
VIII.—Organization, Improvement and Extension of forest—								
a. Demarcation ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Cost of forest settlements and compensation for land and rights ...	.....	.....	.....	.....	.....	.....	.....	.....
c. Surveys ...	.....	.....	.....	.....	.....	.....	.....	.....
d. Working Plans ...	.....	2,873 1 6	755 8 6	1,290 13 0	730 9 9	.....	.....	5,050 0 9
e. Sowing and planting ...	.....	407 5 6	2,234 0 1	1,180 4 11	2,392 9 4	.....	.....	6,363 14 10
f. Protection from fire ...	.....	.....	971 12 9	1,607 1 6	.....	.....	.....	2,038 14 8
g. Other works ...	.....	1,145 8 11	.....	.....	.....	.....	.....	1,145 8 11
Total, A-VIII ...	.....	4,515 15 11	4,011 5 4	4,138 3 5	3,122 14 1	.....	.....	16,788 6 0
IX.—Miscellaneous—								
a. Law charges ...	.....	.....	233 8 4	.....	8 4 0	.....	.....	241 10 4
b. Other charges ...	64 13 0	783 11 0	986 15 6	782 0 0	1,632 4 9	.....	.....	4,449 12 3
c. Grain compensation ...	.....	47 9 3	20 0 0	85 12 0	36 13 5	.....	.....	104 2 8
Total, A-IX ...	64 13 0	831 4 3	1,240 5 10	867 12 0	1,879 6 2	.....	.....	4,853 9 3
TOTAL, A.—CONSERVANCY AND WORKS ...	461 2 0	7,517 14 0	7,842 3 8	8,030 3 5	8,059 12 5	.....	.....	32,511 3 6
B.—ESTABLISHMENTS.								
I.—Salaries.								
a. Conservators ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Superior Officers ...	16,693 8 9	9,472 14 6	12,484 8 1	10,040 0 0	13,240 11 1	.....	.....	61,931 5 5
c. Subordinate Forest and Depôt Establishments ...	.....	9,526 5 11	18,831 4 1	10,771 11 11	21,774 5 2	1,502 8 10	.....	57,406 3 11
d. Office Establishments ...	6,815 11 7	5,050 14 5	4,732 13 3	5,003 10 7	5,997 5 10	.....	.....	27,000 7 8
e. Deputation and Special Allowances ...	1,793 8 9	101 11 4	554 12 11	157 6 6	591 10 8	.....	.....	3,294 2 2
f. Exchange Compensation Allowance—	.....	.....	.....	.....	.....	.....	.....	.....
1. Conservators ...	.....	.....	.....	.....	.....	.....	.....	.....
2. Deputy Conservators ...	.....	.....	.....	.....	.....	.....	.....	.....
3. Assistant Conservators ...	.....	.....	.....	.....	.....	.....	.....	.....
4. Extra Assistant Conservators ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, B-I ...	25,307 13 1	24,241 14 2	31,603 1 4	28,032 13 0	41,004 0 9	1,502 8 10	.....	1,60,852 3 2
II.—Travelling Allowances—								
a. Conservators ...	.....	.....	.....	.....	.....	.....	.....	.....
b. Superior Officers ...	3,513 0 7	2,116 14 8	2,165 14 0	2,312 4 0	1,830 13 5	.....	.....	11,993 14 5
c. Subordinate Forest and Depôt Establishments ...	.....	914 14 5	1,047 8 10	710 0 8	1,823 3 2	.....	.....	4,550 11 1
d. Office Establishments ...	778 5 7	935 4 10	448 7 6	547 9 3	536 16 10	.....	.....	3,643 11 0
e. Forest School (D.D.) ...	.....	89 1 4	.....	.....	84 10 10	.....	.....	172 12 2
f. Plague allowances ...	1 14 6	19 8 0	.....	197 4 10	.....	.....	.....	218 11 4
g. Grain compensation ...	40 3 3	261 11 1	608 10 4	463 6 0	202 15 11	107 11 4	.....	1,839 9 11
Total, B-II ...	4,333 7 11	4,337 5 0	4,436 10 0	4,235 8 9	4,948 11 2	107 11 4	.....	23,399 6 2
III.—Contingencies—								
a. Stationery ...	14 11 0	94 7 5	8 9 8	155 4 6	179 2 9	.....	.....	531 3 4
b. Carriage of tents and records ...	209 15 7	408 9 4	272 10 5	229 14 0	341 12 4	.....	.....	1,598 14 8
c. Rents, Rates and Taxes ...	1,732 5 5	658 6 5	600 0 0	314 0 0	332 10 0	.....	.....	3,637 5 10
d. Pay of Police guards ...	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage ...	280 7 6	579 13 6	380 8 6	352 5 6	624 12 0	.....	.....	2,417 18 0
f. Sundries ...	487 10 3	417 14 8	371 0 10	419 3 8	563 11 8	.....	.....	2,259 6 8
Payments to officers of other provinces ...	.....	.....	.....	.....	.....	.....	.....	.....
Total, B-III ...	2,815 1 9	2,159 3 4	1,711 13 5	1,470 11 8	2,242 1 4	.....	.....	10,398 15 6
TOTAL, B.—ESTABLISHMENTS ...	32,456 6 9	30,738 6 6	37,751 8 9	31,739 1 5	48,794 13 3	1,670 4 2	.....	1,83,150 6 10
GRAND TOTAL OF EXPENDITURE ...	82,017 8 9	38,256 4 6	45,593 12 5	40,300 4 10	50,854 9 8	1,670 4 2	.....	2,15,661 12 4

FORM No. 25.—Annual Account Current for the forest year 1915-1916.

NORTHERN CIRCLE.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Opening Balance ... ..	.....	1,067 2 10	By I. Refunds and Drawbacks— Refunds—		
„ VIII.—Assessed Taxes—In- come Tax—			Divided Heads, Forests...	.....	1,580 11 0
Deductions by Gov- ernment from sala- ries and pensions ... ..	.....	.....	„ II. Forest (as per Annual Summary Form No. 24).	.....	7,63,739 5 9
Tax on other sources of income ... ..	.....	3,485 0 11	Savings Bank Deposit G. P. Fund ... ..	.....	3,254 7 3
Recoveries by Revenue Authorities ... ..	.....	31 4 0	„ 33. Famine Relief—VI.—Mis- cellaneous—measures for the protection of cattle ...	.....	11,876 14 6
„ IX.—Forest (as per Annual Summary, Form No. 24) ... ..	.....	16,57,003 0 7	„ 32. Miscellaneous—Miscella- neous Refunds— Refund of lapsed depo- sits ... ..	.....	70 5 3
„ P. W. Remittances ... ..	.....	.....	„ Civil Deposits— Forest deposits ... ..	.....	83,929 3 11
„ III.—Other remittances ... ..	.....	.....	„ Advances Recoverable—		
„ Rents of public buildings ...	.....	1,232 8 9	Forest advances	6,42,385 15 8	
„ XII.—Interest— Miscellaneous on other accounts ... ..	.....	1 0 3	Tentage advances	66 10 9	
„ Provincial Advance and Loan Account, Tagai Advances— Advances to cultivators under Land Improve- ment and Agricultur- ists' Loans Act ... ..	.....	182 8 0	Objection book advances ...	2,611 0 0	6,45,258 10 5
„ XII.—Interest— Interest on advances to cultivators under Land Improvement and Agriculturists' Loans Act ... ..	.....	26 13 3	Advances to non-gazetted officers for purchase of conveyance, etc.	195 0 0	
„ Bombay Uncovenanted Service Family Pension Fund ... ..	.....	.....	„ Cash Recoveries ... ..	.....	1,378 9 2
„ Widows' Branch ... ..	.....	239 3 6	„ Cheques and Bills—Depart- mental Cheques (Forests) ...	.....	46,697 7 6
„ Forest Officers' Provident Fund ... ..	.....	.....	„ Forest Remittances—		
„ Civil Deposits— Forest deposits ... ..	.....	1,02,846 13 1	Remittances to treasuries ...	16,89,780 12 0	
„ Advances Recoverable—			Inter-Departmental trans- fers	50 0 0	16,90,219 4 0
Forest advances	6,30,743 15 2		Inter-Divisional transfers ...	388 8 0	
Tentage advances to gazet- ted officers ... ..	.....		„ Account between Bombay and Military Poona Division— IV.—Items adjustable by Military—		
Objection book advances ...	1,775 0 0	6,32,831 7 2	Provincial Advance and Loan Account ... ..	.....	2,646 0 0
Advances to non-gazetted officers for the purchase of conveyance, etc.	312 8 0		„ Tagai Advances— Advances to cultivators under Land Improvement and Agriculturists' Loan Act ... ..	.....	365 0 0
„ Cash Recoveries ... ..	.....	1,378 9 2	„ P. W. D. Remittances—		
„ Cheques and Bills—Depart- mental Cheques—Forests ...	.....	11,07,755 14 1	„ III. Other Remittances—Mis- cellaneous ... ..	.....	10 10 0
„ Forest Remittances—			„ 32. Miscellaneous—Allowances, Rewards, etc.— Rewards for proficiency in Oriental Languages ...	.....	1,500 0 0
Remittances to treasuries ...	1,779 7 1		„ 32. Miscellaneous, Unforeseen charges—Famine relief expenditure written back —Charges for prelimi- nary observation and test ...	.....	2,50,000 0 0
Inter-Divisional transfers ...	388 8 0	12,658 13 5	„ Account between Bombay and Railways—(Railway Boards) (B. B. & C. I. Railway)— IV.—Items adjustable by Railways—Miscellaneous ...	.....	39,005 7 6
Inter-Departmental trans- fers	10,490 14 4		„ Closing Balance ... ..	.....	807 2 2
„ General Provident Fund ... ..	.....	21,105 7 5	Total, Northern Circle ... ..	.....	35,42,289 2 5
„ Account between Bombay and Post Office— Postal Fund deductions ...	.....	444 6 9			
„ XXII.—Receipts in aid of superannuation—Offi- cers lent to foreign service—Contribution for pensions and gratui- ties—other foreign service ... ..	.....	1 1 9			
Total, Northern Circle ... ..	.....	35,42,289 2 5			

FORM No. 25.—Annual Account Current for the forest year 1915-1916—continued.

CENTRAL CIRCLE.		Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Opening Balance ... ..	.....		615 11 7	By I. Refunds and Drawbacks—Re-		
„ VIII. Assessed Taxes—Income Tax—				funds—		
Deductions by Government from				Divided Heads, Forests ... ..	.....	2,089 3 0
salaries and pensions	3,148 9 7			„ II. Forest (as per Annual Sum-	.....	5,58,048 7 9
Tax on other sources of Income.	.....		3,148 9 7	mary Form No. 24)		
Recoveries by Revenue Author-	.....			Savings Bank Deposits—		
ities ... ..	.....			General Provident Fund ... ..	.....	1,301 9 1
„ IX. Forest (as per Annual Summary	.....		8,09,825 1 0	„ 33.—Famine Relief—		
Form No. 24)				VI. Miscellaneous measures for		
„ XII. Interest—				the protection of cattle ... ..	.....	3,660 8 10
Interest on advances to cultiva-	.....		0 11 6	„ 32. Miscellaneous—Miscellaneous		
tors under the Land Improve-				Refunds—		
ment Act ... ..	.....			Refund of lapsed deposits ... ..	.....	240 0 0
„ P. W. Remittances—				„ Civil Deposits—Forest deposits ...	.....	56,745 15 7
„ III. Other Remittances—				„ Advances Recoverable—		
Rents of Public Buildings	8,303 11 9		2,349 11 0	Forest Advances	4,28,089 10 6	
Rents of Public Buildings—				Advances to Gazetted Officers	1,000 0 0	
Miscellaneous	45 5 4			for the purchase of motor car.		
„ Provincial Advance and Loan				Objection Book Advances	17,804 0 0	4,47,273 10 6
Account—				Advances to Non-Gazetted		
Loan to Native States and	.....		5,000 0 0	Officers for purchase of	380 0 0	
other Notabilities ... ..	.....			conveyance, etc.		
„ XII. Interest—				„ Cash Recoveries ... ..	.....	1,304 1 2
Interest on Provincial Advance	.....		1,406 2 0	„ Cheques and Bills—Departmental		
and Loan Account—Interest				Cheques (Forests) ... ..	.....	368 2 5
on Advances to Land holders and	.....			„ Forest Remittances—		
other Notabilities ... ..	.....			Remittances to treasuries	8,31,891 1 9	
„ Bombay Uncovenanted Service Family				Inter-Departmental transfers ...	11,659 7 8	8,51,154 7 5
Pension Fund—				Inter-Divisional transfers	10,604 0 0	
Widows' Branch ... ..	.....		313 8 7	By Account between Bombay and Mil-		
Forest Officers' Provident Fund...	.....		269 0 0	itary, Bombay—		
„ Civil Deposits—				IV. Items adjustable by		
Forest Deposits ... ..	.....		60,273 3 2	Military, Miscellaneous,		
„ Provincial Advance and Loan				Poona Division ... ..	.....	8,223 6 10
Accounts—				„ P. W. D.—Remittances—		
Advances to cultivators under the	.....		198 11 0	III—Other Remittances—		
Land Improvement Act ... ..	.....			Miscellaneous ... ..	.....	6 0 0
„ Advances Recoverable—				„ Account between Bombay and		
Forest Advances	4,26,457 0 7			Military Supply Circle—		
Tentage Advances to Gazetted				IV.—Items adjustable by		
Officers	183 5 0			Military Miscellaneous ... ..	.....	820 8 6
Objection Book Advances	2,557 5 4		4,29,786 10 11	„ 32. Miscellaneous—		
Advances to Gazetted Officers for	200 0 0			Miscellaneous and unforeseen		
purchase of motor car				charges (Provincial)—other		
Advances to Non-Gazetted				unforeseen charges ... ..	.....	359 12 1
Officers for the purchase of con-	389 0 0			Closing Balance ... ..	.....	590 2 9
veyance, etc.						
„ Cash Recoveries ... ..	.....		1,304 1 2			
„ Cheques and Bills—Departmental						
Cheques—Forests ... ..	.....		5,67,662 10 0			
„ Forest Remittances—						
Remittances to treasuries	11,466 3 1					
Inter-Divisional transfers	19,679 0 0		35,891 7 9			
Inter-Departmental transfers ...	13,746 4 8					
„ General Provident Fund ... ..	.....		16,361 11 1			
„ Account between Bombay and Post						
Office—						
Postal Fund deductions ... ..	.....		811 9 6			
Total, Central Circle ... ..	.....		19,35,215 13 11	Total, Central Circle ... ..	.....	19,35,215 13 11

FORM No. 25.—Annual Account Current for the forest year 1915-1916—continued.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
SOUTHERN CIRCLE.					
To Opening Balance ... ..	.....	643 6 0	By I. Refunds and Drawbacks— Refunds—		
„ VIII. Assessed Taxes—Income Tax—			Divided Heads, Forests ... ..	.....	1,508 5 1
Deductions by Government from salaries and pensions. ....	.....	3,952 4 6	„ II. Forest (as per Annual Sum- mary Form No. 24) ... ..	.....	11,39,899 6 9
Tax on other sources of income ... ..	.....	.....	Savings Bank Deposits— General Provident Fund ... ..	.....	4,323 12 2
Recoveries by Revenue Autho- rities ... ..	.....	.....	„ 33. Famine Relief—		
„ IX. Forest (as per Annual Summary Form No. 24) ... ..	.....	19,95,685 5 10	VI. Miscellaneous—Measu r e s for the protection of cattle. ....	.....	.....
„ P. W. Remittances—			„ 32. Miscellaneous—Miscellaneous Refun's—Refund of lapsed Deposits	396 4 3	
III. Other Remittances ... ..	.....	.....	„ 32. Miscellaneous—Other Items ..	3 8 0	416 12 3
Rents of Public Buildings ...	1,678 5 11	1,901 3 2	„ 32. Unforeseen Charges—Other unforeseen Charges	17 0 0	
Rents of Public Buildings, Miscellaneous	222 13 3		„ Civil Deposits—Forest Deposits ..	66,223 3 0	
„ Account between Bombay and Mili- tary Supply Circle—			„ Civil Deposits—Personal Depart- ments—Other Departments.	16 1 0	66,239 4 0
IV. Items adjustable by Military— Miscellaneous ... ..	.....	5 0 0	„ Advances Recoverable—		
„ XII. Interest—Miscellaneous on other Accounts ... ..	.....	2,146 9 3	Forest Advances	6,99,793 0 7	
„ Bombay Uncovenanted Service Family Pension Fund—			Motor Car Advances	5,000 0 0	
Widows' Branch	72 13 0	121 1 10	Objection Book Advances	2,900 4 9	7,03,323 5 4
Life Assurance Branch	48 4 10		Advances to Non-Gazetted Officers for purchase of conveyance, etc.	630 0 0	
„ Forest Officers' Provident Fund—			„ Cash Recoveries ... ..	.....	1,236 15 8
„ Civil Deposits—Forest Deposits ...	68,470 7 4	68,549 1 4	„ Cheques and Bills—Departmental Cheques (Forests) cancelled ...	.....	11,643 11 1
„ Civil Personal Deposits—Other Departments	78 10 0		„ Forest Remittances—		
„ Advances Recoverable—			Remittances to Treasuries ...	14,78,029 14 6	
Forest Advances	6,92,753 8 10	6,99,454 12 3	Interdepartmental Transfers...	1,677 3 11	15,29,776 3 6
Tentage Advances to Gazetted Officers	30 0 0		Inter-divisional Transfers ...	50,069 1 1	
Objection Book Advances... ..	3,968 15 5		By Account between Bombay and Military Supply Circle—		
Motor Car Advances	1,911 1 4		IV. Items adjustable by Military—Miscellaneous. ....	.....	35,398 10 5
Advances to Non-Gazetted Officers for the purchase of conveyance, etc.	791 2 8		„ P. W. D. Remittances—		
„ Cash Recoveries ... ..	.....	1,236 15 8	„ III. Other Remittances—		
„ Cheques and Bills—Departmental Cheques—Forests ... ..	.....	11,92,924 5 6	Miscellaneous ... ..	.....	3,476 15 3
„ Forest Remittances—			„ Account between Bombay and Military Works—		
Remittances to Treasuries ...	118 8 10	54,834 10 10	IV. Items adjustable by Military Works ... ..	.....	4,112 2 11
Inter-divisional Transfers ...	48,619 1 1		„ Account between Bombay and Railways—M. & S. M. Railway IV. Items adjustable by Rail- ways—Miscellaneous ... ..	.....	5,33,717 12 9
Inter-departmental Transfers ...	6,097 0 11		„ Account between Bombay and Military—		
„ General Provident Fund ... ..	.....	21,231 8 5	IV. Items adjustable by Mili- tary—Poona Division— Miscellaneous ... ..	.....	232 7 11
„ Account between Bombay and Post Office—			Closing Balance ... ..	.....	3,021 4 8
Postal Fund Deductions ... ..	.....	642 31 2			
„ Total, Southern Circle ... ..	.....	40,43,329 1 9	„ Total, Southern Circle ... ..	.....	40,43,329 1 9

FORM No. 25.—Annual Account Current for the forest year 1915-1916—concluded.

SIND CIRCLE.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Opening Balance ... ..	.....	293 5 11	By 1. Refunds and Drawbacks— Refunds—		
„ VIII. Assessed Taxes—Income Tax—			Divided Heads, Forests ... ..	.....	410 8 5
Deductions by Government from Salaries and Pensions ... ..	.....	1,850 5 5	„ 11. Forest (as per Annual Sum- mary Form No. 24) ... ..	.....	215,681 12 4
„ Tax on other sources of Income, recoveries by Revenue Authorities... ..	.....	.....	Savings Bank Deposits— General Provident Fund ... ..	.....	1,600 0 0
„ IX. Forest (as per Annual Summary Form No. 21) ... ..	.....	3,79,974 13 5	„ 33. Famine Relief—VI. Miscella- neous—Measures for the protection of cattle ... ..	.....	.....
„ P. W.—Remittances—			„ 32. Miscellaneous—Miscellaneous Refunds—		
III. Other Remittances—			Refund of lapsed Deposits .. ..	.....	47 8 0
Rents of Public Buildings ... ..	.....	335 14 11	„ Civil Deposits—Forest Deposits ... ..	.....	16,846 0 3
Rents of Public Buildings, Miscellaneous ... ..	.....	.....	„ Advances Recoverable—		
„ Account between Bombay and P. W. D. (Railway Branches), N.-W. Ry.—			Forest Advances	1,04,924 11 1	
IV. Items adjustable by P. W. D. ... ..	.....	204 3 0	Tentage Advances ... ..	.....
„ XII. Interest—			Objection Book Advances	174 0 0	1,05,158 11 1
Interest on Advances to Land- holders ... ..	.....	.....	Advances to Non-Gazetted Officers for purchase of conveyance, etc.	60 0 0	
„ Bombay Uncovenanted Service Family Pension Fund—			„ Cash Recoveries (Clothing) ... ..	.....	118 6 11
Widows' Branch ... ..	.....	.....	„ Objection Book Advances—Sus- pense—Suspense Account ... ..	.....	29 1 6
Forest Officers' Provident Fund... ..	.....	.....	„ Forest Remittances—		
„ Civil Deposits—			Remittances to Treasuries	3,87,333 1 5	3,87,537 4 5
Forest Deposits ... ..	.....	15,094 1 9	Inter-departmental Transfers	204 3 0	
„ Advances Recoverable—			Inter-divisional Transfers ... ..	.....	.....
Forest Advances	1,06,751 13 1		„ Refunds and Drawbacks—Re- funds—Divided heads—Assessed Taxes—Income Tax ... ..	.....	8 5 4
Tentage Advances to Gazetted Officers ... ..	.....		By P. W. D. Remittances—		
Objection Book Advances	190 10 8	1,07,010 13 1	III. Other Remittances—		
Advances to Non-Gazetted Officers for the purchase of conveyance, etc.	78 5 4		Items adjustable by P. W. D.—		
„ Cash Recoveries (Clothing) ... ..	.....	118 6 11	Miscellaneous ... ..	.....	7,804 4 10
„ Cheques and Bills—Departmental Cheques—Forests ... ..	.....	2,20,679 12 0	Closing Balance ... ..	.....	265 8 6
„ Forest Remittances—			Total, Sind Circle ... ..	.....	7,35,487 7 6
Remittances to Treasuries	148 12 6				
Inter-divisional Transfers ... ..	.....	475 4 6	GRAND TOTAL ... ..	.....	1,02,56,321 9 7
Inter-departmental Transfers... ..	331 8 0				
General Provident Fund ... ..	.....	9,145 2 7			
„ Account between Bombay and Post Office—					
Postal Fund Deductions ... ..	.....	365 4 0			
Total, Sind Circle ... ..	.....	7,35,487 7 6			
GRAND TOTAL ... ..	.....	1,02,56,321 9 7			

FORM No. 26.—Revenue received and outstandings on account of revenue during 1915-1916.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
1	2	3	4	5	6	7	8
NORTHERN CIRCLE.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction ...	Various sources ...	.....	380 12 0	380 12 0	380 12 0	.....
Working Plans	Do. ....	.....	3 3 1	3 3 1	3 3 1	.....
Panch Mahals.	Timber and other forest produce.	.....	1,14,022 10 2	1,14,022 10 2	1,14,022 10 2	.....
Surat ...	Do.	14,633 6 6	2,19,243 7 3	2,33,876 13 9	2,32,603 1 9	1,273 12 0	
North Thána.	Do.	49,890 12 6	5,04,146 13 5	5,54,037 9 5	5,54,037 9 5	.....
Central Thána.	Do.	1,314 11 10	2,48,770 13 2	2,56,085 9 0	2,56,085 9 0	.....
South Thána.	Do.	12,864 0 0	1,90,624 4 0	2,03,488 4 0	2,03,488 4 0	.....
North Násik...	Do.	375 0 0	59,444 10 6	59,819 10 6	59,819 10 6	.....
South Násik...	Do.	927 0 0	1,67,645 0 8	1,68,572 0 8	1,68,442 0 8	130 0 0	
Direction (Famine Fodder).	Famine fodder ...	.....	68,120 4 0	68,120 4 0	68,120 4 0	.....
Total, Northern Circle.		86,004 14 4	15,72,401 14 3	16,58,406 12 7	16,57,903 0 7	1,403 12 0	
CENTRAL CIRCLE.							
Direction ...	Various sources ...	.....	—192 15 0	—192 15 0	—192 15 0	.....
East Khán-desh.	Timber and firewood ..	4,320 0 0	1,34,860 7 1	1,39,180 7 1	1,39,180 7 1	.....
West Khán-desh.	Do.	1,494 0 0	1,54,918 14 5	1,56,412 14 5	1,56,412 14 5	.....
North Khán-desh.	Do.	1,710 0 0	75,327 10 5	77,037 10 5	76,747 10 5	290 0 0	
Poona ...	Do. ....	.....	1,62,779 6 6	1,62,779 6 6	1,62,779 6 6	.....
Satára ...	Do.	2,847 0 0	58,673 7 10	*61,520 7 10	*61,468 7 10	52 0 0	* Includes the amount of Rs. 2,847 written off, vide Government Resolution, No. 8664-R. D., dated 28th July 1915.
Working Plans.	Do. ....	.....	0 1 0	0 1 0	0 1 0	.....
Kolábar ...	Do.	583 0 0	1,78,742 6 0	1,79,325 6 0	1,78,669 6 0	656 0 0	
Total, Central Circle ...		10,964 0 0	7,65,109 6 3	7,76,063 6 3	7,75,065 6 3	998 0 0	
SOUTHERN CIRCLE.							
Kánara, North-ern.	Timber and other forest produce.	1,04,712 2 4	9,58,989 15 0	10,63,702 1 4	(a) 7,91,428 4 4	2,72,273 13 0	Includes:— (a) Rs. 3-8-0 written off; (b) Rs. 324-12-8 do. (c) Rs. 31-4-0 do
Kánara, East-ern.	Do.	78,661 14 2	4,61,986 13 9	5,40,648 11 11	(b) 4,21,722 6 5	1,18,926 5 6	
Kánara, Central (New Division from 1st Feb. 1916).	Do. ....	.....	72,626 11 9	72,626 11 9	46,965 3 11	25,661 7 10	
Kánara, South-ern.	Do.	5,861 11 2	56,425 7 0	61,787 2 3	54,525 7 8	7,261 10 7	
Kánara, West-ern.	Do.	33,509 12 9	1,64,678 14 5	1,98,188 11 2	1,74,744 8 2	23,444 3 0	
Belgaum ...	Do.	30,906 8 7	4,15,811 4 9	4,46,717 13 4	4,02,267 7 4	44,450 6 0	
Dhárwar-Bijá-pur (New combined Division).	Do.	2,843 14 0	99,558 4 10	1,02,402 2 10	(c) 1,02,024 7 1	377 11 9	* This includes Rs 359-8-9 written off during the year.
Ratnágiri ...	Do. ....	.....	962 11 1	962 11 1	962 11 1	.....
Direction ...	Various sources ...	.....	1,404 1 0	1,404 1 0	1,404 1 0	.....
Working Plans.	Do. ....	.....	0 5 6	0 5 6	0 5 6	.....
Total, Southern Circle...		2,55,995 15 1	22,32,444 9 1	24,88,440 8 2	*19,96,044 14 6	4,92,395 9 8	
SIND CIRCLE.							
Sukkur ...	I. Timber and other produce removed from the forests by Government agency—						
	(a) Timber ...	.....	5 6 0	5 6 0	5 6 0	.....
	(b) Firewood and charcoal.	.....	1,562 1 7	1,562 1 7	1,562 1 7	.....
	(c) Grass and other minor produce.	.....	284 4 7	284 4 7	284 4 7	.....
	II. Timber and other minor produce removed from the forests by consumers or purchasers—						
	(a) Timber ...	3,591 4 0	21,536 3 11	25,127 7 11	20,144 11 11	4,982 12 0	The outstanding under V.C. at close of the year amounts to Rs. 227-10-5.
	(b) Firewood and charcoal.	14,311 0 0	88,887 8 2	1,03,198 8 2	83,267 8 2	19,931 0 0	
	(d) Grazing and fodder grass.	.....	13,135 13 11	13,135 13 11	13,135 13 11	.....
	(e) Other minor produce.	.....	3,396 6 8	3,396 6 8	3,396 6 8	.....
	III. Drift, waifwood and confiscated forest produce.	.....	381 14 6	381 14 6	381 14 6	.....
Total ...		17,902 4 0	1,29,189 11 4	1,47,091 15 4	1,22,178 3 4	24,913 12 0	

FORM No. 26.—Revenue received and outstandings on account of revenue during 1915-1916—continued.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks
1	2	3	4	5	6	7	8
	SIND CIRCLE—contd.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Larkana ...	I. Timber and other produce removed from the forests by Government agency—						
	(a) Timber	.....	145 9 8	145 9 8	145 9 8	.....
	(b) Firewood and charcoal.	.....	931 11 2	931 11 2	931 11 2	.....
	(c) Grass and other minor produce.	.....	51 0 0	51 0 0	51 0 0	.....
	II. Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	1,459 0 4	5,732 15 6	7,191 15 10	5,972 6 11	1,219 8 11	The outstanding under V.C. at close of the year amounts to Rs. 104-7-2.
	(b) Firewood and charcoal.	5,836 3 8	20,834 12 8	26,671 0 4	21,702 13 8	4,878 3 1	
	(d) Grazing and fodder grass.	.....	6,797 8 0	6,797 8 0	6,797 8 0	.....
	(e) Other minor produce.	956 0 0	1,726 13 0	2,682 13 0	2,682 13 0	.....
	III. Drift and waifwood and confiscated forest produce.	.....	30 10 0	30 10 0	30 10 0	.....
	Total ...	8,251 4 0	36,251 0 0	44,502 4 0	38,404 8 0	6,097 12 0	
Hyderabad ...	I. Timber and other produce removed from the forests by Government agency—						
	(a) Timber	.....	4 0 0	4 0 0	4 0 0	.....
	(b) Firewood and charcoal.	.....	2,234 12 1	2,234 12 1	2,234 12 1	.....
	(c) Grass and other minor produce.	105 0 0	435 4 0	540 4 0	405 4 0	135 0 0	
	II. Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	.....	27,711 14 4	27,711 14 4	20,816 4 9	6,895 9 7	The outstanding under V.C. at close of the year amounts to nil.
	(b) Firewood and charcoal.	.....	48,458 1 7	48,458 1 7	38,114 11 2	10,343 6 5	
	(d) Grazing	.....	14,815 2 8	14,815 2 8	14,815 2 8	.....
	(e) Other minor produce.	1,996 10 8	18,191 4 0	20,187 14 8	16,601 4 0	3,496 10 8	
	III. Drift and waifwood and confiscated forest produce.	.....	18 12 0	18 12 0	18 12 0	.....
	Total ...	2,101 10 8	1,11,869 2 8	1,13,970 13 4	93,100 2 8	20,870 10 8	
Jerruck ...	I. Timber and other produce removed from the forests by Government agency—						
	(a) Timber	.....	.....	.....	.....	.....
	(b) Firewood and charcoal.	.....	456 1 2	456 1 2	456 1 2	.....
	(c) Grass and other minor produce.	.....	2 2 0	2 2 0	2 2 0	.....
	II. Timber and other produce removed from the forests by consumers or purchasers—						
	(a) Timber	4,975 3 4	18,735 10 10	23,710 14 2	18,555 15 5	5,154 14 9	The outstanding under V.C. at close of the year amounts to nil.
	(b) Firewood and charcoal.	20,465 12 8	50,748 6 2	71,214 2 10	52,955 5 7	18,258 13 3	
	(d) Grazing	.....	11,434 13 0	11,434 13 0	11,434 13 0	.....
	(e) Other minor produce.	7,010 5 4	6,080 0 0	13,090 5 4	10,875 11 3	2,214 10 1	
	III. Drift and waifwood and confiscated forest produce.	.....	674 1 0	674 1 0	674 1 0	.....
	Total ...	32,451 5 4	88,131 2 2	1,20,582 7 6	94,954 1 5	25,628 6 1	

FORM No. 26.—Revenue received and outstandings on account of revenue during 1915-1916—concluded.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
1	2	3	4	5	6	7	8
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
SIND CIRCLE— concluded. Thar and Pár- kar.	I. Timber and other produce removed from the forests by Govern- ment agency—						
	(a) Timber ...	.....	.....	.....	.....	.....
	(b) Firewood and char- coal.	.....	.....	.....	.....	.....
	(c) Grass and other minor produce.	.....	.....	.....	.....	.....
	II. Timber and other produce removed from the forests by consumers or purchas- ers—						
	(a) Timber ...	.....	1,327 2 0	1,327 2 0	1,327 2 0	.....	The outstanding under V.C. at the close of the year amounts to nil.
	(b) Firewood and char- coal.	.....	1,272 9 0	1,272 9 0	1,272 9 0	.....
	(d) Grazing and fodder grass.	.....	268 0 0	268 0 0	268 0 0	.....
	(e) Other minor pro- duce.	.....	1,113 8 0	1,113 8 0	1,113 8 0	.....
	III. Drift and waifwood and confiscated forest produce.	.....	.....	.....	.....	.....
	Total ...	.....	3,981 3 0	3,981 3 0	3,981 3 0	.....
Total of Sind Circle.	I. Timber and other produce removed from the forests by Govern- ment agency—						
	(a) Timber ...	.....	154 15 8	154 15 8	154 15 8	.....
	(b) Firewood and char- coal.	.....	5,184 10 0	5,184 10 0	5,184 10 0	.....
	(c) Grass and other minor produce.	105 0 0	772 10 7	877 10 7	742 10 7	135 0 0	
	II. Timber and other produce removed from the forests by consum- ers or purchasers—						
	(a) Timber ...	10,025 7 8	75,043 14 7	85,069 6 3	66,816 9 0	18,252 13 3	The outstanding under V.C. at the close of the year amounts to Rs. 392-15.
	(b) Firewood and char- coal.	40,613 0 4	2,10,201 5 7	2,50,814 5 11	1,97,402 15 2	53,411 6 9	
	(d) Grazing and fodder grass.	.....	46,451 5 7	46,451 5 7	46,451 5 7	.....
	(e) Other minor pro- duce.	9,963 0 0	30,507 15 8	40,470 15 8	34,759 10 11	5,711 4 9	
	III. Drift and waifwood and confiscated forest produce.	.....	1,105 5 6	1,105 5 6	1,105 5 6	.....
	Total, Sind Circle ...	60,706 8 0	3,69,422 3 2	4,30,128 11 2	3,52,618 2 5	77,510 8 9	
	GRAND TOTAL ...	4,13,661 5 6	49,39,378 0 8	53,53,039 6 2	47,80,731 7 9	5,72,307 14 5	

FORM No. 27.—Outstandings and Liabilities on account of Contractors and Disbursers for the forest year 1915-1916.

Division.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
1	2	3	4	5	6	7	8	9	10
NORTHERN CIRCLE.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
<i>Contractors.</i>									
North Thána	160 10 3	160 10 3	160 10 3	.....	160 10 3	.....	...
Central Thána	28 4 0	28 4 0	28 4 0	.....	28 4 0	...	...
Surat	28,196 10 0	28,196 10 0	.....	41,954 2 0	41,954 2 0	13,757 8 0	...	
Direction Famine Fodder.	...	1,00,000 0 0	1,00,000 0 0	.....	1,00,000 0 0	1,00,000 0 0	.....	...
Total, Contractors	1,28,385 8 3	1,28,385 8 3	188 14 3	1,41,954 2 0	1,42,143 0 3	13,757 8 0	...	
<i>Disbursers.</i>									
North Thána	45,916 1 1	45,916 1 1	1,263 0 0	45,544 4 3	46,807 4 3	891 8 2	...	
Central Thána	44,498 3 7	44,498 3 7	920 9 3	44,967 7 1	45,888 0 4	1,389 13 9	...	
South Thána	50,882 0 3	50,882 0 3	1,447 1 1	50,353 11 6	51,800 12 7	918 12 4	...	
Panch Mahals	43,078 15 1	43,078 15 1	234 5 8	43,431 15 6	43,666 5 2	587 6 1	...	
Surat	90,181 15 0	90,181 15 0	4,822 14 9	89,940 0 0	94,762 14 9	4,580 14 9	...	
North Násik	21,974 0 7	21,974 0 7	693 0 11	22,115 0 0	22,808 0 11	834 0 11	...	
South Násik	45,223 12 7	45,223 12 7	3,127 14 0	43,512 0 0	46,639 14 0	1,416 1 6	...	
Working Plans	796 0 0	796 0 6	35 15 5	760 1 1	796 0 6	.....	...
Direction Famine Fodder.	...	1,59,807 6 3	1,59,807 6 3	.....	1,59,807 6 3	1,59,807 6 3	.....	...
Total, Disbursers	5,02,358 6 11	5,02,358 6 11	12,544 13 1	5,00,431 13 8	5,12,976 10 9	10,618 8 10	...	
TOTAL, N. C.	6,30,743 15 2	6,30,743 15 2	12,733 11 4	6,42,385 15 8	6,55,119 11 0	24,375 11 10	...	
CENTRAL CIRCLE.									
<i>Contractors.</i>									
Direction	—2,500 0 0	2,500 0 0	.....	.....	...
West Khándesh Famine Fodder.	...	23,300 0 0	23,300 0 0	.....	23,300 0 0	23,300 0 0	.....	...
Direction Famine Fodder.	...	10,000 0 0	10,000 0 0	.....	10,000 0 0	10,000 0 0	.....	...
Total, Contractors	33,300 0 0	33,300 0 0	—2,500 0 0	35,800 0 0	33,300 0 0	.....	...
<i>Disbursers.</i>									
Direction	600 0 0	600 0 0	1 2 0	600 0 0	601 2 0	1 2 0	...	
East Khándesh	48,631 10 8	48,631 10 8	1,999 14 11	47,045 10 6	49,045 9 5	413 14 9	...	
West Khándesh	70,427 2 0	70,427 2 0	3,005 7 7	70,430 12 4	73,436 3 11	3,009 1 11	...	
North Khándesh	71,480 13 8	71,480 13 8	2,539 7 1	72,068 14 7	74,658 5 8	3,177 8 0	...	
Poona	66,856 8 2	66,856 8 2	1,117 3 7	67,253 15 6	68,371 3 1	1,514 10 11	...	
Sátara	48,629 10 7	48,629 10 7	977 1 8	48,920 0 0	49,897 1 8	1,267 7 1	...	
Kolába	64,218 14 1	64,218 14 1	1,376 6 8	63,727 7 10	65,103 14 8	885 0 5	...	
Working Plans	1,047 7 8	1,047 7 8	69 7 8	978 0 0	1,047 7 8	.....	...
West Khándesh Famine Fodder.	...	21,226 7 9	21,226 7 9	.....	21,226 7 9	21,226 7 9	.....	...
Kolába Famine Fodder	...	38 6 0	38 6 0	.....	38 6 0	38 6 0	.....	...
Total, Disbursers	3,93,157 0 7	3,93,157 0 7	11,136 3 2	3,92,289 10 6	4,03,425 13 8	10,268 13 1	...	
TOTAL, C. C.	4,26,457 0 7	4,26,457 0 7	8,636 3 2	4,58,059 10 6	4,86,725 13 8	10,268 13 1	...	

FORM No. 27.—*Outstandings and Liabilities on account of Contractors and Disbursers for the Forest year 1915-1916—concl.*

Division.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE		Rema
	At com- mencement of year.	Recoveries in cash and value of sup- plies and work done during the year.	At close of year.	At commence- ment of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Depart- ment (Liabilities).	
1	2	3	4	5	6	7	8	9	10
SOUTHERN CIRCLE.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
<i>Contractors.</i>									
Belgaum.	1,14,910 4 8	1,14,910 4 8	69,582 13 5	1,10,903 8 0	1,80,486 5 5	65,576 0 9	...	
Kánara, N. D.	85,133 6 8	85,133 6 8	46,564 13 10	66,600 0 0	1,13,164 13 10	28,031 7 2	...	
Kánara, W. D.	52,046 2 3	52,046 2 3	26,868 1 10	71,142 0 5	98,010 2 3	45,964 0 0	...	
Kánara, S. D.	11,064 0 10	11,064 0 10	10,064 0 10	5,700 0 0	15,764 0 10	4,700 0 0	...	
Kánara, E. D.	34,583 9 3	34,583 9 3	7,800 0 0	39,996 0 0	47,796 0 0	13,212 6 9	...	
Kánara, C. D.	11,121 0 2	11,121 0 2	.....	30,583 10 11	30,583 10 11	19,462 10 9	...	
Total, Contractors	3,08,858 7 10	3,08,858 7 10	1,60,879 13 11	3,24,925 8 4	4,85,805 1 3	1,76,946 9 5	...	
<i>Disbursers.</i>									
Belgaum	90,497 0 0	90,497 0 0	13,329 13 1	87,575 0 0	1,00,904 13 1	10,407 13 1	...	
Dhárwar—Bijápur	35,793 11 6	35,793 11 6	1,221 8 10	36,306 9 0	37,528 1 10	1,734 6 4	...	
Kánara, N. D.	99,339 6 5	99,339 6 5	9,317 13 3	94,277 5 9	1,03,595 8 0	4,255 12 7	...	
Kánara, W. D.	43,496 13 2	43,496 13 2	6,376 12 4	41,003 10 5	47,380 6 9	3,883 9 7	...	
Kánara, S. D.	40,247 0 8	40,247 0 8	2,244 0 11	39,330 12 3	41,574 13 2	1,927 12 6	...	
Kánara, E. D.	53,883 1 1	53,883 1 1	1,801 3 7	54,909 2 4	56,710 5 11	2,827 4 10	...	
Kánara, C. D.	14,244 4 5	14,244 4 5	.....	15,120 11 6	15,120 11 6	876 7 1	...	
Ratnágiri	3,993 11 2	3,993 11 2	57 1 9	3,944 10 0	4,001 11 9	8 0 0	...	
Working Plans	2,400 0 0	2,400 0 0	...	2,400 0 0	2,400 0 0	...	...
Total, Disbursers	3,83,895 1 0	3,83,895 1 0	34,348 5 9	3,74,867 13 3	4,09,216 3 0	25,321 2 0	...	
TOTAL, S. C.	6,92,753 8 10	6,92,753 8 10	1,95,228 3 8	6,99,793 0 7	8,95,021 4 3	2,02,267 11 5	...	
SIND CIRCLE.									
<i>Contractors.</i>									
Direction	100 0 0	100 0 0	.....	100 0 0	100 0 0	...	...
Lárkána	120 0 0	120 0 0	.....	120 0 0	120 0 0	...	...
Jerruck	130 0 0	130 0 0	.....	130 0 0	130 0 0	...	...
Hyderabad	120 0 0	120 0 0	.....	120 0 0	120 0 0	...	...
Sukkur	30 0 0	30 0 0	.....	30 0 0	30 0 0	...	...
Total, Contractors	500 0 0	500 0 0	.....	500 0 0	500 0 0	...	...
<i>Disbursers.</i>									
Lárkána	25,241 15 0	25,241 15 0	425 15 9	24,955 12 0	25,381 11 9	139 12 3	...	
Jerruck	23,069 15 0	23,069 15 0	2,236 2 4	21,865 0 0	24,101 2 4	1,031 3 4	...	
Hyderabad	22,416 11 3	22,416 11 3	175 11 9	22,360 0 0	22,535 11 9	119 0 6	...	
Sukkur	35,512 11 10	35,512 11 10	766 0 1	35,233 7 1	35,9 9 7 2	486 11 4	...	
Total, Disbursers	1,06,241 5 1	1,06,241 5 1	3,603 13 11	1,04,414 3 1	1,08,018 1 0	1,776 11 11	...	
TOTAL, SIND CIRCLE.	...	1,06,741 5 1	1,06,741 5 1	3,603 13 11	1,04,914 3 1	1,08,518 1 0	1,776 11 11	...	
GRAND TOTAL	18,56,695 13 8	18,56,695 13 8	2,20,202 0 1	18,75,182 13 10	20,95,384 13 11	2,38,689 0 3	...	

Administration Reports.

Administration Report of the Forest
Circles in the Bombay Presidency,
including Sind, for the year 1915-16.

GOVERNMENT OF BOMBAY.

REVENUE DEPARTMENT.

Resolution No. 7741.

Bombay Castle, 25th June 1917.

Letters from the Deputy Conservator of
Forests in charge Sind Circle, No. 1005
dated 18th September 1916, No. 1068
dated 21st idem, No. 1083 dated 22nd
idem and No. 1342 dated 23rd October
1916.

Letter from the Conservator of Forests,
C. C., No. 1400 dated 2nd October 1916.

Letter from the Conservator of Forests,
N. C., No. 1401 dated 5th October
1916.

Letter from the Conservator of Forests, S. C.,
No. 2376 dated 19th October 1916.

Forwarding the Forest Administration
Reports of their respective Circles for
the year 1915-16.

Memorandum from the Commissioner, S. D., No. 4481 dated 11th October 1916—For-
warding his remarks on the Forest Administration Report of the Central Circle for the
year 1915-16 so far as the Kolāba Division is concerned.

Memorandum from the Commissioner in Sind, No. 2959 dated 14th October 1916—For-
warding his remarks on the Forest Administration Report of the Sind Circle for the
year 1915-16.

Memorandum from the Commissioner, N. D., No. F.O.R.—47 dated 23rd October 1916—
Forwarding his remarks on the Forest Administration Report of the Northern Circle
for the year 1915-16.

Memorandum from the Commissioner, S. D., No. 4856 dated 31st October 1916—For-
warding his remarks on the Forest Administration Report of the Southern Circle for
the year 1915-16.

Memorandum from the Commissioner, C. D., No. Genl.—1401 dated 15th November
1916—Forwarding his remarks on the Forest Administration Reports of the Northern
and Central Circles for the year 1915-16 so far as the areas in the Central Division are
concerned.

RESOLUTION.—During the year 1915-16 the total forest area decreased
from 15,060 square miles to 15,018 square miles of which 13,985½ square
miles were reserved and 1,032½ were protected forests. The main reason
for the diminution of 42 square miles was the disforestation in the interest of
cultivation of 39 square miles of pasture forests in the Ahmednagar and
Sholāpur districts. The figure from the Southern Circle was reduced by a
change of 13 square miles due to rectification of errors in survey and re-
measurement of certain areas. Small areas amounting to 1½ square miles
in the Central Circle and 2 square miles in the Southern Circle consisting of
isolated numbers within the demarcation line were afforested during the year.
In Sind the surplus of additions over exclusions, mainly caused by alluvial
accretion, was 8 square miles. The area in charge of the Revenue Depart-
ment decreased from 2,627 to 2,537 square miles owing mainly to the re-
transference of land in West Khándesh to the Forest Department for the
preservation of tree growth and production of grass for grazing. There were
few alterations in charges during the year. 169 square miles of reserved
forest were transferred from North Násik to South Násik, while in the
Southern Circle the Dhárwār and Bijápur Divisions were amalgamated and

a fifth Forest Division was formed in Kárwár. The work of settlement in the Presidency proper is practically complete and was confined to the small areas added to the forests. The question of the settlement of the area proposed for afforestation in the Kánara and Belgaum districts is under consideration. In Sind the area awaiting settlement was reduced from 7,772 to 673 acres, the progress made being very satisfactory. The boundaries of 1,343 miles of forests were demarcated during the year leaving 1,131 still to be done. The greater portion of this is in the Central Circle, particularly in the Akola and Rajur ranges of the Poona Division where 658 miles remain to be completed. A very satisfactory amount of demarcation was done in the South Kánara Division of the Southern Circle. No surveys were undertaken during the year with the exception of the usual survey of the river frontages in Sind.

2. The progress made with working plans during the year was not very striking, only 50 square miles being added to the area under working plans, while revised plans were sanctioned covering an area of 265 square miles. Working plans for 1,013 square miles are under preparation while revisions of plans affecting 2,366 square miles are in progress. The working plan of the South Dángs forest was completed during the year while a revised working plan was introduced in the Eastern Maháls. The plans sanctioned in the Central and Southern Circles were not of great importance. In the Southern Division the control work is reported to be considerably in arrears chiefly owing to difficulties of transport, and also in some cases to scarcity of money and labour. It is hoped that the arrears will be reduced by the improvement of transport by the work in progress and in contemplation in the beds of the Kaneri and the Kalinadi rivers. In the Eastern Division of Kánara, the arrears can only be reduced by the improvement of communications, and the construction of a Light Railway for which a preliminary survey has been made is strongly supported by the local officers. In Sind the whole area is under sanctioned working plans but a large amount of revision is necessary and is in progress.

3. The expenditure during the year on communications and buildings was greatly cut down owing to the financial stringency and amounted to Rs. 1,06,347 against Rs. 1,89,515 in the previous year. The sum spent on new works was only Rs. 47,766 against Rs. 1,19,384 in the previous year. Two-thirds of the expenditure was incurred on improvements of roads and pathways, work on new buildings being reduced to a minimum. In the Northern Circle attention is drawn by the Conservator to the necessity for developing the Peint ranges. In the Central Circle considerable improvement was effected in the communications in the Akráni tract. The recommendation of the Conservator regarding the alignment of the Public Works Department road between Dhadgaon and Taloda in North Khándesh will be taken into consideration. The Conservator doubts the wisdom of the forest road proposed to be constructed in the Koyna valley. Mr. Napier's further conclusions in the matter should be submitted to Government through the Commissioner. The expenditure in Sind was, as usual, chiefly on small irrigation works. In addition to the expenditure of Rs. 1,238 on new works the Public Works Department constructed sluices for the forests costing Rs. 4,720.

4. The number of offences against the forest rules was 22,444 against 21,822 in the previous year, being an increase of 622. In the Northern Circle there was an increase of 353 but the number was below the average of the previous three years. The increase was due to a rise in the Panch Maháls by 526 cases due to the influx of cattle from Káthiáwár and Gujarát, the owners of which disregarded the forest rules laid down. In South Násik, on the other hand, there was a decrease of 224 cases, but the Conservator regards the decrease here, as in Sálsette, as due to slackness in reporting. The Conservator considers the present staff to be insufficient, especially as regards the number of Rangers, to check the offences that occur. In the Central Circle there was a decrease of 926 cases. It is satisfactory to note that the setting aside of coupes for the special supply of coast towns and villages in the Kolába Division reduced the illicit trade and consequently the number of offences. In the Southern Circle there was a small decrease of 174 cases, but

the Conservator points out that such variations cannot be relied upon as the number of offences reported represents only a fraction of those that occur. In Sind there was a considerable increase from 3,237 to 4,606 cases. This was due to the abnormally low inundation and the influx of cattle from the hills, the owners of which not only broke the ordinary forest rules but in many cases caused fires to get green grass for their animals. Generally speaking, the offences in the Presidency were not of a serious nature, a comparatively small number having to be taken to Court. The high percentage of convictions obtained in these cases shows that they were brought with proper care. In the Southern Circle there was a good deal of looting of timber and 38 offenders were convicted in one case. In the same circle there were two cases in which subordinates were convicted of taking bribes in connection with offences against the forest. The effect of communal punishment where it was necessary to be employed is reported to have been good.

5. The number of fires increased from the low figure 1,717 of the previous year to 1,939 while the area increased from 279,166 to 414,457 acres. In the Northern Circle the number of fires and the area burnt decreased. In the South Thána Division the number of destructive fires continued large and was undoubtedly due, in many cases, to the connivance of the Forest Guards who belong to the local wild tribes. In the Central Circle there was a decrease of 33 cases and of 30,000 acres, but, as the Conservator remarks, there is still much room for improvement. In Poona and Sátára where the grass is valuable there were no fires except in land leased to the Military Department where the villagers had less personal interest in preventing and extinguishing fires. Some progress was again made in the checking of fires in Khándesh, but the scanty population of the country, the highly inflammable nature of the grass, the careless habits of the wild tribes and the thoughtlessness of persons with privileges in the forest combine to make fire-prevention difficult. These causes were specially noticeable in East Khándesh where the area burnt increased from 44 to 70 thousand acres much of which was caused by carelessness. The Conservator's proposals for checking the licenses allowed to villagers will be awaited. It is satisfactory to note the steady improvement observable in the West Khándesh district, particularly in one area inhabited and surrounded by Bhils, where it is stated to be mainly due to the personal influence of a Bhil Round Forester. In the Southern Circle the area burnt increased very largely from 40,759 acres to 213,959 acres, the number of fires being 982 against 696. In Kánara the year was the worst for fires for 10 years, the causes assigned being an exceptionally dry hot weather and the very large number of dead bamboos which still remain in the jungles. These causes were aided by the continued apathy of villagers in the extinguishing of fires. In Sind the number of fires increased from 46 to 163, but the area burnt, 6,451 acres, was comparatively small. The reason for the increase was the low inundation which not only rendered the grass much drier and more inflammable than usual but also, as already noted, led to an influx of cattle from the hill districts and from Cutch, the owners of which freely set fire to the forests in order to obtain green grass.

6. The number of cattle impounded was 142,970 against 135,394 in the previous year. The increase was confined almost entirely to the Northern Circle where there was a large influx of cattle from the surrounding areas of scarcity where also it was necessary to take special steps for the protection of the local grass crop. In the Central and Sind Circles there were small increases in the number impounded while the impoundings in the Southern Circle show a considerable decrease. It is satisfactory to note that in some of the Sind divisions the graziers are appreciating the advantage of paying a yearly grazing fee. It does not appear that the efforts to catch the semi-wild cattle in the Sind forests have yet met with much success. The amount realized in grazing fees was Rs. 3,19,710 against Rs. 3,03,612. This was due to the larger numbers brought in for grazing purposes, the number of cattle permitted to graze on payment of either full or privileged fees being 1,935,655 against 1,775,413 in the previous year, while the number of animals allowed free grazing was 541,769 against 502,142 in the previous year. The increase is probably largely due to the number of cattle brought in from areas of

scarcity. The amount of fees that would have been realized had grazing been charged at full rates would have been Rs. 19,66,743.

7. The damage due to causes other than those noticed was not great. The growth of prickly-pear is complained of in the Central and Southern Circles and of lantana in the Southern Circle. As pointed out however by the Conservator elsewhere, lantana may have its uses not only in assisting the growth of young sandalwood but also in checking forest fires. Elephants are stated to have done a certain amount of damage in the Southern Circle. In Sind damage was done by severe frosts, while, as usual, in a year of low inundation the number of rats increased and did considerable harm in the forests.

8. The natural reproduction from seed is reported to have been good in all circles especially in the Southern, where it was the best for many years. Reproduction by coppice was also satisfactory though hindered by fires in the Southern Circle. The Divisional Forest Officer, Kánara Northern Division, however, reports that the degree of damage depended upon the age of the coupe and that in a coupe where the coppice stood about 12 feet high a number of teak-seedlings about a foot high, though all burnt, threw up fresh shoots more vigorous than the original plants. The success of artificial reproduction in the plantations of casuarina seems to have been very varying. The system of agriculture cum forestry in the Central Circle succeeded in Poona, but was a failure in West Khándesh, largely owing to the inferiority of the Bhil as a cultivator. In the Southern Circle it was successful in one coupe and unsuccessful in another while in Sind the results were fair. In North Kánara the tending of $2\frac{1}{2}$ lakhs of natural teak-seedlings by weeding and mulching is stated to have been very satisfactory. In Sind successful work appears to have been done with cuttings of tali while the sowing of babul and kandi seed appears to have given good results. Little was done in the way of fresh experiment. The result of the trial of teak and jamba for paving blocks for the Bombay Municipality is not yet known. A further attempt was made to grow bamboo in Sind, but though the seed germinated the experiment is very doubtful. The attempts to cultivate lac in the Khándesh district were again unsuccessful owing to the destruction caused by black ants. The artificial propagation of lac in the Sind Circle was also unsuccessful, but the quantity is stated to be increasing naturally in some parts and the prospects seem fairly hopeful.

9. The departmental extraction of timber was very little resorted to in the Northern and Southern Circles and in Sind, where it was confined to the supply of fuel to Government steamers. In the Southern Circle the percentage of timber exploited to the total outturn was 55 against 53 in the previous year. Great difficulty was experienced in getting contractors to take up new work. While there can be no doubt that the extension of departmental control would be remunerative, an increase of staff and improvement of communications are necessary. The latter question is under the consideration of Government. The two Government saw-mills in the Northern Division of Kánara did not do so well as in previous years owing to the necessity of closing down one mill for three months and of moving both mills to fresh sites. The net income, however, was Rs. 7,373 and better results are hoped in the future. A contractor's saw-mill was re-opened in the Eastern Division of Kánara and did some useful work. The year's results of the charcoal-making experiments carried on by Mr. Hodgson are not mentioned in the report.

10. The gross revenue realized during the year amounted to Rs. 47,36,661 while the expenditure (revenue and expenditure on account of famine fodder operations being excluded) was Rs. 24,71,326, leaving a surplus of Rs. 22,65,335, an increase of nearly Rs. 94,000 on the previous year. In the Northern Circle there was an increase in receipts and decrease in expenditure, the surplus revenue thus increasing by about Rs. 48,000, but the timber trade is stated to have been dull and the increase is largely due to better outturn from the saw-mill in the Surat Division. In the Central

Circle the revenue was practically identical with the previous year showing a small decrease of Rs. 5,000 on a gross revenue of nearly 8 lakhs. The expenditure, however, decreased by nearly Rs. 30,000 resulting in a net increased surplus of Rs. 24,500. The demands on the forest supply in Poona and Kolába are stated to have been large and to guarantee an increase in revenue. In Khándesh, on the other hand, there was stated to be an absence of demand for timber owing to the war. Since the close of the year there has been a sharp rise in the price of timber and better results should, therefore, follow. The improved results from the Kolába forests are especially satisfactory since their proximity to Bombay greatly enhances both their value and their utility. In the Southern Circle there was a net increase of over half a lakh in the surplus; both revenue and expenditure increased. The receipts notwithstanding the fall in prices and the temporary congestion of the timber market were $1\frac{1}{4}$ lakhs more than in the previous year, the increase being due entirely to the larger quantities of materials exploited and exported. This quantity could be largely increased with improved methods and facilities of extraction. The expenditure increased by Rs. 73,000, but this was chiefly due to larger payments of wages for labour and fuel extracted. In Sind there was a decrease of revenue by about Rs. 39,000 while the expenditure only decreased by Rs. 7,000 leaving the surplus smaller by Rs. 32,000. The decrease in revenue is ascribed to the collection of coupe revenue being spread over this and the succeeding year while poor results were obtained by the sale of some coupes in the Jerruck Division. It may be assumed that owing to the great demand for fuel that has since arisen in Sind this decrease in revenue has proved only temporary. On the whole the financial results appear to have been extremely satisfactory considering that during the period covered by the report there was considerable dulness in the timber trade and congestion of stocks and having regard also to the smaller staff available for supervision.

11. Although the fear of extensive scarcity was fortunately falsified by the heavy falls of rain late in 1915, a considerable amount of work connected with the prevention of famine was thrown upon the Forest Department. Not only were large numbers of outside cattle provided with grazing whereby their lives were saved in the forests of the Northern Circle and of Sind but extensive grass operations had to be undertaken in the Northern and Central Circles. The utility of the forest as a reserve against famine was once more proved.

12. The Department worked under considerable difficulties owing to officers being taken away for military duties and this difficulty has been accentuated since the completion of the year under report. The subordinate staff proved in some respects deficient both in the number of Rangers and in the quality of the work of some branches, more especially of the Foresters. The Governor in Council is pleased to record his opinion that the administration of the Department, in view of the difficulties that had to be met, reached a high level of efficiency during the year.

A. F. L. BRAYNE,

Under Secretary to Government.

G. R. No. 7741, R. D., dated 25th June 1917.

To

The Conservator of Forests, N. C.,
The Conservator of Forests, C. C.,
The Conservator of Forests, S. C.,
The Deputy Conservator of Forests in charge Sind Circle,

L Rev 1224—2

The Commissioner in Sind,	
The Commissioner, N. D.,	
The Commissioner, C. D.,	
The Commissioner, S. D.,	
All Collectors, including the Deputy Commissioner,	
Upper Sind Frontier,	
The Director of Agriculture and of Co-operative	
Societies,	
The Settlement Commissioner and Director of Land	With copies of
Records,	
The Accountant General,	the Report.
The Compiler, General Administration Report,	
The Secretary, Indigenous Industries Committee,	
The Oriental Translator to Government,	
The Public Works Department of the Secretariat,	
The Separate Department of the Secretariat (for the	
Reading Room for the non-official members of the	
Legislative Council),	
The Editors' Tables,	
The Government of India,	} By letter.
The Under Secretary of State for India.	