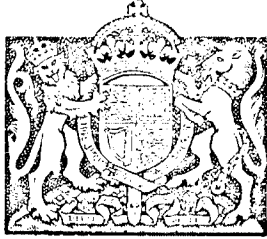


GOVERNMENT OF THE
CENTRAL PROVINCES AND BERAR



ADMINISTRATION REPORT
ON THE
FOREST DEPARTMENT
IN THE
CENTRAL PROVINCES & BERAR
FOR THE YEAR ENDING THE
31ST MARCH 1939

NAGPUR
GOVERNMENT PRINTING, C. P. & BERAR
1940

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No. 442-1258-XI OF 1939
 GOVERNMENT OF THE
 CENTRAL PROVINCES AND BERAR
 FOREST DEPARTMENT

Nagpur, the 27th May 1940.

READ—

The report by the Chief Conservator of Forests on Forest Administration in the Central Provinces and Berar for the year ending the 31st March 1939.

RESOLUTION

The salient features of the working of the department during the year were satisfactory financial results, grant of a number of concessions and introduction of ameliorative measures in the lowest ranks of Forest Department employees. In spite of adverse agricultural conditions and continued economic depression, the net surplus was the highest since 1927-28, with the exception of 1929-30. There was a drop of Rs. 1·82 lakhs in the revenue over the figure of the previous year due mainly to lack of buying capacity of the people, grant of concessions, and abandonment of departmental collection of lac and kullu gum, but this decrease in revenue was converted into a net surplus by improved returns obtained from departmental operations and from the Raipur Forest Tramway and rigid economy in expenditure, which fell by more than Rs. 2·19 lakhs in comparison with the previous year. In fact the expenditure has been so severely curtailed that there is danger of a loss of revenue if the process is carried any further. The economies effected include abolition of one division and seven ranges. The audited commercial accounts for Allapilli and Pedigundam ranges of South Chanda show an increase of profit from Rs. 1·34 lakhs to Rs. 1·49 lakhs, and the Allapilli Saw Mill had a successful year with a considerably increased outturn of 1·03 lakhs cubic feet of timber compared to 0·89 lakh cubic feet for the previous year. Milling costs were also reduced with the result that the receipts from sales of sawn timber rose from 1·36 lakhs to Rs. 1·52 lakhs, and there was a reduction in expenditure from Rs. 43,426 to Rs. 41,785. The gross revenue derived from sales of timber from depots in the Nimar, Hoshangabad and Melghat divisions registered an increase of Rs. 49,351 owing to higher prices obtained for timber from the Hoshangabad division. Similarly the sal sleeper operations were further extended and yielded an increase in net profits of nearly Rs. 45,000.

2. The Raipur Forest Tramway also had a more satisfactory year. Its gross earnings amounted to Rs. 1·56 lakhs, the highest figure since 1933. The working expenses, which amounted to Rs. 1·01 lakhs, slightly exceeded the figure of the previous year owing to abnormal expenditure on repairs to an engine. The net financial results, however, show a considerable improvement over the previous year. The surplus of gross earnings over expenses, which amounted to Rs. 55,152, is more than sufficient to cover the depreciation charges, but if interest on the capital sunk is also taken into account, there is still a net deficit, the amount of which, however, was less than in any year since 1931. It may be mentioned that the Raipur Forest Tramway, in addition to serving the needs of the department, is also supplying a real public need. The tramway carried about 18,000 passengers and 671,000 maunds of goods. Efforts to increase its usefulness to the general public are being continued, and the question of introducing through booking of goods with the Bengal-Nagpur Railway is under examination. The chief problem before the Raipur Forest Tramway is overloading, which not only reduces the revenue but also wears out the rolling-stock. The question of installing a weigh-bridge to check this evil, which has been kept in abeyance so far on account of financial stringency, has become urgent and is being re-examined.

3. The aspect of the administration of the department which touches the agriculturist more intimately than perhaps any other is grazing. The report contains an exhaustive exposition of the policy of Government. During the year Government introduced a number of measures calculated to give relief to the agriculturist and the cattle-owner. A reduction of 25 per cent in the privileged and ordinary grazing rates, wherever the existing rates were more than Re. 0-1-6 per head of cattle, was sanctioned with effect from the commencement of the year. In the Nimar and Seoni divisions the commercial rates were also reduced as their incidence was too high. The net result of these concessions was that the number of animals which grazed in Government forest increased by 92,540, while the revenue actually realized fell by Rs. 79,585. This, however, does not reveal the full extent of the value of the concession. The grazing revenue at the original rates for the actual number of cattle which grazed in the forests would have exceeded the actual receipts by Rs. 1·32 lakhs. The provincial finances are not in such a condition as to justify Government in regarding with equanimity this heavy reduction in grazing revenue, and the general effect of the concessions will have to be carefully watched.

4. In addition to the above-mentioned reduction in the grazing rates, the grazing rules were modified and the date of commencement of the grazing year was changed from the 1st July to the 1st April, with a view to granting cattle-owners a longer period for taking out grazing licences. The change in the grazing year has given rise to a number of administrative difficulties which will need examination. In addition, the system of issuing grazing

certificates by patwaris in the Central Provinces was abandoned for the Berar system, under which recourse to the patwari for grazing certificates is not required. This alteration should result in considerable convenience to the people.

5. The other concessions granted include free removal of grass in areas where it has no commercial value, and free extraction of mahua and achar in certain backward areas. With a view to encouraging sheep farming, possible areas totalling 777 square miles have been set aside for 'gwari' grazing of sheep, and in order to encourage stall feeding of agricultural cattle—considered by many to be the only solution of the grazing question of this province experiments on silage operations are being made on the extensive grass areas along the Raipur Forest Tramway.

6. In order to improve the efficiency of the Forest Guards and increase their utility to the public, a system of local training for all junior Forest Guards has been introduced and they have also been supplied with a printed list of their duties. The Forest Guards have to serve under most onerous conditions and a long overdue measure of improvement in the conditions of their service, *viz.*, increase in their minimum salary by Re. 1, was introduced at the close of the year. It has also been decided to supply each Forest Guard annually with a pair of shoes at a cost of Rs. 2. It is hoped that the effect of these measures will be to give encouragement to these lowest paid forest employees on whose efficient working the success of the operations of the department to a large extent depends. Government has noted with much regret the increase in the number of assaults on Forest Guards including one unprovoked fatal assault by a poacher. Government believes that this increase was due to fortuitous circumstances and does not connote any deterioration in the relations between Forest Guards and the public.

7. The experiment of opening village schools which was initiated last year was carried a step further by the opening of 21 new schools during the year. Timber worth Rs. 11,784 was supplied for the construction of 66 Vidya Mandirs. This involved considerable strain on the forest staff which was entrusted with the duty of felling and carting the timber to its destination. An area of 4,208 acres of Government forests in the Saugar district has been transferred to the Veterinary Department for the opening of a cattle-breeding farm. Government has also passed orders designed to encourage private plantation of fruit trees in open forest lands.

8. The discussion on the report of the relative advantages and disadvantages of clear-felling *vis-a-vis* an improvement-*cum*-selection system is instructive. In view of the great part which Government forests play in the well-being of the province, Government trusts that the policy best suited to the interests of the province will be evolved after careful experiments and examination of all relevant facts and circumstances.

9. Attached to the report is a brief review of the quinquennium ending the 31st March 1939. The main features of the quinquennium are economic depression and the preparation of 14 new working plans in divisions with the result that practically the whole area under Government forests is now under regular working plans.

10. Government desires to place on record its appreciation of the valuable services rendered by Mr. Cox, the Chief Conservator, who retired after the close of the year. Its thanks are due to him and the officers of the department for their zeal and industry in the discharge of their duties.

ORDER.—Ordered that a copy of this resolution be forwarded to the Chief Conservator of Forests and to the Conservators of Forests, Central, Eastern and Western Circles, for information and guidance; also that it be published in Part I of the *Central Provinces and Berar Gazette*.

By order of the Governor,
Central Provinces & Berar,

K. B. L. SETH,
Secy. to Govt., C. P. & Berar,
Forest Department.

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**REPORT ON THE FOREST ADMINISTRATION IN THE
CENTRAL PROVINCES AND BERAR FOR THE
YEAR ENDING 31st MARCH 1939**

**CHAPTER I.—CONSTITUTION OF STATE
FORESTS**

1. **Changes in area.**—The total area under the control of the Forest Department stood at 19,432 square miles [19,411 square miles] exclusive of 174 square miles of the Ahiri Leased forests as shown in Form 7.

The afforestation of 28 square miles of the escheated Rajoli and Palastola forests in the Bhandara division and the disforestation of 8 square miles in the Mandla division made in favour of cultivation, and minor alterations increased the area by 21 square miles.

2. **Forest settlements.**—Settlements were completed for 30.08 square miles and are in hand for 5.83 square miles.

3. **Demarcation.**—The five-year demarcation scheme was adhered to as far as funds permitted at a cost of Rs. 10,465 [Rs. 8,933]. The total length increased by 549 miles to 34,684 miles due mainly to the re-measurement of boundaries in Buldana during the revision of the working plan.

4. **Forest surveys.**—No forest surveys were undertaken during the year.

5. **Constitution of State forests.**—The expenditure under this head was Rs. 27,584 [Rs. 25,744].

**CHAPTER II.—MANAGEMENT OF STATE
FORESTS**

I.—REGULATION OF MANAGEMENT.

6. **Preparation and control of regular working plans.**—The revised plan for the Yeotmal division (779 square miles) was introduced with effect from 1st July 1938 except in the case of the grazing settlement, orders on which were received too late to be effective during the first grazing season.

7. **Revised working plans for Seoni** (925 square miles) and the North-Raipur sub-division of Bilaspur (514 square miles) were sanctioned by the Chief Conservator and will be introduced from 1st July 1939. The revisions of the working plans for Chhindwara and Jabulpore sub-division were also completed during the year. The draft

of the revised Buldana Working Plan for West-Berar, which has been completed, was under examination at the close of the year, and work on the collection of the price increment data for the forests of Hoshangabad under the direction of the Central Silviculturist is now in progress, a temporary working scheme having meanwhile been drawn up for the valuable forests of the Bori reserve.

A working plan party was employed in stockmapping the forests of Bhandara in connection with the revision of the plan for that division, the field work on which has been completed and the mapping work being in progress.

8. **Control.**—The prescriptions of sanctioned working plans have been generally adhered to and all deviations sanctioned by the Chief Conservator. As examples, the working plan for the Garhakota Ramna of Saugor had to be recast to provide for reservations, owing to the damage from frost resulting from the clear-fellings prescribed in the original plan. Also in Balaghat, revised felling prescriptions were drawn up for the Sal High Forest Working Circle to replace the far too drastic methods covered by the plan. These have proved suitable and adequately safeguard the crop from frost.

The grazing settlements for the plans of North and South Mandla were revised in the light of experience gained to date. Plans of operations were drawn up, as usual, in all divisions and adhered to in all essential details.

9. **Preliminary working plans.**—The preliminary working plan report for the Jubbulpore Ranges was prepared and received sanction during the year.

10. With regard to working plans in general it is interesting to recall a passage from Forsyth's "Highlands of Central India" in which allusion is made to the dangers attending the application to tropical forests of systems of forest management involving clear-fellings with the object of obtaining a forest containing a regular gradation of age classes. Writing as far back as 1872 Forsyth said—

“Government have taken the proper course in seeing that all newly-appointed forest officers shall, in future, go through a course of instruction in the advanced schools of Forestry in Germany and France. The only danger now remaining is lest cut-and-dried theories based on the example of moist temperate regions, be applied without sufficient caution to the very different conditions of tropical

forests. For example, one of the practices of continental forestry, the working of forests in blocks by rotation, though probably quite inapplicable to a hot country where stripping the soil of all the trees at once converts it into an arid desert, is still aimed at in our Indian forests, and is the cause of much, and I believe wasteful, expenditure of money."

No words could perhaps more aptly foreshadow the experiments in forest management made in these Provinces during the past 15 years during which attempts have been made to replace the series of cycles of Improvement Fellings, to which most of the forests had been previously treated, by a regular system on definite rotations involving clear-fellings having for their object the gradual conversion of the naturally uneven-aged, irregular, generally understocked and dry forests of the Province into a normal forest of even-aged stands, in which the annual yield can be equalised and control facilitated. Experience of its working so far has shown that such a system may not be entirely suited to local conditions, and close observation has led to the criticism that it is attended with dangers of over-felling, frost, fire and an excessive growth of grass or bamboo. As the result of this practical experience and criticism, the working plan policy for the whole Province is now being gradually revised on more conservative lines, a few instances of which have been mentioned above.

II.—COMMUNICATIONS AND BUILDINGS

11. Roads.—Owing to existing financial stringency the construction of new roads has now practically come to a stand-still and only 30 miles of cart roads were constructed at a cost of Rs. 16,824 [Rs. 25,567]. There is scope for considerable development of forest resources by the construction of forest roads and at present the sanctioned road programme consisting of nine projects with a length of 49 miles, all of which are expected to bring in increased revenue to the extent of over 15 per cent on the estimated outlay of Rs. 37,000, is held up for want of funds. Such remunerative road development is particularly necessary in the Mandla, Bilaspur and Balaghat divisions.

12. The cost of maintenance of 10,224 miles of roads amounted to Rs. 1,13,633 [Rs. 1,10,703] or an average of only Rs. 11 per mile. Owing to paucity of funds even ordinary and special repairs have not been

adequately carried out in recent years and roads in all circles, which carry heavy cart traffic, are in a bad condition. To prevent further deterioration adequate funds to the extent of Rs. 1,23,000 per year or Rs. 12 per mile are an urgent necessity.

13. Rs. 1,339 were paid by district councils for the upkeep of forest roads used largely by the public.

14. Forest roads formerly closed under the Motor Vehicles Act have now been ordered to be opened for motor traffic under the orders of District Magistrates.

15. Raipur forest tramway.—The year under report shows a still further improvement in the earnings of the Tramway, which increased by Rs. 18,064 to Rs. 1,56,199—a record figure since the year ending 30th June 1932. This was mainly due to the larger number of sleepers transported over the Tramway by Messrs. H. Dear & Co., as a result of reduced freight rates introduced last year. Public and goods traffic also registered a revival with the result that earnings from these sources improved considerably. A push trolley service was introduced for the first time during the non-running season of the year, the results of which have been encouraging and it has now been decided to continue this service. Harra and paddy, which form the bulk of revenue from public traffic, suffered some contraction but the deficiency was made good by an appreciable increase in the traffic in rice, oil-seeds, bidi leaves, poles, logs and firewood. Negotiations for introducing through booking of goods traffic between the Raipur Forest Tramway and the Raipur-Dhamtari branch of the Bengal-Nagpur Railway are in progress.

Persistent over-loading of wagons over the Tramway continues to present a serious problem. The Manager has estimated on actual weighment of a few wagons that the Tramway has probably suffered a loss of revenue to the extent of Rs. 25,000 during the past year on this account. Apart from the pecuniary loss, the damage to the rolling stock has also been considerable. Solution of the difficulty lies in the installation of a weigh bridge at Bagleyganj. This proposal has been examined by Government but due to the poor finances of the Tramway it has not been possible to accept the heavy expenditure involved.

The Tramway carried about 18,000 passengers and 6,71,000 maunds of goods during the year. Working costs increased by Rs. 1,392 to Rs. 1,01,047 due to heavy

expenditure incurred on repairs to one engine, the payment of a liability incurred last year on repairs to three locomotives in the Bengal-Nagpur Railway Workshop and a rise from Rs. 2-12-0 to Rs. 4 per ton in the price of coal. In spite of this extraordinary expenditure, which had to be met from revenue, the surplus increased from Rs. 38,480 in 1937-38 to Rs. 55,152 which was more than sufficient to cover the depreciation charges which amounted to Rs. 29,606.

16. Buildings.—Owing to the urgent call for retrenchment in expenditure to provide funds for other important works of a public nature, such funds as were available for new buildings were entirely inadequate. The five-year programme of buildings submitted to Government in 1937 had therefore to be held in abeyance and only Rs. 2,569 [Rs. 25,382] were spent during the year on new works against the minimum annual requirement of Rs. 50,000. In last year's report the urgent necessity for providing quarters for the subordinate staff was stressed and comparative figures of expenditure incurred during recent years on the Police and Forest Departments were given by way of contrast. The position which again receives adverse comment from Conservators and Deputy Commissioners, remains practically unchanged and is extremely unsatisfactory, over 1,000 subordinates being still unprovided with quarters the total cost of which is estimated to amount to Rs. 3,54,650. Under such conditions it can be easily understood that Divisional Officers find it difficult to recruit and maintain a contented, healthy and efficient outdoor staff.

The position as regards the actual building requirements of the department is exhibited in the following statement :—

Class of Officers	Total number required	Owned by Government		Available on rent	Still required	Approximate cost
		Suitable	Unsuitable			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
						Rs.
Gazetted Officers ..	33	21	3	9	11	89,000
Forest Rangers ..	129	117	7	4	12	46,250
Range Assistants ..	399	298	76	18	101	1,26,850
Forest Guards ..	2,594	1,707	672	69	887	354,650
Paid Vendors ..	80	48	14	..	32	11,650
Combined range office and range clerks' quarters and other buildings.	141	98	22	18	43	60,650
Total ..	<u>3,376</u>	<u>2,289</u>	<u>794</u>	<u>118</u>	<u>1,086</u>	<u>689,050</u>

17. The expenditure on upkeep of existing buildings amounted to Rs. 65,389 [Rs. 64,315]. More money is required for special repairs to certain very old buildings which are deteriorating rapidly on account of lack of attention in the form of repairs during recent years.

18. Miscellaneous works.—Expenditure on wells, tanks and other minor works amounted to Rs. 13,663 [Rs. 17,018] of which Rs. 3,493 was spent on new works. A sum of Rs. 5,000 was sanctioned by Government after the close of the year for the construction of bunds at suitable centres in order to improve the water supply for cattle during the summer months.

III.—PROTECTION OF FORESTS

19. (a) General protection.—The following statement compares the number of forest offences of the year with those of 1937-38 and with the average of the last three years :—

Nature of offence	Average of three years ending 1936-37	1937-38	1938-39	Increase or decrease	Percentage of cases to total cases
(1)	(2)	(3)	(4)	(5)	(6)
(i) Injury by fire ..	574	553	628	+75	3
(ii) Unauthorized felling	13,453	11,749	11,943	+194	49
(iii) Unauthorized grazing	12,406	10,763	9,907	-856	41
(iv) Other offences ..	2,318	2,100	1,788	-312	7
Total ..	28,751	25,165	24,266	-899	100

The total number of forest offences declined by 899 to 24,266. The increase under (i) and (ii) is attributed to a stricter control and that under (iii) and (iv) to the following causes :—

- (i) reduction in the privileged and ordinary grazing rates by 25 per cent as a result of which more cattle owners took out licences ;
- (ii) the longer period allowed under the revised grazing rules for the issue of grazing licences at concessional rates ;
- (iii) removal of petty grievances in respect of paths and listing of villages to certain grazing units ;

- (iv) the action taken in accordance with the order issued by Government in connection with cattle found grazing near boundary lines which on detection were driven out instead of being seized; and
- (v) free removal of grass and other minor produce from the backward tracts of the Province.

Another factor of some importance in the administration of the Forest Act, and which also contributed towards a decrease in forest offences, was the issue of a circular order making it obligatory for all junior Forest Guards to pass a prescribed test to the effect that they were conversant with their duties and had an adequate knowledge of the Forest Act with regard to forest offence cases before they could be confirmed in their grades and receive promotion beyond Rs. 14 per mensem. To supplement this, the duties of Forest Guards and Range Assistants were prescribed and issued in the form of a printed list to all subordinates in service. The issue of these duty lists has served to some extent to make the staff acquainted with their legal functions and to remove the misunderstanding and ignorance which previously existed and has gone a long way in checking the tendency of over-zealous members towards unnecessarily harassing the public.

20. Eighty-eight cases were pending in courts at the commencement of the year, to which 284 cases were added, making a total of 372 cases. Of these, 210 resulted in convictions, 39 in acquittals, 31 were subsequently withdrawn and compounded and 92 remained pending. The percentage of convictions was 84 [80] and punishments awarded by the courts were generally adequate. A few cases in which punishments were inadequate were brought to the notice of the District Magistrates concerned and suitable action was taken.

21. Cases compounded.—The number of cases dealt with under section 58 of the Indian Forest Act was 20,108 involving 50,331 persons against 21,458 cases involving 53,336 persons last year. The average compensation per case and per person was Rs. 4-8-10 [Rs. 5-3-4] and Rs. 1-13-1 [Rs. 2-1-6], respectively. In view of the poor economic condition of the people low rates of compensation were levied. The question of prescribing maximum penalties in forest offence cases on a sliding scale is being examined for the guidance of compounding officers. Such a scale of compensation fees, if it can be

devised to cover all the common forms of forest offences, may possibly remove the oft-heard complaint that the present form of *Kabuliyatnama* is a sort of blank cheque which offenders are compelled to sign.

In addition to the above, 53 forest offence cases were detected in ryotwari forests by the subordinates in the North-Chanda division under section 33 of the Indian Forest Act and were forwarded to the Revenue authorities for disposal. These included two cases under the Central Provinces Game Act of 1935.

22. Undetected cases.—The number of undetected cases was 1,474 [1,588].

23. No cases were reported under the Wild Birds and Animals Protection Act, VIII of 1912.

24. A disturbing feature of the year's work was the occurrence in the Eastern Circle alone in spite of the numerous forest concessions made by Government on behalf of the public of no less than 16 cases of assaults on forest subordinates which occurred in the Saugor, Jubbulpore and Balaghat divisions. In one of these the accused—a poacher—went so far as to shoot in cold blood a Forest Guard without any provocation. The offender though armed was tackled and caught by another forest subordinate who displayed considerable gallantry, assisted by a Gond. The murderer was subsequently sentenced to death and an extraordinary pension of Rs. 6 per mensem was sanctioned by Government in favour of the minor son of the deceased Forest Guard for a period of 15 years.

25. Rewards amounting to Rs. 778 [Rs. 1,157] were paid to subordinates and informers in 315 [405] cases.

26. (b) Protection from fire (Form Nos. 14 and 15).—The area under fire protection rose by 581 square miles to 15,429 square miles due mainly to the whole area of the Nimar division being brought under full protection instead of class I and II areas only as in the previous years.

Weather conditions were again unfavourable to fire protection and the area burnt increased by 15 square miles to 596 square miles, or 4 per cent of the area under protection. The expenditure was Rs. 57,581 [Rs. 54,369] or Rs. 3-11-9 [Rs. 3-10-8] per square mile. The total cost includes a sum of Rs. 600 paid as compensation to

the family of a deceased Forest Guard in the Saugor division under the Workmen's Compensation Act. The increase in cost was due to a greater measure of fire protection afforded to young regenerated coupes and the employment of more fire watchers.

27. The number and origin of fires are exhibited in Form No. 15. There were 1,038 [1,068] fires burning an area of 381,858 acres [371,682 acres]. Although the number of fires has decreased by 30, the area burnt has increased to some extent. The necessity for better protective measures and a general improvement in fire discipline, which was stressed in last year's report, must be repeated as the area of even-aged crops created in recent years is increasing year by year and their very existence will be imperilled if matters do not improve. The subordinate staff unfortunately rarely realize that an out-break of fire anywhere is undesirable and in a regenerated area a calamity. The fire question has become so serious, particularly in Bhandara and North-Chanda, that strict disciplinary action will have to be taken against those immediately in charge of regenerated areas which are burnt. The public unfortunately are also to some extent to blame for the increase in fire damage through failure to exercise sufficient care when passing through reserved forest or by deliberately setting it on fire in a mistaken belief that the grazing will thereby be improved.

28. (c) Protection from cattle.—Areas closed and open to grazing are compared below with the figures of last year :—

	1937-38 Square miles	1938-39 Square miles
(i) Closed partially or entirely ..	1,937	1,888
(ii) Open to all animals including browsers.	2,761	2,681
(iii) Open to all animals except browsers.	14,713	14,863
(iv) Percentage open ..	90	90

The small differences are due to variations in the size of coupes closed to grazing and to the greater number of coupes now opened to grazing with the object of removing local inconvenience.

29. The number of cattle impounded was 4,052 [4,607]. The decrease is attributed to the greater efforts now made by the subordinate staff in tracing out the owners of stray cattle.

30. (d) Protection against injuries from natural causes—*Frost*.—On the whole the year was a good one as regards frost damage which was only reported appreciably in certain sal areas in the Eastern Circle notably in the case of sal coppice and seedlings in the worked coupes of Barmani and Khitoli Felling Series of Jubbulpore. Teak saplings were also badly affected in the experimental plots in the Pandaria and Maiyanala circles of that division. The frosty areas of Baihar and Supkhar Ranges of Balaghat suffered as usual, but the introduction of new felling rules in recent years has definitely arrested their extension and provided adequate safeguards against such damage in future. Similar protective measures are also being introduced in Mandla and Bilaspur.

31. Wind and hail.—A severe gale during the rains in the South Chanda division resulted in several wind-falls in areas where the soil was shallow black cotton. A certain amount of damage was also done by storms in the Sonawani Range of Balaghat and in the Dhanwahi and Jubbulpore Ranges.

32. Drought.—No appreciable damage was noticed.

33. Floods.—Flooding of the Agni and Mona rivers in Nimar damaged coppice growth in the Asapur Felling Series and uprooted several Kahu trees. A heavy rainfall of 11 inches at Karanja in West-Berar on the 9th June 1938 resulted in the flooding of the Karanja tank but no serious damage was done.

34. Wild animals.—Damage to young regenerated crops by browsing by sambhar and chital continues to present a serious problem and to exhibit itself as an adverse feature of systems of management involving concentrated regeneration operations by clear felling. The Conservator of Forests, Eastern Circle, mentions extensive damage by browsing and rubbing caused to sal saplings in the Khitoli regeneration area of the Jubbulpore division where even wire-fencing is not found wholly effective in keeping out the incredibly agile chital and sambhar. In many coupes of the mixed ranges of Kaipur the damage is so marked

that several valuable species are in danger of complete extermination in young coppice coupes. All regeneration coupes in the sal forests of Mandla and Balaghat and to a less extent Bilaspur are reported to be plagued with deer, of which chital and barking deer are the worst offenders. The Conservator considers that the sal regeneration areas in the Banjar and Supkhar sanctuaries will be complete failures if some form of fencing is not provided and suggests that funds for the purpose should be provided from the proceeds of the Game Act. In Hoshangabad and Nimar, damage by chital continues to be severe along the Nerbudda river and the permission given to shoot some chital and sambhar in such areas has had no appreciable effect.

In the West-Berar division, young trees in agri-silvicultural plots continue to suffer from a variety of wild animals and damage is occasionally serious. The Conservator's impression is that wild cattle in Berar are on the increase in spite of organized cattle-catching operations and that the problem will not be solved until the more orthodox members of the Hindu population in the localities affected agree to the extermination of these pests to agriculture.

35. Insects.—Slight attack by teak defoliators was noticed in Mandla, Chhindwara and in the Arvi and Umrer Ranges of Nagpur-Wardha, the worst case being in the Sipna Valley near Ghatang in the Melghat. Sporadic attack by the sal borer (*Hoplocerambyx Spinicornis*) was observed in parts of the Banjar, Motinala and Karanjia Ranges of Mandla and suitable and prompt measures were taken to prevent its spread, trap trees being felled and beetles caught on them. Later in the cold weather the trap trees were concentrated in heaps and burnt. Damage by borers was also noticed in felled and standing *semal* trees in the Dhaba Range of South Chanda. Seven hundred and eighty-one trees had to be felled and burnt and the beetle responsible for this attack was identified as *Batocera rufomaculata*. The babul borer *Coelosterna scabrata* continues to give trouble but mainly in areas where babul is not a suitable crop.

36. Fungus.—Damage by *Fomes pappianus* continues to occur in the older babul bans in the West-Berar and Amraoti divisions.

37. *Lantana*.—The eradication of lantana was continued in the Melghat, West-Berar, Nimar, Betul, Hoshangabad, Jubbulpore, Mandla, Seoni and Bhandara divisions at a cost of Rs. 3,276. In the Melghat, coupes 3 and 4 of the new working plan were dealt with at a cost of Rs. 2,118 and the area worked over was 2,156 acres. In the Bhandara division efforts were also made through the Revenue authorities to have this weed exterminated in malguzari areas adjoining reserved forests, but they were not very successful as malguzars and tenants are generally apathetic. This pest as well as “Gokhru” are reported to be also spreading with alarming rapidity in the Nerbudda and Wainganga Valleys.

38. *Gokhru* or *Audhi* (*Xanthium strumarium*) *Bathurst's burr*.—The occurrence and serious spread of this weed has come to notice comparatively recently and has been a subject of local enquiry in Seoni and Chhindwara. It has not yet encroached to any great extent on reserved forests and is chiefly found along main roads and in village areas. The burr appears to be disseminated by cattle as the plant is a light demander, the danger is likely to affect agriculture more than forests though the possible menace to grazing areas is not being overlooked.

39. *Loranthus*.—Continues to be a common pest on Mohwa, Achar and Tendu in most divisions. *Viscum orientale* is reported to be on the increase on garari in the Pedigundam Range of South-Chanda division.

40. *Land slides*.—Two land slides occurred during the rains of 1938 in coupes 8 and 9 of the Gwari Low Forest Felling Series of the Khairi Range in Hoshangabad over an area of about five acres, which are thought to be due partly to the heavy opening up of the canopy when these coupes were worked and partly to the abnormally heavy rains. Though tree growth was damaged the slides have encouraged the growth of baber grass which appears to prefer freshly exposed soil.

41. *Climber cutting*.—Climber cutting operations were undertaken over an area of 136,743 acres in the Eastern and Central Circles and in the Betul and Hoshangabad divisions of the Western Circle at a cost of Rs. 8,792 [Rs. 5,587]. In addition a large number of climbers were cut by Forest Guards in the course of patrol work and during marking operations.

CHAPTER III.—SILVICULTURE

I.—SYSTEMS OF MANAGEMENT

42. Reference was made in last year's report to the fact that experience has shown that the silvicultural systems of management, introduced during the last fifteen years, which had for their main object the conversion of the irregular forests to a series of age-gradations by clear-felling, are not altogether suitable. Apart from the fact that such systems involve a sacrifice of much immature growth, they also have not resulted in complete restocking on account of frost damage, heavy grass or a prolific regrowth of bamboos which follow clear-felling and adversely affect regeneration.

43. As a result of such experience present tendencies lie in the direction of replacing drastic clear-fellings by more conservative prescriptions emphasising the preservation of shelterwoods and the avoidance of any uneconomic sacrifice of young pole crops. At the same time, steps have been taken to collect basic data regarding price increment and the silvicultural requirements of the varying types of forest crop. This information alone will indicate what the ideal systems of management should be, and as soon as it is available it may be necessary to undertake wholesale revisions of current working plans. On the other hand, until facts have been established caution will be necessary lest the natural tendency to go to opposite extremes should lead to any sudden and wholesale modification of the structure of existing plans which may in turn prove equally unsuitable. As a result of the Central Silviculturist's tour of the forests of the province, work on the collection of data was commenced during the year and will be continued. Details of this work are given in the Silviculturist's report on Forest Research in the province.

44. Two examples illustrating the modifications that are being made in existing prescriptions may be of interest—

- (i) In accordance with previously accepted principles, the 1938-39 revised plan for the Bori teak high forests provided for immediate conversion to a uniform forest with an eventual rotation of eighty years, and for this purpose prescribed clear-fellings in the regeneration block. This

plan has not been passed on the grounds that the forests are generally understocked in respect of sound teak, size classes are inextricably mixed, the proportion of large-sized trees which yield a larger profit is small and much below the possibility, and above all because clear-fellings entail a heavy sacrifice of young growth and result in a prolific regrowth of bamboos which completely suppress the regeneration. In order to meet these objections, the collection of price increment and out-turn data and the enumeration of the growing stock are being undertaken on the basis of which selection-*cum*-improvement fellings will, in all probability, be eventually prescribed. For the interim period a temporary working scheme has been drawn up under which a fixed number of trees of six feet girth and over, representing a third of the present volume yield but half of the total value yield, are to be removed. As, however, it will not be possible to ensure adequate regeneration and the necessary improvement of stocking by such fellings, it is proposed to raise compensatory plantations simultaneously therewith.

- (ii) The current prescriptions for the Sal high forests of the Bilaspur division have been modified because experience showed that they did not lay sufficient emphasis on the existence of a very uniform but immature pole crop of healthy sal under the overwood surviving from past working and also omitted to provide necessary safeguards against frost damage. Under the revised prescriptions the forests are to be worked under a scheme directed at *preparing* them for conversion to a uniform forest. Future fellings are to be very conservative in order to reduce the sacrifice of immature stock, and aim at obtaining or liberating regeneration under a frost shelterwood. Guides have been indicated to facilitate the location of frost liable areas, and the

desirability of maintaining a closed canopy to ensure a clean forest floor for inducing regeneration is emphasised.

II.—GENERAL PROGRESS OF REGENERATION AND AFFORESTATION

45. (a) *Natural*.—The general progress of regeneration was satisfactory and, except in certain areas where bamboo growth is particularly aggressive, young crops were able to make good headway everywhere, as frosts and fires were nowhere very severe and the necessity for treating all frost dangerous areas with extreme caution and for retaining sufficient cover to prevent rank growth of grass which competes with tree species and increases the fire risk is now fully realised.

46. (i) *Teak forests*.—The areas of regenerated coupes which suffered from severe frost damage in the bad years between 1929 and 1935 are gradually recovering but cannot yet be considered out of danger from frosts of similar severity. The competition of bamboos with young teak remains a difficult problem in areas where the bamboo growth is particularly vigorous, examples of which are provided by the Bori forests of Hoshangabad and wider areas in Betul and Chanda. Repeated cutting of bamboos is being tried but has so far not given anything approaching complete success.

The lantana problem of the Melghat is still not properly solved and large scale experiments are being continued. Present treatment combines eradication in the rains by elephants with annual burning but has, on the whole, given disappointing results as the shrub reappears after a year or two. Restocking by stump planting with teak in the bad lantana areas is also being tried and may prove to be the ultimate solution in the restricted high quality areas.

Damage to young woods by game continues and efforts in reducing the numbers of chital have so far not been as successful as is desirable. Wild cattle also continue to hamper operations in certain localities and this problem will not be solved until local opinion is reconciled to their destruction.

Teak is an invasive species in the mixed forests of Balaghat and the raising of plantations is a comparatively easy matter. This work is therefore to be taken up in suitable areas which may then act as foci for aiding and

extending the invasive process. From Nagpur-Wardha it is reported that as a result of leaving more reserves in worked coupes, natural regeneration is making good headway which was not possible previously on account of the heavy grass which followed clear-fellings, coppice also is straight and clean, and the leafless period has been shortened. In North-Chanda, repeated cutting back of bamboos is having its effect in aiding the regeneration. As regards fire damage, a general opinion appears to be gaining ground that this is becoming far more serious as the area of young woods under present systems of management increases, and a reversion to the old system of rigid fire protection is generally favoured.

47. (ii) Sal forests.—In Mandla steps are being taken to substitute area control for volume control as the former is not practicable on account of the large areas that have to be dealt with. In Raipur where browsing is not a menace, the establishment of sal reproduction is fairly satisfactory now that frost damage is being averted by the retention of sufficient cover. In the Bilaspur forests the occurrence of large stretches of established even-aged pole crops and the ever-present danger of frost have led to the evolution of a frost shelterwood system under which an arbitrary number of stems are being left per acre with good results. In Balaghat, the year was a particularly favourable one for regeneration which was satisfactory in all coupes. Coupes I to V of the regeneration block of the Baihar High Forest, which were clear-felled under the prescriptions of the current plan, now contain large areas where young sal is still in danger of suppression by bamboos, or of being wiped out by frost. Coupes VI and VII have therefore been worked under revised and much more conservative prescriptions, under which most of the pole crop and a proportion of the older crop has been left standing to act as a frost shelterwood. The results of this treatment are very satisfactory. It is now also recognized that controlled grazing by cows and bullocks is of the utmost value in combating the ill effects of any injudicious opening up of the canopy.

In all sal divisions browsing by deer continues to be a major regeneration problem. It is realised that such damage to young crops can only be successfully prevented by high fencing, and the possibility of utilising for this purpose the sal *baglies* (side pieces) derived from the

saving of sleepers is being investigated. Experiments so far made in this direction indicate that a good deer-proof fence can be made from these at a cost of Rs. 2 to 3 per chain.

48. (iii) **Mixed forests.**—The regeneration of mixed forests has been a difficult problem for a number of years on account of heavy grass, damage by fire and browsers, and the slow growth of many species during early youth. The necessity for retaining reserves in the overwood has long been recognized and it is now generally admitted that all young growth up to about nine inches in girth should also be reserved. In cases where this is not found to be sufficient, the solution appears to lie in raising the limit to twelve inches or even higher in extreme cases.

49. (b) **Artificial.**—The gradual extension of teak plantation work throughout the province was mentioned in last year's report and progress has been maintained as far as funds have permitted. In addition, increasing attention is now being paid to improvement in plantation technique in order to obtain better results at lower cost. As examples of such efforts the possibility of replacing direct sowings by stump planting in agri-silvicultural plantations, pre-monsoon planting as opposed to the present practice of planting after the onset of the monsoon, and the raising of stumps directly on seed beds, *i.e.*, without resorting to transplanting, may be cited.

50. The most interesting and important plantation work is now being carried out in the South-Chanda and Bilaspur divisions and in Berar. In the former division nearly 300 acres are now planted up with teak as a routine operation. The work in Bilaspur though on a smaller scale, deserves special mention as being by far the best organised in the Province, and thus reflecting great credit on the staff. At this centre the cost of planting teak, 12' × 12', has been gradually reduced to Rs. 4 per acre, which is perhaps the lowest figure of cost at which such plantations have ever been raised.

51. The progress made in the agri-silvicultural work in Berar also deserves special mention. This work is now being carried out departmentally in several centres in the Kinwat range of the Yeotmal division, and results obtained are very satisfactory. The management and development of the Babul-Bans of Berar, on the other hand, are still in a somewhat unsatisfactory state,

chiefly owing to the slump in cotton prices and the consequent disappearance of demand for land for agriculture, and to a lesser extent, to a dearth of suitable contractors willing to undertake such work. A thorough revision of the working plans for these babul forests is therefore shortly to be taken up in an attempt to place their management on a sounder footing. Meanwhile, attempts are also being made to regenerate coupes abandoned by insolvent lessees, by natural means, that is to say, by tending the babul that has come up naturally in these areas. Experiments to introduce *Prosopis juliflora* in these plantations have now met with success. It has been found that the Mexican variety of this species which was sown before 1935 is unsuitable as it grows only to the shrub stage. The Australian variety which has been tried since has given much better results, the oldest plants having already attained a height of ten to fifteen feet and a girth of six to nine inches.

III.—TENDING OF THE GROWING STOCK

52. The nature of tending work that is being done, has been referred to in the previous paragraphs. The areas dealt with and the costs incurred are given in the following statement:—

Operation	1938-39				
	Area in acres	Cost	Cost per acre	Revenue from sold material	Revenue per acre
(1)	(2)	(3)	(4)	(5)	(6)
<i>Eastern Circle</i>		Rs.	Rs. a. p.	Rs.	Rs. a. p.
Cleanings and thinnings ..	9,702	4,928	0 8 1	22,131	2 4 5
Cutting back operations ..	15,876	2,945	0 2 11	4,140	0 4 2
Total ..	25,578	7,873	..	26,271	..
<i>Central Circle</i>					
Thinnings ..	19,123	14,706	0 12 3	99,537	5 3 3
Cutting back operations ..	21,997	6,390	0 4 8	15,908	0 11 7
Advance bamboo fellings ..	511	551	1 1 0	46	0 1 0
Total ..	41,631	21,647	..	1,15,491	..
<i>Western Circle</i>					
Thinnings ..	32,976	*54,727	1 10 7	1,66,202	5 0 7
Cutting back operations ..	29,304	5,350	0 2 11	6,069	0 3 4
Total ..	62,280	60,077	..	1,72,271	..
Grand Total ..	1,29,489	89,597	..	3,14,033	..

*Includes cost on remunerative thinnings charged to AIs.

53. It is of interest to compare here the figures of gross revenue with the expenditure incurred on silvicultural operations carried out with the object of increasing the ultimate productivity of the forests, namely, regeneration, natural and artificial, (A. IV-*b*) and other works (A. IV-*e*) which include climber cutting, eradication of bamboos and lantana, weedings and unremunerative thinnings. Gross revenue amounted to Rs. 48,68,288 and the sum spent on silvicultural operations was only Rs. 82,021. In other words, for every hundred rupees of gross revenue realised from the forests in their present stage of conservancy, less than Rs. 1-11-0 is being spent on silvicultural work for improving the growing stock. It is thus obvious that a reasonable share of the profits is not being put back or re-invested in the forests in the interests of their future revenue yield, a state of affairs which is in urgent need of remedy. An expenditure of from 4 to 5 rupees on this important work, and in the case of some of the more understocked forests of even a higher figure, would be well repaid in future revenue returns.

IV.—EXPERIMENTAL WORK

54. Silvicultural experimental work is fully dealt with in the report of the Silviculturist. The following points deserve mention as being of general interest.

55. The most important feature of the year's work was the beginning made to collect price increment data for the Central Provinces teak forests, with a view to determine the most profitable exploitable sizes and rotations.

56. Another important investigation is that concerning the best and cheapest methods of improving forest grazing grounds and grass reserves mentioned in last year's report. The preliminary investigation to assess the quality trend in various areas was completed and the results were sent to the Forest Research Institute, Dehra Dun, for statistical analysis. It was found that although initially comparable sets of plots could be

roughly indicated on this preliminary survey, the final assessment of results of differential treatment could only be made on the same criterion by which the sets were differentiated, *viz.*, an ocular estimate of the ground covered by three types of vegetation—

- (i) important fodder grasses,
- (ii) other fodder grasses, and
- (iii) non-fodder grasses.

This was not considered satisfactory as among other things the value of a pasture also depends on the height of herbage and the yield of fodder. The quality trend has therefore to be reassessed in greater detail. Work carried out during the previous year has shown that the investigation is far more intricate and demands more skill and labour than was at first anticipated. It is, however, absolutely essential to continue it on correct lines if reliable conclusions regarding the efficacy or otherwise of the various treatments under study are to be obtained and ultimately the benefits derived from results will more than repay any additional effort and cost incurred at this stage.

57. In order to create and stimulate a demand for the vast and untapped reserves of grass available in the more remote forests of the province where at present its rank growth hampers regeneration and increases danger from fire, Government directed that an experiment be conducted with a view to encouraging the ensilage of such grass. A small scale experiment was therefore initiated in the heavy grass areas alongside the Raipur Forest Tramway in the Raipur division. Nearly 12,000 pulas of spear grass were cut departmentally, placed in a silo pit and later offered to local agriculturists at a nominal price. The experiment itself, *i.e.*, the actual ensilage of the grass, was a success but the people were entirely apathetic with regard to its use for stall-feeding purposes with the result that most of it was used for thatching. It is clear that to make such operations a success, extensive propaganda will be necessary and the experiment is to be repeated.

CHAPTER IV.—EXPLOITATION

I.—SYSTEMS OF MANAGEMENT

58. Major forest produce.—The extent to which forests were worked under the various systems of management is shown below :—

	Area worked in acres
<i>(1) High Forest systems</i>	
(i) Clear-fellings ..	799
(ii) Regeneration fellings ..	27,061
(iii) Selection fellings ..	3,176
(iv) Improvement fellings ..	44,982
(v) Thinnings ..	50,401
(vi) High Forest with reserves ..	462
<i>(2) Coppice with standards</i>	
(i) Main fellings ..	27,354
(ii) Thinnings ..	8,690
<i>(3) Coppice with reserves</i>	
(i) Main fellings ..	11,052
(ii) Thinnings ..	742
<i>(4) Simple coppice system</i>	
(i) Main fellings ..	26,682
(ii) Thinnings ..	4,279
Total 1938-39 ..	205,680
Total 1937-38 ..	206,586
Difference ..	-906

The total area worked during the year decreased slightly by 906 acres due mainly to variations in the areas of coupes or compartments prescribed for fellings. Owing to bad crops, combined cultivation leases in the West-Berar division failed to attract buyers which accounts for the decrease in area under "clear-fellings". The fall in area under "Improvement fellings" in the Yeotmal and West-Berar divisions due chiefly to the introduction of

new plans was more than counter-balanced by an increase under "coppice with reserves" in the Raipur and Satigor divisions due to the change in the system of working.

59. **Unregulated fellings.**—The revenue from these operations decreased by Rs. 40,148 to Rs. 74,408 [Rs. 114,556] due to restrictions made in such fellings in the B class areas of North and South Chanda owing to the dull state of the timber market and to the fact that royalty was recovered in advance from the Central Provinces Manganese Ore Company last year. Most of these unregulated fellings are made in forest village areas and are partly regulated by felling schemes. In the Mandla division mature and overmature sal trees were removed from such areas and the material converted into sleepers.

60. **Minor forest produce.**—The following statement compares the value of minor produce (excluding grazing) removed from forest during the current and preceding years :—

Kind of produce	1937-38	1938-39	Difference
	Rs.	Rs.	Rs.
Bamboos	.. 331,516	248,386	—83,130
Lac	.. 34,521	10,398	—24,123
Harra	.. 30,203	17,177	—13,026
Grass	.. 174,387	163,962	—10,425
Kulloo gum	.. 9,733	9,363	—370
Minerals	.. 21,035	24,893	+3,858
Tendu leaves	.. 66,050	50,626	—15,424
Other minor produce	.. 1,02,791	84,237	—18,554
Total	.. 7,70,236	6,09,042	—1,61,194

Bamboos.—There was a general decline in the export of bamboos from all Circles this being particularly marked in the case of the demand from Berar on the forests of North-Chanda. The main reason for this is the poor economic condition of the people, but the heavy export of bamboos, which took place during 1937-38, may have also glutted the markets and so affected the demand.

Lac.—A further decline in the price of T. N. lac accounts for the fall under this head and the continued low sale price of lac has made it necessary to close departmental operations as the sale price is now hardly sufficient to cover the cost of collection.

Harra.—The decrease is mainly due to the fact that only one instalment of the current Balaghat contract was recovered during the year against two instalments of this lease and one instalment of the old one which were recovered last year. The general slump in the Calcutta harra market was also reflected in the decrease.

Grass.—The decrease is due to lower prices obtained from grass leases on account of the liberal policy adopted by Government of throwing open of certain forests for free removal of grass during the year, and also to some extent to the prevailing economic distress. A plentiful supply of grass in the haveli tracts and the abandonment by the Military Department of certain grass birs were factors which also contributed to the fall.

Kulloo gum.—The decrease is due to a slump in the market price of the gum.

Minerals.—The increase is due to larger quantities removed by the Public Works Department, local bodies and the public.

Tendu leaves.—Bhandara North-Chanda and Nagpur-Wardha are mainly responsible for the fall which is partly due to the existence of heavy stocks of tendu leaves and partly to the manufacturers of *bidis* combining to form rings.

Other minor produce.—The decrease is due to lack of demand and to the discontinuance, under the orders of Government and as a matter of policy in the interest of the poorer people, of the leasing out of the right to collect mohwa and achar, which with other edible products are now given free for the benefit of the aboriginal population of certain divisions.

61. *Grazing.*—In view of the interest taken by the public and the criticism continually voiced in the Legislative Assembly in connection with a subject which is of such vital importance to the agricultural community of these Provinces, and with a view to dispelling some of the misunderstanding which exists at present with regard to the difficulties which Government in its direction of policy, and the Forest Department in the execution of that policy, have to contend with an outline of the present position may not be out of place. Firstly as regards basic facts: the total area of reserved forests amounts to nearly 19,500 square miles or about one-fifth of the total area of the Central Provinces and Berar (98,600 square

Under the present rules it has been calculated that the average individual payment made by cattle owners for one year's grazing of an average herd amounts to Rs. 2-4-0 in the Central Provinces and Rs. 3-8-0 in Berar, while the average annual payment for the C class forests of Berar is Rs. 1-11-0 only.

(c) Whenever a working plan is revised a general examination of its prescriptions as regards the supply of forest produce and provision for grazing is carried out by a Special Revenue Officer to see what modifications are necessary in the arrangement proposed by the Working Plans Officer. For this purpose a detailed enquiry is made in as many typical villages as possible and on this a detailed *grazing settlement* is based. The Special Revenue Officer prepares a list of villages requiring grazing, and then apportion the cattle from these to the various grazing units into which he sub-divides the reserved forests. The capacity of each grazing unit is worked out according to the class of forests included in it. Should the number seeking admission exceed the capacity of the forest to meet the grazing demand on it, a selection is made and for this purpose three classes of cattle are distinguished.

Privileged, i.e., cattle absolutely indispensable for *bona fide* agricultural purposes : a liberal limit of 4 animals per working plough is allowed.

Ordinary, i.e., cattle which are reasonably necessary for *quasi-commercial* pursuits such as the supply of milk, manure and plough bullocks : four animals per working plough over and above the privileged cattle are allowed.

Commercial, i.e., cattle other than those classed as privileged or ordinary.

The privileged and thereafter the ordinary cattle are given preference in admission to grazing; commercial cattle are admitted only if there is room in the unit. In addition to such listing of villages, the Special Revenue Officer also examines the prescribed rotational grazing closures to ensure that they do not cause inconvenience to cattle-owners.

63. (1) In view of the above-mentioned measures adopted in the past for the regulation of grazing, it has been no easy matter for Government and the Department to face further insistent demands for concessions and even

for free grazing. It is generally realised that any concession which involves free grazing will—apart from the heavy financial sacrifice—spell the ultimate ruin of all the more accessible forest areas and reduce them to the state of the C class forests of Berar. Short of granting free or unlimited grazing, however, a liberal policy by way of removing legitimate sources of complaint and introducing a number of reforms has been followed. The following are the more important measures which have been given effect to during the year :—

As a measure of relief to agriculturists the Provincial Government sanctioned, from the commencement of the year, a general reduction of 25 per cent in the privileged and ordinary grazing rates wherever the existing rates were more than one anna six pies per head of cattle. The commercial grazing rates in the Nīmar and Seoni divisions where past over-enhancement had caused some loss of revenue, were also reduced. As a result of these concessions, the total number of animals which grazed in Government forests during the year increased by 92,540, while the receipts fell by Rs. 79,585 as exhibited in the statement below :—

Year	Buffaloes	Cows and bullocks	Goats	Sheep	Other animals	Total animals
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1937-38	.. 306,602	24,39,556	165,403	94,171	4,665	3,010,397
1938-39	.. 3,14,358	2,514,312	181,504	86,383	6,380	3,102,937
Difference	.. +7,756	+74,756	+16,101	-7,788	+1,715	+92,540

Year	Value at full rates	Revenue actually realized	Value of free grazing	Value of concessions
(1)	(8)	(9)	(10)	(11)
	Rs.	Rs.	Rs.	Rs.
1937-38	.. 24,47,526	11,27,323	1,69,939	11,50,264
1938-39	.. 25,00,249	10,47,738	1,70,455	12,82,056
Difference	.. +52,723	-79,585	+516	+131,792

The financial relief afforded by the above concession has been calculated to amount on an average to 5 annas in the Central Provinces and Re. 1 in Berar per licence-holder but apart from the question of relief it is not easy to contemplate with equanimity the appreciable loss of revenue involved and the deleterious effect on grazing

miles). These forests are primarily managed for the production of timber, fuel and minor produce, but also have to cater for the heavy grazing demand of nearly three million cattle out of a total provincial cattle population of over twelve million, *i.e.*, only one quarter of the total number of cattle in the Province resort to reserved forests for grazing. The remainder either graze in private and malguzari forests (total area 24,500 square miles) or are stall-fed.

Nearly 90 per cent of the total area of reserved forests is always open to grazing, the remaining 10 per cent being closed in rotation in order to obtain regeneration of tree species in felled areas and to give pastures a periodical rest to recover from the ill effects of grazing. The whole of the open area is not actually available for grazing for various reasons, *e.g.*, dense forest growth, superficial soil carrying poor grass, remoteness or general inaccessibility, etc., and it is estimated that cattle have actual access to nearly 10,500 square miles of forest of all classes which gives an average incidence of nearly two acres per animal, though along the easily accessible fringes of certain forests the incidence is as heavy as two animals to an acre.

The fact that grazing revenue now approximates to the annual surplus is a point frequently used in adverse criticism of forest administration. The figures for the year under report are as under—

Gross revenue—Rs. 48,68,288.

Net surplus—Rs. 13,80,123.

Grazing revenue—Rs. 10,90,353.

Such criticism omits consideration of certain other important facts, the chief one being that grazing revenue is by no means a net return, actual calculation showing that about Rs. 2,37,600 is spent annually on its collection. Other points are that the existing relation between net surplus and grazing revenue is fortuitous, that pasture is inextricably mixed up with forest areas and cannot be separated therefrom for management by another agency, that no better or cheaper agency can be found for the collection of grazing revenue and that gross revenue is likely to increase considerably with any improvement in the economic condition of the people. Such criticism also fails to give credit for the value re-invested annually in the forest estate in the form of gradual improvement and conservation at the hands of a trained staff.

62. Secondly, it is necessary to take into consideration the various measures adopted for the regulation of grazing. In this respect it can be safely stated that in no other province has this subject received more careful attention in the joint interest of the agriculturist and of the pasture itself—

(a) All forests have been classified with regard to their suitability for timber or fuel production or for pasture, and a maximum grazing incidence prescribed for each class as under—

Class and description	Area square miles	Maximum permissible grazing incidence acre per animal
<i>A. Tree Forest.</i> —The production of trees is the primary object of management.—		
<i>I. Moist type.</i> —Annual rainfall over 45".	2,325	4
<i>II.—Dry type.</i> —Annual rainfall 45" or less.	8,622	3 (two in teak forest).
<i>B. Scrub Forest.</i> —The preservation and improvement of the pasture is the primary object of management.—		
<i>I. Pasture Forests</i>	4,914	1
<i>II. Open pastures</i>	1,422	No limit.
<i>C. Miscellaneous.</i> —Forest villages, grass reserves, etc.	2,285	No grazing.

(b) Since 1912 in order to favour the agriculturists with few cattle, a scale of differential grazing rates for privileged, ordinary and commercial cattle has been prescribed and these rates are graded for each district in accordance with the severity of the grazing demand. The average grazing fees in the Central Provinces work out at—

Kind of rate	Average fee per	
	Cow or bullock	Buffalo
	Rs. a. p.	Rs. a. p.
Privileged ..	0 1 8	0 3 9
Ordinary ..	0 5 0	0 10 0
Commercial ..	0 12 0	1 6 6

Besides which 79,475 cattle graze free. The rates in Berar are—

Rate	Cow or bullock	Buffalo
<i>In A class forests.</i>		
Privileged ..	6, 9 or 12 annas	Not permitted.
Commercial ..	11, 14 or 17 annas	24, 28 or 32 annas.
<i>In C class forests.</i>		
Privileged ..	3 annas	Not permitted.
Commercial ..	8 annas	12 annas.

NOTE.—The forests are sub-divided into three zones. The rates are slightly higher in Amraoti, Morsi and Chandur taluqs and also when passes are taken out after 31st July.

Besides this 178,496 cattle are grazed free.

Under the present rules it has been calculated that the average individual payment made by cattle owners for one year's grazing of an average herd amounts to Rs. 2-4-0 in the Central Provinces and Rs. 3-8-0 in Berar, while the average annual payment for the C class forests of Berar is Rs. 1-11-0 only.

(c) Whenever a working plan is revised a general examination of its prescriptions as regards the supply of forest produce and provision for grazing is carried out by a Special Revenue Officer to see what modifications are necessary in the arrangement proposed by the Working Plans Officer. For this purpose a detailed enquiry is made in as many typical villages as possible and on this a detailed *grazing settlement* is based. The Special Revenue Officer prepares a list of villages requiring grazing, and then apportions the cattle from these to the various grazing units into which he sub-divides the reserved forests. The capacity of each grazing unit is worked out according to the class of forests included in it. Should the number seeking admission exceed the capacity of the forest to meet the grazing demand on it, a selection is made and for this purpose three classes of cattle are distinguished.

Privileged, i.e., cattle absolutely indispensable for *bona fide* agricultural purposes: a liberal limit of 4 animals per working plough is allowed.

Ordinary, i.e., cattle which are reasonably necessary for *quasi-commercial* pursuits such as the supply of milk, manure and plough bullocks: four animals per working plough over and above the privileged cattle are allowed.

Commercial, i.e., cattle other than those classed as privileged or ordinary.

The privileged and thereafter the ordinary cattle are given preference in admission to grazing; commercial cattle are admitted only if there is room in the unit. In addition to such listing of villages, the Special Revenue Officer also examines the prescribed rotational grazing closures to ensure that they do not cause inconvenience to cattle-owners.

63. (1) In view of the above-mentioned measures adopted in the past for the regulation of grazing, it has been no easy matter for Government and the Department to face further insistent demands for concessions and even

for free grazing. It is generally realised that any concession which involves free grazing will—apart from the heavy financial sacrifice—spell the ultimate ruin of all the more accessible forest areas and reduce them to the state of the C class forests of Berar. Short of granting free or unlimited grazing, however, a liberal policy by way of removing legitimate sources of complaint and introducing a number of reforms has been followed. The following are the more important measures which have been given effect to during the year :—

As a measure of relief to agriculturists the Provincial Government sanctioned, from the commencement of the year, a general reduction of 25 per cent in the privileged and ordinary grazing rates wherever the existing rates were more than one anna six pies per head of cattle. The commercial grazing rates in the Nimar and Seoni divisions where past over-enhancement had caused some loss of revenue, were also reduced. As a result of these concessions, the total number of animals which grazed in Government forests during the year increased by 92,540, while the receipts fell by Rs. 79,585 as exhibited in the statement below :—

Year	Buffaloes	Cows and bullocks	Goats	Sheep	Other animals	Total animals
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1937-38	.. 306,602	24,39,556	165,403	94,171	4,665	3,010,397
1938-39	.. 3,14,358	2,514,312	181,504	86,383	6,380	3,102,937
Difference	.. +7,756	+74,756	+ 16,101	-7,788	+1,715	+92,540

Year	Value at full rates	Revenue actually realized	Value of free grazing	Value of concessions
(1)	(8)	(9)	(10)	(11)
	Rs.	Rs.	Rs.	Rs.
1937-38	.. 24,47,526	11,27,323	1,69,939	11,50,264
1938-39	.. 25,00,249	10,47,738	1,70,455	12,82,056
Difference	.. +52,723	-79,585	+516	+131,792

The financial relief afforded by the above concession has been calculated to amount on an average to 5 annas in the Central Provinces and Re. 1 in Berar per licence-holder but apart from the question of relief it is not easy to contemplate with equanimity the appreciable loss of revenue involved and the deleterious effect on grazing

grounds by the further increase in incidence. As already pointed out, less than a quarter of the total number of cattle in the province are affected by such a concession which must therefore have its reaction on the general tax-payer.

(2) *Modifications in the grazing rules.*—With a view to affording cattle owners greater facilities and a longer period in which to take out grazing licences, the commencement of the grazing year has been changed from 1st July to 1st April. The effect of this is that the period prescribed for the issue of licences at concessional rates now extends over the three months, April, May and June, compared with only one and half months allowed under the old rules.

At the same time the patwaris certificates giving the details of cattle owned and the area cultivated, which in the Central Provinces are issued individually to each cattleowner and to obtain which they must apply to patwaris before they can apply for grazing licences, have been replaced by the issue of village grazing lists similar to those in use in Berar. These lists are issued directly to Range Officers and Grazing Pass Vendors by the revenue authorities and relieve agriculturists of the inconvenience of having to apply personally to patwaris for them.

(3) *Opening of areas to free grass cutting.*—With a view to encouraging stall feeding of cattle, free removal of grass is being permitted as an experimental measure from areas on which there is no commercial demand. Such areas amount in the aggregate to nearly 900 square miles.

(4) In conjunction with the Agricultural Department sheep farming is being encouraged by earmarking extensive areas of reserved forest for 'gwari' grazing of sheep. So far, possible areas amounting to 777 square miles have been proposed for this purpose, and the Agricultural Department is examining the quality of herbage in the most suitable localities and local breeders are being informed.

(5) *Rotational grazing.*—With a view to improving existing conditions and to make better grazing available in the hopelessly overgrazed C class forests of Berar, Government, in passing orders on the grazing settlement of the recently sanctioned working plan for the Yeotmal

division, decided that for the first time in their history efforts should be directed towards improving these grazing areas and experimenting or the introduction of some form of rotational grazing in certain small areas. Under this system parts of the pasture will be closed to grazing from July to December for three years in succession to allow the grass time to recover from the ill effects of permanent heavy grazing. Success is entirely dependent on the co-operation of the people affected who already realize that such closures are in their own interest.

64. In addition to the revenue of Rs. 10,47,738 obtained from grazing, Rs. 34,904 were realized as dues on 315,827 animals covered by transit passes against Rs. 41,007 last year. A sum of Rs. 7,711 was also realized on account of deferred grazing dues, short recovery of grazing fees and compensation awarded by courts.

65. The value of grazing concessions allowed to agriculturists amounted to Rs. 12,82,056 [Rs. 11,50,264].

66. Deferred collection of grazing dues.—Owing to the failure of crops in Berar, the collection of grazing dues in the Yeotmal, and Akola district of the West Berar division was deferred and passes worth Rs. 1,72,836 were issued. Of this, Rs. 1,60,959 were recovered leaving an outstanding of Rs. 11,877.

II.—AGENCY OF EXPLOITATION

(i) Departmental agency.

67. Major produce.—The outturn of timber and fuel compares as follows with that of the previous year :—

Year	Cubic feet in thousands		
	Timber	Fuel	Total
1938-39	5,516	7,076	12,592
1937-38	5,508	8,167	13,675
Difference	+8	-1,091	-1,083

Timber.—The decrease of 343,000 cubic feet of timber in the Western Circle, due mainly to the smaller area worked departmentally and a lower outturn from coupes, was more than counterbalanced by an increase of 2,000 cubic feet in the Eastern Circle, and 349,000 cubic

feet in the Central Circle where larger areas came under departmental working during the year. In addition a certain amount of *semal* timber was also supplied departmentally in Bhandara.

Fuel.—The decrease of 250,000 cubic feet in the Eastern Circle and 1,115,000 cubic feet in the Western Circle is due to the lower outturn obtained from cutting back and other cultural operations and lack of funds available for such work. The increase of 274,000 cubic feet in the Central Circle is due to the larger area worked over.

68. Allapilli.—During the year, 254,670 [258,182] cubic feet of timber in the round and sawn were transported to Ballarshah in lorries from the Allapilli depôt. In addition, 49,893 cubic feet [4,756 cubic feet] of logs and poles of teak and other species and sawn timber were transported by bullock carts from the forests of Pedigundam, Dhaba and Markhanda Ranges. In order to provide increased employment for local cartmen the transport of timber from the commercially worked Allapilli and Pedigundam Ranges to Ballarshah, which during the last nine years had been carried by motor lorries, has been partly replaced by bullock carts for the outturn of the Pedigundam Range.

Mr. A. Green, Proprietor of the Allapilli Timber Transport Co., and the pioneer of successful mechanical transport in this division, sold his lorries and equipment to the Ballarshah Motor Transporting Syndicate and the transport contracts of the year were given partly to the latter and partly to Mr. Tilley Ramchandra Kanoje at reduced rates.

The average sale-price of teak logs and other logs and poles fell by Re. 0-3-7 and Re. 0-1-0 per cubic foot to Re. 1-3-3 and Re. 0-9-4 per cubic foot, respectively, while that of sawn timber increased by Re. 0-5-2 per cubic foot to Rs. 2-0-2. The total receipts from sales at Ballarshah, Allapilli and Pedigundam amounted to Rs. 3,90,094 [Rs. 3,98,411]. The slight fall of Rs. 8,317 is due to the fall in the average sale-price of round logs. The audited commercial accounts for 1938-39 show a profit of Rs. 1,49,107 [Rs. 1,33,761]. The Saw Mill at Allapilli worked for 307 [304] days with a considerably increased outturn of 103,082 [88,987] cubic feet of timber and milling costs fell from Re. 0-3-7 per cubic foot to Re. 0-3-1 per cubic foot of outturn. Receipts from

sales of sawn timber at Ballarshah and Allapilli amount-
ed*to Rs. 1,52,378 [Rs. 1,36,496] on which direct ex-
penditure incurred amounted to Rs. 41,785 [Rs. 43,426].

69. *Sleeper operations.*—The number of sal sleep-
ers supplied to the Eastern Railway Group from the
Mandla, Balaghat, Raipur and Bilaspur divisions was
28,315 [26,551] broad gauge, 31,644 [27,842] metre
gauge, 42,806 [27,214] narrow gauge and 11,847
[3,930] specials. The financial results of the operations
are given below :—

	Rs.
Revenue ..	2,83,202
<i>Add</i> value of stock in hand on the 31st March 1939.	1,31,654
Total ..	<u>4,14,856</u>
<i>Deduct</i> value of stock in hand on the 31st March 1938.	<u>1,08,685</u>
Net revenue ..	<u>3,06,171</u>
<i>Deduct</i> expenditure ..	<u>1,32,241</u>
Net profit ..	<u>1,73,930</u>

In addition to the above, 17,997 rejected sleepers
were sold for Rs. 21,452.

70. *Sal scantlings.*—In all 83,871 [85,663] cubic
feet of scantlings were prepared in the Mandla, Balaghat,
Raipur and Bilaspur divisions, of which 64,901 cubic
feet were sold for Rs. 69,549.

71. Revenue realized and remitted through the
Sales Agent at Raipur amounted to Rs. 82,214
[Rs. 77,289]. The working of the agency has in other
respects not been satisfactory and steps are being taken
to run it departmentally.

72. The volume of teak timber dealt with at
departmental sale depôts in the Hoshangabad, Melghat
and Nimar divisions fell slightly by 1,740 to 627,404
[629,144] cubic feet, but the gross revenue increased by
Rs. 49,351 to Rs. 5,54,331 as a result of better prices
obtained in the Hoshangabad division. This suggests
that the northern India market is at present booming
which is borne out by the following abstract from the

progress report of the Western Circle showing the steady increase of revenue from departmental sales in the Hoshangabad division since the commencement of these operations.

“*Hoshangabad Division*.—June sales complete the 1938-39 auction season. The financial year 1938-39 has been the most successful year for each depôt since their inception. The revenue figures of each depôt since the year when they were started are as follows :—

Year	Revenue of	
	Taku Depôt	Timarni Depôt
	Rs.	Rs.
1928-29	37,545	95,009
1929-30	62,547	65,623
1930-31	67,288	58,006
1931-32	52,194	83,300
1932-33	52,613	66,661
1933-34	59,204	78,979
1934-35	50,806	88,441
1935-36	66,094	1,01,146
1936-37	87,663	1,32,855
1937-38	1,28,707	1,30,187
1938-39	1,51,347	1,42,773”

73. *Minor produce*.—The value of minor produce extracted fell from Rs. 94,106 to Rs. 43,063 due mainly to the closing down of departmental collection of lac in the Saugor division.

(ii) Purchasers.

74. *Major produce*.—The outturn of the year compares as follows with that of the previous year :—

Year	Cubic feet in thousands		
	Timber	Fuel	Total
1938-39	5,617	22,484	28,101
1937-38	5,492	25,212	30,704
Difference	+125	-2,728	-2,603

Timber.—The Eastern and Central Circles show increases of 168,000 and 17,000 cubic feet, respectively, due to the sale of more coupes than last year, while the Western Circle shows a decrease of 60,000 cubic feet due probably to incorrect estimates of outturn.

Fuel.—All Circles are responsible for a decrease in the outturn of fuel, the largest being in the Eastern Circle (2,165,000) due to the lower outturn of the coupes of the year and more conservative fellings. The concession of free extraction of fuel by head-loads over an area of 3,463 square miles in certain parts of the province sanctioned by the Provincial Governments also accounts to some extent for the decrease. In the North Chanda division sales of large areas for purposes of disforestation, which were carried out during the previous year, have flooded the local markets with fuel and it will be some time before stability is again attained.

75. *Minor produce.*—The value of minor produce extracted during the year fell from Rs. 18,07,661 to Rs. 16,08,613 due to the following causes:—

- (i) 25 per cent reduction in the privileged and ordinary grazing rates throughout the Province;
- (ii) free extraction of grass, mohwa, achar and other edible products in certain backward tracts of the province as a measure of relief to the poorer classes;
- (iii) the smaller quantity of bamboos extracted during the year; and
- (iv) diminished demand for tendu leaves due to the existence of heavy stocks and the tendency of contractors to form rings at auctions.

76. *Rights, privileges and free grants.*—The quantity and value of forest produce removed free by right-holders concessionaires and free grantees is shown below:—

Produce	1937-38		1938-39	
	Cubic feet in thousands	Value	Cubic feet in thousands	Value
		Rs.		Rs.
<i>Right-holders in class forests in Berar.</i>				
Major produce—				
Timber
Fuel	..	118	..	118
		3,602		3,602
Minor produce—				
Grazing
Miscellaneous
		375		375
		2,400		2,400
Total	..	118	118	6,377

Produce	1937-38		1938-39	
	Cubic feet in thousands	Value Rs.	Cubic feet in thousands	Value Rs.
<i>Concessions.</i>				
Major produce—				
Timber	.. 3	1,734	4	2,096
Fuel	.. 1,583	10,137	1,218	8,126
Minor produce—				
Bamboos	.. ..	..	..	..
Grass	.. ..	..	..	..
Grazing	.. ..	11,50,264	..	12,82,056
Miscellaneous	.. ..	..	..	..
Total	.. 1,586	11,62,135	1,222	12,92,278
<i>Free grants.</i>				
Major produce—				
Timber	.. 366	26,927	382	37,971
Fuel	.. 941	18,085	1,060	19,161
Minor produce—				
Bamboos	.. ..	12,289	..	11,172
Grass	.. ..	11,340	..	13,704
Grazing	.. ..	1,69,564	..	1,70,080
Miscellaneous	.. ..	14,284	..	20,443
Total	.. 1,307	2,52,489	1,442	2,72,531

77. Free grazing.—This is only allowed to Forest Villagers at the rate of eight bulls, bullocks or cows per holding, and four bulls, bullocks or cows to a labourer without a holding. In Berar a free allowance of one bullock for every eight acres of cultivation is given to each cultivator. The value of the concessions and free grazing during the year amounted to Rs. 14,52,136 [Rs. 13,19,828].

78. The Chanda Match Works were again granted a concession of 250 semal trees on payment of half royalty rate, *viz.*, Rs. 3-13-0 per tree.

79. In addition to the usual free grants made to Forest Villagers and subordinates for *bona fide* domestic requirements and to the public in cases of destruction of houses by fire, an exceptional free grant of timber, fuel and bamboos to the value of Rs. 11,784 was made for the construction of 66 Vidya Mandirs (self-supporting village schools) throughout the Province. Owing to the failure of crops in certain villages of the Bachai Range in the

Seoni division, the Government forests of that range were thrown open for free grazing and removal of grass by head and cart-loads. The value of the concessions so allowed amounted to Rs. 373 only.

As a measure of relief to agriculturists and other persons, the following concessions were also sanctioned by Government during the year in certain parts of the Province :—

- (i) free extraction of fuel by head-loads ;
- (ii) free extraction of grass from localities where the demand is small; and
- (iii) free removal of mohwa, achar, tendu, aonla, edible roots and tubers in the backward tracts of the Province.

Agriculturists did not, however, avail themselves of the concessions to any appreciable extent, and the value of such grants amounted to only Rs. 4,642.

80. **Outturn and sources of forest produce.**—The total quantity and value of major and minor produce extracted by all agencies is shown below :—

Produce		Cubic feet in thousands	Value Rs.
Major produce—			
Timber	..	11,515	23,59,029
Fuel	..	30,738	5,99,070
Total	...	42,253	29,58,099
Minor produce—			
Bamboos	..	..	2,48,386
Grass	..	..	1,63,962
Grazing	..	..	25,42,864
Other minor produce	..	..	1,96,694
Total	..	..	31,51,906
Grand Total 1938-39	..	..	61,10,005
Grand Total 1937-38	..	..	60,61,837

CHAPTER V.—FINANCIAL RESULTS

81. Revenue.—The year under report was marked by a decrease in gross revenue and an increase in net surplus. Total receipts fell from Rs. 50,50,094 to Rs. 48, 68, 288 or by Rs. 1,81,806, the decrease being shared by all Circles—Eastern (Rs. 65,858), Central (Rs. 92,721) and Western (Rs. 33,684).

This fall in revenue is mainly due to certain changes in policy such as the 25 per cent reduction in the privileged and ordinary grazing rates throughout the Province and the abandonment of departmental operations for lac and kulloo gum, and also to other factors such as the slump in trade for bamboos and other minor produce, and the low prices obtained for teak logs throughout the year on account of the dull condition of the Ballarshah timber market. The serious defalcations of revenue, which have been discovered as having occurred in the South Chanda Divisional Office during the last few years, are also to some extent responsible for the decrease in revenue of that division. Lack of spending power in the cotton tract also had a very depressing effect and the Berar plains divisions have steadily lost revenue during the last 10 years; this loss has fortunately, however, been recouped by the increased profits derived from departmental timber operations which have been introduced in some of the larger timber divisions.

The sources of revenue were—

	1937-38	1938-39
	Rs.	Rs.
Departmental agency	.. 18,26,498	17,88,335
Purchasers	.. 28,55,892	27,06,693
Miscellaneous	.. 2,19,598	2,09,498
Leased forests	.. 2,669	6,703
Raipur Forest Tramway	.. 1,45,437	1,57,059
Total	.. <u>50,50,094</u>	<u>48,68,288</u>

While classification by produce shows—

	1937-38	1938-39
	Rs.	Rs.
Timber	22,68,948	22,85,658
Fuel	4,97,993	5,48,712
Bamboos	3,05,754	2,26,772
Grazing and fodder grass	12,81,688	11,95,100
Other produce	2,87,703	2,08,005
Miscellaneous	2,59,902	2,40,279
Leased forests	2,669	6,703
Raipur Forest Tramway	1,45,437	1,57,059
Total	50,50,094	48,68,288

82. Expenditure.—The figures compare with those of last year as follows:—

	1937-38			1938-39		
	A.—Conser- vancy	B.—Estab- lishment	Total	A.—Conser- vancy	B.—Estab- lishment	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Eastern Circle	4,28,406	6,50,102	10,78,508	3,90,438	6,15,433	10,05,871
Central Circle	3,48,140	4,90,081	8,38,221	3,46,397	4,84,317	8,30,714
Western Circle	5,56,611	6,81,767	12,38,378	5,33,050	6,09,978	11,43,028
Raipur Forest Tramway	1,29,271	..	1,29,271	1,30,299	..	1,30,299
General Direction Division	499	2,35,705	2,36,204	575	2,23,620	2,24,195
Loss by exchange .. .. .	..	—578	—578	..	483	483
Interest on capital	75,768	..	75,768	72,091	..	72,091
Charges in England .. .. .	..	1,11,521	1,11,521	..	81,484	81,484
Total	15,38,695	21,68,598	37,07,293	14,72,850	20,15,315	34,88,165

Under A (Works), expenditure fell by Rs. 37,968 in the Eastern Circle due mainly to there being no expenditure on departmental lac and kulloo gum operations and also to curtailment of expenditure on roads and buildings. In the Central and Western Circles also expenditure decreased by Rs. 1,743 and 23,561 respectively due to curtailment of expenditure on the construction of roads and buildings.

Under B (Establishment), expenditure fell by Rs. 1,12,221 due mainly to the amalgamation of the Saugor and Damoh divisions and abolition of certain ranges which resulted in reduction of staff and less expenditure on travelling allowance, touring charges, conveyance and dear district allowances, etc., in accordance

with recommendations made by the Economy Committee. The retirement of certain Officers during the year also had its effect.

83. Surplus.—Although gross revenue showed an appreciable fall, the cash surplus rose by Rs. 37,322 to Rs. 13,80,123 which, except for the year 1935-36 (Rs. 13,99,954), is the highest figure registered during the last ten years. It should be noted, however, that it has only been possible to attain such results by effecting every possible economy in expenditure, cutting staff allowances, increasing the charge and responsibilities of the executive and by starving the department of funds for development of roads and much needed housing accommodation for its subordinate staff. There are indications that efforts to increase net surplus by means of reducing expenditure have now reached the safety limit and until there is an improvement in economic conditions and in the general spending power of the public the only way of effecting further improvement in the financial condition of the department would appear to lie in the direction of a further expansion in departmental exploitation of its resources by a judicious outlay of increased expenditure.

84. The value of stock remaining unsold at the close of the year was Rs. 7,00,787 (Rs. 6,87,172 wrongly shown as Rs. 6,87,194 last year).

85. The value of live and dead stock allowing for depreciation fell by Rs. 44,714 to Rs. 10,80,284.

CHAPTER VI.—RESEARCH AND EXPERIMENTS

86. A report on these subjects by the Silviculturist is published separately.

87. Experiments for the improvement of pasture have been dealt with in Chapter III.

CHAPTER VII.—ADMINISTRATION

88. The writer of the report continued to hold the post of Chief Conservator of Forests throughout the year.

89. Messrs. C. M. Harlow, H. C. B. Jollye and H. S. George held charge of Western, Eastern and Central Circles, respectively, and Mr. K. P. Sagreiya, Deputy Conservator of Forests, the post of Silviculturist throughout the year. The post of Forest Utilization Officer was

held by Khan Sahib Mohammad Abdus Salam, Extra-Assistant Conservator of Forests, up to 15th September 1938 when he was relieved by Khan Bahadur S. R. Daver, on the latter's return from foreign service.

In eight divisions there was no change of Divisional Forest Officers while in one a temporary and in ten a permanent change took place.

90. **Indian Forest Service.**—Mr. E. L. P. Foster continued to be on deputation in the Andamans as Chief Forest Officer. Messrs. H. C. Watts and C. D. A. Caldecott proceeded on leave preparatory to retirement from 29th March 1938 and 18th December 1938, respectively.

91. **Provincial Forest Service.**—On return from foreign service, Mr. G. V. Trivedi and Khan Bahadur S. R. Daver were posted to the charge of the Balaghat division and as Forest Utilization Officer, Central Provinces, respectively. Rai Sahib D. R. Datt was awarded the title of Rai Bahadur during the year. Sardar Sahib Kesar Singh and Messrs. Labh Singh and C. W. O'Brien retired during the year.

92. **Service of Officers.**—Acknowledgment is due to all Divisional Officers and their Assistants for the way in which they have stood up to the strain of running their relatively enormous charges under condition of increasing difficulty. Considerable additional work was thrown on the department in connection with the supplies of timber which had to be arranged for at short notice for the building of 66 village schools under the Vidya Mandir scheme and this with the responsible work of expanding departmental timber operations was carried out effectively in spite of further reductions in the number of the gazetted staff. After the amalgamation of the Amraoti and Melghat divisions the number of divisional charges will be reduced to 18 with an average area of 1,078 square miles and under such conditions divisional officers are finding it difficult to cope with increasing office work which has to be performed at the expense of their practical out-door work and supervision. The steady loss of officers by retirement during the last few years with no compensatory recruitment is also creating a serious position as regards trained officers. During the economy drive of 1930—32 the combined cadre of the Indian Forest Service and Provincial Forest Service was reduced from 68 to 55 posts

and the call for retrenchment during recent years to provide funds for other nation building departments has necessitated the abolition of certain divisional and range charges and a further reduction in the cadre. At the same time the regular recruitment of candidates to the service which has been suspended since 1929 is creating a very unsatisfactory situation as regards the balanced distribution of officers by age, the youngest officer being now in his thirty-second year.

93. Subordinate Forest Service.—The work of the subordinate staff has been generally satisfactory. There is, however, still much room for improvement in the lower ranks and steps have been taken to improve matters by providing a course of local training for all junior forest guards and by the issue of printed duty lists. The experiment of substituting one trained and better paid forester for three inadequately paid and untrained forest guards referred to in last year's report had to be abandoned as it was found that the scattered nature of the forests and the length of boundaries to be patrolled rendered it impossible for one man to perform the work of three.

A long overdue and much appreciated improvement in conditions of service was provided by the sanction accorded by Government at the close of the year to the raising of the scale of pay of Forest Guards from Rs. 12—1/5—16 to Rs. 13—1/5—16 and the annual supply of a pair of shoes per man at a cost of Rs. 2.

94. Training.—The six candidates who were deputed for the Dehra Dun Ranger's course 1937—39 passed out by the higher standard and were appointed as Rangers on Rs. 70 per month with effect from 1st April 1939. Of these, four obtained the Honour's certificate.

Two candidates were selected for training for the Dehra Dun Ranger's course 1939—41 and underwent practical training during the year. They were deputed to the College at the close of the year.

Of the 50 students, who underwent the 1937-38 course of the Forest School, Balaghat, three passed by the Higher Standard with credit, 19 by the Higher Standard and the remaining 28 by the Lower Standard.

The course of 1938-39 also started with 50 students, of whom 10 came from Indian States and three were private students.

95. Punishments and casualties.—The table below shows details of casualties and punishment:—

Subordinates	Services dispensed with	Dismissed	Retired	Resigned]	Died	Total casualties	Fines and degradations
<i>Rangers.</i>							
1936-37	.. ..	..	5	..	1	6	1
1937-38	.. ..	1	1	..	1	3	2
1938-39	.. ..	..	3	..	..	3	..
<i>Deputy Rangers</i>							
1936-37	.. ..	..	7	..	4	11	1
1937-38	.. ..	1	7	..	3	11	7
1938-39	.. 1	3	2	..	3	9	2
<i>Foresters.</i>							
1936-37	.. 2	9	6	4	3	24	23
1937-38	.. ..	2	7	2	3	14	28
1938-39	.. 1	4	5	1	4	15	35
<i>Forest Guards.</i>							
1936-37	.. 100	33	40	56	39	268	341
1937-38	.. 106	34	51	52	42	285	267
1938-39	.. 76	20	53	48	54	251	206
<i>Clerks.</i>							
1936-37	.. 1	..	4	2	4	11	11
1937-38	.. 2	..	11	..	..	13	7
1938-39	.. 1	..	23	1	1	26	4

Adverting to the remarks made in last year's report there was a slight improvement in the number of punishments inflicted on the forest guard grade and it is still an unfortunate fact that assaults on the forest staff in the execution of their duties continue to be common, one particularly serious case in the Saugor division resulting in the death by shooting of a guard who attempted to apprehend a poacher in Government forest.

96. Health.—The general health of the outdoor staff during the year was not satisfactory. Attacks of malaria and influenza were common in almost all divisions, particularly in the Balaghat, Jubbulpore, Raipur and Mandla divisions and a large number of subordinates have had either to resort to hospitals or go on leave. The high percentage of death indicates the necessity for better housing accommodation and more travelling dispensaries. Free distribution of quinine and cinchona tablets purchased for the use of subordinates was made to a number of forest villagers. Funds were also sanctioned during the year to the Independent Local Board, Melghat, for the construction of a cheap plan dispensary and Assistant Medical Officer's quarters at Raipur forest village. This dispensary will be of enormous benefit both to the range staff and the villagers of this notoriously malarious locality.

97. **Inspection of Divisional Offices.**—All divisional offices except Bilaspur and the Melghat were inspected by Conservators during the year.

98. **Criminal misappropriation of forest revenue.**—In the course of the year large misappropriations of forest revenue in the South Chanda divisional forest office were detected. There were altogether 10 items, of which two involving Rs. 7,000 concern the Ahiri-leased range and 8 involving Rs. 18,955 concern other ranges of the division. A particularly disturbing feature is the fact that the earliest misappropriations remained undetected over a period of three years. The Revenue Accountant, Babu Safdar Hussain, was criminally prosecuted in three cases and was sentenced to rigorous imprisonment for 4, 3 and 3 years, respectively, to run concurrently and to pay in addition a fine of Rs. 500, Rs. 100 and Rs. 100, or in default to an additional imprisonment of three months in each case. Three other clerks are also under suspension. It is obvious that there has been great laxity in this division though the exceptionally heavy office work connected with extensive departmental operations and the management of a Saw Mill may mitigate to some extent the blame attaching to controlling officers. This case necessitated the deputation of a special audit party from the Accountant-General's office to check the accounts, investigate the misappropriation and make final recommendations.

99. **Other criminal prosecutions.**—One gazetted officer, two rangers, one forester and one forest guard are undergoing prosecution on various counts for offences committed in the South Chanda division.

100. **Touring.**—Touring by gazetted officers was generally satisfactory.

101. The relations with other departments continued to be cordial.

CHAPTER VIII.—GENERAL

102. **Forest villages.**—Six new forest villages were established during the year while eight became deserted. At the close of the year there were 1,113 [1,115] villages with a population of 121,139 [118,995]. The condition of forest villages is generally satisfactory except for water shortage in Jubbulpore, high land rent in Saugor and lack of medical aid in general.

103. Forest village schools—Twenty-one new schools were opened during the year. All the schools are reported to be progressing well. In some divisions of the Eastern Circle arrangements have been made for periodical medical examination of the students by the local staff of the Medical Department and also for their inspection by Deputy Inspectors of Schools.

The school at Pipalgota forest village managed by the District Council, Hoshangabad, was abandoned as a measure of retrenchment. The Forest Department hopes to re-establish this school in the near future.

The District Council of Betul has introduced a scheme of compulsory primary education throughout the district and on behalf of the council, the Divisional Forest Officer constructed nine school buildings in forest villages and three in adjoining other villages. The material for the schools was given as a free grant of forest produce and the labour was generally provided free by the villagers. The schools under this scheme serve about half the forest villages of this division.

The handicraft school, which was opened at Allapilli with the object of imparting some vocational training to the aborigines, had to be closed down for want of funds to meet recurring expenses.

104. Rural uplift.—In the Eastern Circle further attempts to improve the sanitary condition of forest villages were made and progress so far has been satisfactory. Free distribution of quinine to forest villagers and sawyers was continued as before. Medicines were purchased and given over to Civil Surgeon, Bilaspur, for treatment of the disease known as “Yaws” which is reported to have broken out in the forest villages of the Bilaspur division in an alarming form.

In the Central Circle this disease is very common amongst Marias and Gonds in South Chanda. No contribution was, however, received from the Medical Department for its treatment. At the Allapilli dispensary alone 13,304 patients were treated.

A weekly bazaar has been started at Nagaotar forest village in the West Kalibhit range of Nimar and is proving a success. A successful sports meeting was arranged by Mr. C. E. Hewetson, for the forest villagers of the Amla

range at Christmas. A large crowd attended and took part in the sports, after which a dinner was given to about 500 persons.

105. Taccavi.—Advances to the extent of Rs. 95,372 were made to forest villagers, recoveries amounted to Rs. 85,762 and Rs. 63,807 [Rs. 54,197] remained outstanding. Failure of crops in some divisions mainly accounts for the large outstandings.

106. Malguzari forests.—Twenty-six malguzari forests—three in the Eastern Circle and twenty-three in the Central Circle—were brought under special protection while two in the Eastern, six in the Central and two in the Western Circles were released.

107. Elephants.—There were 19 elephants at the close of the year, the general condition of all of which remained satisfactory. Seven elephants were employed on dragging work in the Allapilli forests, and two each in the Melghat and Hoshangabad divisions were employed on lantana eradication, timber dragging and road consolidation work. Of the three surplus elephants, which were advertised for sale, one was sold for Rs. 600 after the close of the year and negotiations for the sale of another are in progress.

108. Forest Rest-houses.—Fees charged for the occupation of forest rest-houses brought in Rs. 1,956 [Rs. 2,270].

109. Arboriculture.—No special work under this head was carried out during the year, but the various plants planted last year in the rest-house, range officers' and range assistants' quarters compounds in commemoration of His Majesty's Coronation, are reported to be doing well.

110. Patch cultivation.—In Seoni, the total area under patch cultivation at the close of the year remained the same as last year, *i.e.*, 43.19 acres.

In Chhindwara 30 [45] persons held land under patch cultivation. Six cultivators died during the year.

111. Tassar silk cultivation.—In North Chanda tassar silk cultivation was carried out in the Sindewahi and Wairagarh ranges over an area of 35 [31.5] and 123.5 [74.5] acres, respectively. The rent recovered was Rs. 39 [Rs. 26-8-0] at Re. 0-4-0 per acre. In South Chanda

similar cultivation was carried out in B class forest areas of Sironcha and Ghot ranges. An area of 9 [13] acres was leased during the year and the revenue realised therefrom amounted to Rs. 9-8-0 [Rs. 13] at the rate of Re. 1 per acre.

112. Forest grievances.—A permanent record is maintained and all legitimate grievances brought to light were promptly remedied.

113. Forest Benevolent Fund.—A report on the working of this fund will be found in Appendix A to this report.

114. Famine relief work.—Three roads in the Western Circle were partly constructed from Famine Relief Funds at a cost of Rs. 168.

115. Mining leases.—A lease for quarrying soapstone and red ochre was given for one year in the Jubbulpore division. In the Balaghat division two manganese leases were renewed for 30 years and one for five years. In Bhandara five mining leases for manganese ore over an area of 503.68 acres were granted during the year. Seventeen prospecting licences for manganese ore were also granted over an area of 1,377.52 acres. Out of these, seven licences were, however, relinquished by the licensees.

In Chhindwara 1,694 [1,953] acres were under mining leases and 1,400 [1,325] acres under prospecting licences at the close of the year. In North Chanda one mining lease for yellow ochre over an area of 11.25 acres and a prospecting licence for the same mineral over an area of 65 acres were granted. Another prospecting licence for coal was also granted. In Nagpur-Wardha two mining leases covering an area of 274.12 acres and 14 prospecting licences over an area of 2,646.98 acres were sanctioned. In South Chanda a prospecting licence for mica over an area of 595.2 acres granted to the Chanda Mining and Industrial Co. expired on 5th February 1939. Another prospecting licence for the same mineral over an area of 749 acres in the Ghot range was granted to the same Company after the close of the year.

116. Forest gardens.—A *pro forma* account of the existing four forest gardens was maintained as usual. It is unfortunate that in spite of every effort being made it has not been possible to meet their working expenses from

the sale proceeds of their produce with the result that Government has now been compelled to order the closing down of one of these gardens.

117. **Civil suit.**—The civil case against Zamin Ali which has been pending since 1933 before the High Court of Allahabad remained undecided by the end of the year.

118. **General.**—Government has sanctioned measures to encourage private persons willing to plant fruit trees at their own expense in open forest lands in charge of the Forest Department.

An area of 4,208 acres of Government forest in Saugor division has been handed over to the Veterinary Department for the purpose of starting a cattle breeding farm.

The Dhumtarai forest block of the Bilaspur division has been leased out for the purpose of establishing a co-operative dairy.

The survey of the Umerkhed-Bittargaon road was completed by the Public Works Department during the year. It is unfortunate that the funds allotted for the construction of this road had to be withdrawn soon after the close of the year. This road is of the utmost importance for the full development of Kinwat range.

CHAPTER IX.—THE PRESERVATION OF WILD LIFE

119. The operation of two acts, *viz.*, the Central Provinces Game Act and the Wild Birds and Animal Protection Act, has had some effect in preserving wild life in some parts of the province and the application of measures such as the calling in of crop protection guns during the hot weather and the prohibition of shooting from motor vehicles has undoubtedly helped to check destruction of game to a certain extent, but poaching is reported to be still rampant in certain localities, thus proving that existing legislation is inadequate. The restrictions, which had been imposed in the interest of game preservation on the use of forest roads by private motor cars, have however been recently removed so that the situation is not likely to improve.

Wild dogs are reported to be on the increase in most divisions and have attacked domestic cattle in the Denwa valley of Hoshangabad—a most unusual occurrence. During the year Government took welcome action in

removing a long-felt grievance of the Department by exempting Rangers, Deputy Rangers, Foresters and Forest Guards from the operation of the Game Act when on duty.

120. Class I—Absolute Sanctuaries—Bori, 61 square miles (Hoshangabad division).—The general condition of game in the sanctuary was satisfactory, and both bison and tiger appear to be on the increase. In view of the number of forest village cattle killed by tigers, the special permission granted for the destruction of two tigers annually was extended for another year but without result.

Taroba, 46 square miles (North-Chanda division).—The general condition of game is satisfactory and here also the number of tiger is reported to be increasing. Some damage to young regenerated crops was noticed by browsing, and the shooting of surplus hinds has been permitted by Government. With a view to check poaching in the sanctuary, a proposal to put gates on the Moharli-Khadsingi road is under consideration. The shooting of tiger and panther within $1\frac{1}{2}$ miles of the Andhari Nadi is still prohibited.

Supkhar, 158 square miles (Balaghat division).—The number of chital and barasingha have increased by some 50 per cent over last year's figures and black buck are also on the increase. The same is the case with tiger, bison and bear but as regards sambhar no noticeable increase was observed. Barking deer remain rare. No appreciable increase of wild dog was noticed.

Kanha, 99 square miles (Mandla division).—Bison, black buck and chital have definitely increased but sambhar and peafowl have decreased. The proposal to convert this sanctuary into a national game park is under the consideration of Government.

121. Class II—Reserves where wild life has little or no effect on cultivation.—In the Western Circle game is reported to have further increased but wild dog are numerous and causing considerable damage. Tiger and panther are increasing in numbers. Complaints of cattle lifting are frequent in the Melghat, Nimar, Betul and Hoshangabad. A man-eating panther killed a number of children on the borders of Betul and Hoshangabad but in spite of the offer of a reward it has not yet been killed. There are several other proclaimed man-eaters but the

small rewards now offered do not attract shikaris. Bears are also causing a certain amount of trouble in several divisions.

In the Allapilli block (73 square miles, South Chanda division) it is reported that tigers have definitely increased. Special permission was given to shoot a limited number of bison, sambhar and chital in the immediate neighbourhood of plantations which were being damaged.

122. Class III—Reserves which adjoin large cultural areas.—The unrestricted destruction of game in the Phiski reserve of Yeotmal continued and resulted in the destruction of five chital, 60 pig and 27 jackals. With a view to protecting agricultural crops from the depredations of wild animals, a proposal to allow unrestricted shooting in isolated blocks of Government forest surrounded on all sides by cultivation on the lines of that permitted in the Phiski reserve is under consideration.

The present methods of combating the nuisance of wild cattle in Berar are ineffective and such cattle continued to give trouble in several localities and are likely to continue to do so until the people of the neighbourhood agree to their wholesale extermination. During the year 35 were captured but this number is considered to be less than their normal increase.

Pig and Nilgai continued to do considerable damage to field crops in many divisions and free permits continued to be issued for their destruction.

123. Poaching.—The number of cases reported during the year compares as follows with those of the last year :—

	1937-38	1938-39
Eastern Circle	.. 38	36
Central Circle	.. 22	63
Western Circle	.. 58	28

Out of the 63 cases in the Central Circle, 34 cases were detected in North-Chanda alone. Poaching in the Nimar division is said to have decreased considerably. In Yeotmal, poaching is most common all along the Penganga river by the people of Hyderabad State, who sometimes are helped by villagers within the Kinwat reserve.

124. Class IV—Legal Shikar.—The number of shooting permits issued during the year was 468 [512].

The following table shows the number of animals shot by permit-holders :—

All India Serial No.	Species.	Total in		
		1936-37	1937-38	1938-39
1	Tiger	.. 117	112	115
2	Panther	.. 88	72	84
6	Hyæna	.. 13	7	10
7	Wolf	.. 1	..	..
8	Wild dog	.. 19	16	26
12—14	Bear	.. 35	37	29
17	Bison	.. 14	15	18
29	Blue bull	.. 90	70	101
31—33	Black buck, chinkara and barking deer.	116	100	92
35	Barasingha (swamp deer)	.. 3	..	..
37	Sambhar	.. 116	103	122
38	Chital	.. 86	119	92
43	Crocodile	.. 5	6	3
46	Wild pig	.. 621	768	873
Total		<u>1,324</u>	<u>1,425</u>	<u>1,568</u>

C. E. C. COX,

NAGPUR : *Chief Conservator of Forests.*

The 25th September 1939. Central Provinces and Berar.

QUINQUENNIAL REVIEW OF FOREST ADMINISTRATION IN THE CENTRAL PROVINCES AND BERAR, FOR THE PERIOD FROM THE 1ST APRIL, 1934 TO THE 31ST MARCH 1939

The world-wide economic depression referred to in the last report continued throughout the quinquennium, rendering it impossible to develop any new forest industries or to finance any scheme for the improvement of the forests. The departmental collection of lac in Damoh has had to be closed down as the prevailing rates barely cover the cost of collection.

2. *Changes in area.*—The area under the management of the department slightly increased from 19,430 to 19,432 square miles as a result of afforestation of the escheated Rajoli and Palastola forests in the Bhandara division, excision of B class areas set aside for cultivation, recalculation of areas and other minor adjustments.

3. *Forest Settlements.*—Settlements were completed for 32.13 square miles.

4. *Demarcation.*—The total length of artificial boundaries decreased from 32,893 to 30,966 miles due mainly to the remeasurement of boundaries during revision of working plans.

5. *Forest Surveys.*—The Survey of India were engaged on 1" survey in Raipur.

6. *Working Plans.*—Fourteen new plans and revisions covering an area of 10,649 square miles were prepared and sanctioned by Government and the Chief Conservator of Forests. The area under sanctioned working plans was:—

Circle		Commencement	Close
		Sq. miles	Sq. miles
Eastern	..	6,118	6,882
Central	..	4,902	4,919
Western	..	6,596	6,331
	Total ..	<hr/> 17,616	<hr/> 18,132
Total forest area	..	19,430	19,432

7. *Communications and buildings.*—Owing to financial stringency only 196 [709] miles of new roads were constructed at a cost of Rs. 86,937 [Rs. 2,66,074]. The construction of a number of sanctioned roads, expected to bring in increased revenue of over 15 per cent, has had to be deferred for want of funds. Rs. 52,648 [Rs. 1,21,273] were spent on new buildings and Rs. 12,607 [Rs. 47, 486] on other works. Over 1,000 subordinates are still unprovided with Government quarters and a heavy programme of new buildings, estimated to cost about Rs. 7 lakhs, awaits the return of normal economic conditions.

8. *The Raipur Forest Tramway.*—There has been a steady improvement in the earnings of the tramway during the latter part of the quinquennium. The gross earnings rose from Rs. 1,11,843 in 1933-34 to Rs. 1,56,199 in 1938-39. The net earnings are still insufficient to cover interest charges in full and the cumulative loss to date amounts to Rs. 8,61,466. Expenditure has been drastically reduced and freight rates on certain commodities have been lowered with a view to attract more traffic. It is hoped that with the improvement in trade the financial condition of the tramway will also improve.

9. *Allapilli Saw Mill.*—As a result of the new boiler installed in 1932-33, the outturn of the mill has increased appreciably so that it is now running at a good profit. Commercial accounts are maintained for the departmental operations in the Allapilli and Pedigundam Ranges, of which the saw mill forms a part. The total profit during the quinquennium amounted to Rs. 4,88,316. With a view to provide employment to local agriculturists and cartmen, the transport of timber from Allapilli to Ballarshah which, for some years, had been carried out by motor lorries was replaced partly by bullock carts.

10. *Forest Offences.*—The average number of forest offences for the two quinquenniums is compared below :—

	Past quinquennium	Present	Difference
I. Injury by fire	.. 533	581	+ 48
II. Unauthorized felling	.. 10,124	12,811	+ 2,687
III. Unauthorized grazing	.. 10,361	11,577	+ 1,216
IV. Other offences	.. 1,240	2,168	+ 928
Total	.. <u>22,258</u>	<u>27,137</u>	+ 4,879

The steady increase during the last two quinquenniums is mainly due to the economic depression. As a result of the throwing open of Government forests to free extraction of fuel grass, and other minor produce from certain backward tracts of the province, the number of forest offences has decreased considerably during the latter part of the quinquennium.

11. *Fire protection.*—The area under protection rose from 14,401 square miles in 1934-35 to 15,429 square miles in 1938-39 with corresponding increase in the cost from Rs. 54,951 to Rs. 57,581.

12. *Grazing.*—The number of cattle grazed in Government forests fell from 31,16,977 in 1934-35 to 31,02,937 in 1938-39, due mainly to distressed economic condition of the people and heavy mortality amongst cattle in Berar. A general reduction of 25 per cent in the privileged and ordinary grazing rates was ordered throughout the province with effect from the 1st April 1938 wherever the existing rates were more than one anna and six pies per head of cattle and the grazing year was also changed from "1st July—30th June" to "1st April—31st March". Collection of grazing dues was deferred in certain divisions.

13. *Yield and outturn.*—In spite of the slump in trade and fall in the price of lac, there has been a marked improvement in receipts due mainly to the extension of the departmental timber operations in South Chanda, Hoshangabad, Nimar and the Melghat and sleeper operations in the sal divisions of Mandla, Balaghat, Raipur and Bilaspur as shown below :—

Year.	Revenue	Expenditure	Difference
	Rs.	Rs.	Rs.
1934-35	.. 16,48,036	6,13,626	+10,34,410
1938-39	.. 17,88,335	6,94,327	+10,94,008

14. The average revenue, expenditure and surplus for the two periods are compared below :—

	1929—34.	1934—39.
	Rs.	Rs.
Revenue	.. 48,50,548	48,82,535
Expenditure	.. 36,01,046	35,61,219
Surplus	.. <u>12,49,502</u>	<u>13,21,319</u>

There has been a slight improvement in revenue owing to higher profits obtained from departmental timber operations and better returns from the Raipur Forest Tramway. The year 1937-38 recorded the highest revenue since 1929-30 (Rs. 50,50,094).

As a result of abolition of certain divisions and ranges and consequent reduction in the staff and in the pay and allowances of subordinates, expenditure would have fallen considerably, but for the fact that the overseas pay and leave salaries of Officers having been debited against the department since 1937-38, it increased slightly from Rs. 34,31,901 in 1934-35 to Rs. 34,88,165 in 1938-39.

15. *Forest Education—Gazetted Officers.*—owing to the reduction of the cadre, no recruitment was made to the Indian Forest Service or the Provincial Forest Service.

Six candidates who were deputed for training at the Dehra Dun Forest College for the 1937-39 Rangers' course, returned duly qualified shortly after the close of the quinquennium. The grant of stipends and travelling allowance to candidates selected for training at the Dehra Dun Forest College was discontinued.

The Balaghat Forest School was re-opened from 1st November 1934 after having been closed for three years and 198 Deputy Rangers and Foresters were trained.

16. *Administration.*—The post of the Chief Conservator of Forests was held by the following Officers:—

Mr. C. A. Malcolm, C.I.E.—1st March to 27th March 1934.

Mr. J. Whitehead—28th March 1934 to 3rd December 1935.

Mr. C. F. Bell, C.I.E.—4th December 1935 to 27th October 1937.

Mr. C. E. C. Cox, C.I.E.—28th October 1937 to 31st March 1939.

17. *Organization.*—As a measure of retrenchment the number of divisions was further reduced from 20 to 19 with effect from 1st April 1937 and the number of ranges from 125 to 119. The cadre of the Indian Forest Service and the Provincial Forest Service, which stands at 29 and 26 posts, respectively, remained unchanged.

Proposals for reducing the cadre still further as well as for replacing the two services by a unified central Provinces Forest Service are under the consideration of Government. The cadre of the Rangers was also reduced from 135 to 134 and that of clerks from 365 to 360. The conveyance and carting allowance of Range Assistants and Rangers was reduced.

18. *General.*—Outstanding features of the quinquennium were the change in the constitution of the province as a result of the promulgation of the Government of India Act, the spread of education among forest villages and the appointment of an Economy Committee to find out ways and means of reducing expenditure

C. E. C. COX,

NAGPUR : *Chief Conservator of Forests,*
The 25th September 1939. Central Provinces and Berar.

APPENDIX A

ANNUAL REPORT OF THE CENTRAL PROVINCES AND BERAR FOREST BENEVOLENT FUND FOR THE YEAR ENDING 31ST MARCH 1939

The Fund started with an opening cash balance of Rs. 3,935-2-5 on the 1st April 1938 which was held by the various presidents of Divisional Committees and the Honorary Secretary in the Postal Savings Banks accounts and the Imperial Bank of India, Nagpur, respectively. Government Promissory notes bearing $3\frac{1}{2}$ per cent interest to the face value of Rs. 18,000 are kept in the safe custody of the Imperial Bank of India, Nagpur. The financial position of the Fund is satisfactory and it was possible to distribute a larger sum by way of benefits to relieve distress among the families of deceased subordinates. Two meetings of the Central Managing Committee were held during the year to consider various matters concerning the management of Fund and in all 45 cases of relief came up for consideration, out of which relief to the extent of Rs. 2,795 was granted in respect of 39 cases. This compares with 21 cases dealt with during the previous year, of which 6 were rejected and relief granted to the extent of Rs. 1,052.

The details of benefits granted to the dependants of various deceased subordinates are shown below :—

Serial No.	Name of the deceased subordinate	Division	Amount of benefit sanctioned to dependants	Authority under which sanctioned
(1)	(2)	(3)	(4)	(5)
			Rs.	
1	Forest Guard Prasad.	Ghansham Jubbulpore ..	20	Central Committee Resolution No. 6 (i) of 13th September 1938.
2	Forest Guard Bhaiyalal	.. Do. ..	20	Central Committee Resolution No. 6 (iii) of 13th September 1938.
3	Forest Guard Dasharath Prasad.	Do. ..	50	Central Committee Resolution No. 6 (iv) of 13th September 1938.
4	Forest Guard Gauri Shankar	Saugor ..	50	Central Committee Resolution No. 6 (vi) of 13th September 1938.
5	Forest Guard Sunderlal	.. Do. ..	50	Central Committee Resolution No. 6 (vii) of 13th September 1938.

Serial No.	Name of the deceased subordinate	Division	Amount of benefit sanctioned to dependants	Authority under which sanctioned
(1)	(2)	(3)	(4)	(5)
			Rs.	
6	Forest Guard Ramcharan ..	Saugar ..	30	Central Committee Resolution No. 6 (viii) of 13th September 1938.
7	Forest Guard Ramsahai ..	Do. .	10	Central Committee Resolution No. 6 (ix) of 13th September 1938.
8	Forest Guard Dipchand ..	Do. .	50	Central Committee Resolution No. 6 (x) of 13th September 1938.
9	Forest Guard Ajodhia Prasad	Do. ..	50	Central Committee Resolution No. 6 (xi) of 13th September 1938.
10	Forest Guard Harjoo ..	Damoh ..	40	Central Committee Resolution No. 6 (xii) of 13th September 1938.
11	Forest Guard Mulchand ..	Hoshangab ad	20	Central Committee Resolution No. 6 (xiv) of 13th September 1938.
12	Forest Guard Ramnarayanlal	Do. ..	20	Central Committee Resolution No. 6 (xv) of 13th September 1938.
13	Forest Guard M. A. Khaliq..	Do. ..	20	Central Committee Resolution No. 6 (xvi) of 13th September 1938.
14	Forest Guard Ramnarayan Sheolal.	Yeotmal ..	25	Central Committee Resolution No. 6 (xvii) of 13th September 1938.
15	Forest Guard Ramnarayan Singh.	Do. ..	50	Central Committee Resolution No. 6 (xviii) of 13th September 1938.
16	Forester Fazlul Rub ..	Betul ..	75	Central Committee Resolution No. 6 (xix) of 13th September 1938.
17	Forest Guard Sikandar ..	Do. ..	50	Central Committee Resolution No. 6 (xx) of 13th September 1938.
18	Forest Guard Abdul Satar ..	Nimar ..	50	Central Committee Resolution No. 6 (xxi) of 13th September 1938.
19	Forest Guard Sukhdeo Prasad	N a g p u r - Wardha.	30	Central Committee Resolution No. 6 (xxiii) of 13th September 1938.
20	Forest Guard Paiku ..	Do. ..	50	Central Committee Resolution No. 6 (xxv) of 13th September 1938.
21	Forest Guard Begarilal ..	Balaghat ..	150	Central Committee Resolution No. 8 (i) of 31st March 1939.
22	Forest Guard Sheikh Bhulai..	Jubbulpore ..	25	Central Committee Resolution No. 8 (ii) of 31st March 1939.

Serial No.	Name of the deceased subordinate	Division	Amount of benefit sanctioned to dependants	Authority under which sanctioned
(1)	(2)	(3)	(4)	(5)
			Rs.	
23	Forest Guard Mahpal Singh	Jubbulpore ..	150	Central Committee Resolution No. 8 (iii) of 31st March 1939.
24	Forest Guard Mangna	.. Do. ..	150	Central Committee Resolution No. 8 (iv) of 31st March 1939.
25	Forest Guard Hajarilal	.. Saugor ..	75	Central Committee Resolution No. 8 (v) of 31st March 1939.
26	Forest Guard Fuddilal	.. Mandla ..	75	Central Committee Resolution No. 8 (vi) of 31st March 1939.
27	Forest Guard Dhimra	.. Do. ..	150	Central Committee Resolution No. 8 (vii) of 31st March 1939.
28	Forest Guard Chindhia	.. Melghat ..	30	Central Committee Resolution No. 8 (viii) of 31st March 1939.
29	Forest Guard Kaloo Ram	.. Hoshangabad	100	Central Committee Resolution No. 8 (ix) of 31st March 1939.
30	Forest Guard Nandoo	.. Do. ..	100	Central Committee Resolution No. 8 (x) of 31st March 1939.
31	Forest Guard Sher Mohamed	N a g p u r - Wardha.	100	Central Committee Resolution No. 8 (xi) of 31st March 1939.
32	Forest Guard Shabas Khan	.. Bhandara ..	50	Central Committee Resolution No. 8 (xii) of 31st March 1939.
33	Deputy Ranger Harsewak Rai.	Chhindwara ..	400	Central Committee Resolution No. 8 (xiii) of 31st March 1939.
34	Forest Guard Noor Mohamad.	.. Do. ..	100	Central Committee Resolution No. 8 (xiv) of 31st March 1939.
35	Forest Guard Gajraj Singh	.. Seoni ..	100	Central Committee Resolution No. 8 (xv) of 31st March 1939.
36	Forest Guard Nurbuda Prasad	.. Do. ..	100	Central Committee Resolution No. 8 (xvi) of 31st March 1939.
37	Forest Guard Azam Khan	.. Do. ..	100	Central Committee Resolution No. 8 (xvii) of 31st March 1939.
38	Forest Guard Abdul Aziz	.. Mandla ..	50	Central Committee Resolution No. 8 (xviii) of 31st March 1939.
39	Forest Guard Khande Rao	.. N a g p u r - Wardha.	30	Central Committee Resolution No. 8 (xix) of 31st March 1939.

The disparity of relief granted under resolution No. 6 of the 13th September 1939 and resolution No. 8 of the 31st March 1939 is due to the change of policy adopted as the result of suggestions made by the Examiner of Local Fund Accounts, Central Provinces and Berar, and resolution No. 2 (ii) of the Central Committee at its meeting held on the 31st March 1939. Not only has the individual grant been more liberal than that of last year but the number of claims has increased one and half times during the year under review. It is for this reason that the total amount of relief sanctioned has risen from Rs. 1,052 of last year to Rs. 2,795 for the year under review. Apart from subscriptions, the Fund has to depend on two sources for augmenting the sum available for investment, *viz.*—

(1) Donations from sportsmen.

(2) Fines imposed on subordinates.

Subscriptions as noted below were received from different grades of subordinates during the year under report :—

	1937-38	1938-39
	Rs. a. p.	Rs. a. p.
(1) Rangers and Deputy Rangers ..	673-0-0	698-0-0
(2) Foresters, Forest Guards, Orderlies, Khalasias and Mahouts. etc. ..	1,192-8-0	1,282-14-0
(3) Clerks ..	263-0-0	274-0-0
Total..	2,128-8-0	2,254-14-0

The Annual Statement of accounts for the year ending 31st March 1939 as passed by the Central Managing Committee are exhibited as appendices.

2. The accounts of the Fund were examined and audited by the Examiner of Local Fund Accounts Central Provinces and Berar, during the year and all objections raised by him in his audit note attended to.

The number of subscribers to the Fund as it stood on 31st March 1939 is shown below :—

	1937-38	1938-39	Sanctioned strength
Forest Rangers ..	98	76	133
Deputy Rangers ..	125	141	181
Foresters ..	231	222	283
Forest Guards and Orderlies, etc. ..	2,027	2,013	2,791
Clerks ..	165	143	350

It is a matter for regret that the number of subscribers among Foresters and Forest Guards decreased by 9 and 9, respectively. These are the very classes of subordinates who derive the greatest benefit from the Fund. There is also a somewhat marked decrease in the number of subscribers among clerks, the number falling from 165 to 143. It is hoped that the more liberal policy now adopted by the Central Committee for distributing benefits and the fixation of minima and maxima rates of relief for the different grades of subordinates which were adopted during the year will have the desired effect of attracting more subscribers.

Although the number of subscribers among Rangers, Foresters, Forest Guards and Clerks has decreased, the amount of subscriptions increased from Rs. 2,128-8-0 to Rs. 2,254-14-0 during the year. This somewhat anomalous position is partly due to the increase of 16 subscribers among Deputy Rangers and partly to the recovery of arrears subscriptions for 1937-38 during the year under review.

The figures of the sanctioned strength of all eligible subscribers show that a fairly large percentage of subordinates are still non-subscribers and there is therefore room for improvement in this direction.

Donations to the extent of Rs. 641-8-10 were received during the year under report and the President takes this opportunity of expressing the gratitude of the staff of the Department to all concerned for their liberality in support of a deserving cause.

The names of some of the more liberal supporters of the Fund are given below :—

Mrs. Christian of Katni (Rs. 5), Lt. D. T. Woddley, R. A. Mess, Allahabad (Rs. 5), Mrs. E. P. Cook, Katni (Rs. 10), Capt. G. W. W. Nicholson, R. A. Mess, Jubbulpore (Rs. 5), Major C. H. V. Cox, 15, Ridge, Jubbulpore (Rs. 24-12-0), Capt. J. E. O'Donell, I. M. S., Quetta (Rs. 5), Bt. Lt. Col. R. A. Savory, 1/11th Sikh Regiment, Jubbulpore (Rs. 5), Mr. J. F. Balf, M. E. S., Saugor (Rs. 10), Dewan U. Pratap Singh, Imjhira (Rs. 5), Major H. M. C. A. Richards, R. H. A., Aldershot, England (Rs. 40), Mr. J. W. Smith, Jubbulpore (Rs. 5), Mr. R. W. Caudray, Dhond (Rs. 5), Mr. L. A. Craven, Calcutta (Rs. 10), Major Selby, Trimulghery (Rs. 16), Dewan Nazaf Ali Khan, Seoni (Rs. 10), Mr. D. Wason (Rs. 30), Capt. T. Wright, R. E. Mess, Roorki (Rs. 10),

Mr. F. C. S. Quinn-Young, D. S. P. Chanda (Rs. 5), Balbant, Shooting Party (Rs. 15), Lt. R. B. Marshall, West Yorkshire Regiment (Rs. 10), Capt. G. H. Illingworth, 16/5th Lancers, Trimulgherry (Rs. 5), Khairulla Shah Mohammad of Junnardeo (Rs. 10), Mr. Kalnoji Mahoji of Dharamwadi (Rs. 5), Mr. Deoji Nagoji of Satti (Rs. 5), Mr. Moti Khan Kalekhan, Patur (Rs. 10), Mr. R. M. C. Dwane, Agent, Imperial Bank of India, Akola (Rs. 5), Staff of Yeotmal Forest Division (Rs. 101), Mr. S. A. Jalil, E. A. C., Yeotmal (Rs. 10), Mr. J. P. Stoker, Peshawar (Rs. 10), Mr. Adi. C. P. Wadia, Bombay (Rs. 25), Mr. E. V. Ardagh, Bombay (Rs. 25), Mr. C. J. W. Polland (Rs. 10), Mr. C. R. Yeo (Rs. 10), Dr N. V. Mudliar, Amraoti (Rs. 50), Capt. J. Yates, Mhow (Rs. 5), Major N. A. Fusset, R. A. Quetta (Rs. 15), Lt. J. H. Stokes, Peshawar (Rs. 9-15-0), Mr. M. B. Pratt, Pachmarhi (Rs. 10), Mr. Ahmad Hussain, Malguzar, Sohagpur (Rs. 5), Lt. W. B. P. Milne, Chitrol, N. W. P. (Rs. 20), Capt. Stephens, 14/20th Kings' Hussars, Trimulgherry (Rs. 20), Mr. P. H. Kitchen, Junnardeo (Rs. 10) and Major W. F. Cooper, Secunderabad (Rs. 10).

C. E. C. COX,

President,

Forest Benevolent Fund,

Central Provinces and Berar.

NAGPUR :

The 22nd September 1939.

Statement showing the financial position of the Central Provinces and Berar Forest Benevolent Fund, for the year ending 31st March 1939.

	Rs.	a.	p.
Balance brought forward (1937-38)	.. 3,935	2	5
<i>Receipts</i>			
1. Donations received during 1938-39	.. 641	8	10
2. Subscriptions received during 1938-39	.. 2,254	14	0
3. Fines received during 1938-39	.. 480	9	0
4. Interest received during 1938-39	.. 644	2	4
5. Miscellaneous received during 1938-39	.. 175	12	7
Total	.. 8,132	1	2
<i>Deduct—</i>			
<i>Expenditure</i>			
1. Relief paid during 1938-39	.. 1,120	0	0
2. Miscellaneous expenses incurred during 1938-39	101	5	0
3. Amount remitted and credited to Secretary's account for investment during 1938-39.	125	12	0
Total	.. 1,347	1	0
Balance on hand at the close of the year with the Presidents, Divisional Committees and in the Imperial Bank of India, Nagpur, on Secretary's account.	6,785	0	2
<i>Add—</i> Government promissory notes bearing interest to the face value of Rs. 18,000.	3½	per cent	

S. R. DAVER,
Honorary Secretary,
Forest Benevolent Fund,
Central Provinces and Berar.

ANNUAL STATEMENTS

Central Provinces and Berar Forest Benevolent Fund, 1938-39.

STATEMENT NO. I

Investment Account

(a) Investments

		Face value	Cost price	
		Rs.	Rs.	a. p.
On the 1st April 1938	Investments in Government Promissory Notes bearing 3½ per cent interest.	18,000	13,283	0 4
1938-39	.. Invested during the year	.. ..	.. ..	.. ..
	Balance on the 31st March 1939...	<u>18,000</u>	<u>13,283</u>	<u>0 4</u>

(b) Cash Accounts (Investments)

Receipts.	Rs.	a.	p.	Payments	Rs.	a.	p.
Balance on the 1st April 1938.	2,051	9	11	Money order commission, etc.	6	6	0
Donation for 1938-39..	641	8	10	Refund of subscription	4	8	0
Fines for 1938-39 ..	480	9	0	Refund of fines ..	10	11	0
Refund of gratuity ..	50	0	0	Bank charges ..	4	12	0
Miscellaneous ..	0	0	7	Printing charges ..	50	0	0
				Honoraria ..	25	0	0
				Balance on the 31st March 1939 (with Divisional Forest Officer's and in the Imperial Bank on the Secretary's Account).	3,122	7	4
Total ..	<u>3,223</u>	<u>12</u>	<u>4</u>	Total ..	<u>3,223</u>	<u>12</u>	<u>4</u>

STATEMENT NO. II

Benevolent Account (Cash)

Receipts	Rs.	a.	p.	Payments	Rs.	a.	p.
Balance on the 1st April 1938.	1,883	8	6	Relief paid 1938-39 ..	1,120	0	0
Subscriptions for the year 1938-39.	2,254	14	0	Benefits already sanctioned but yet to be paid.	2,177	0	0
Interest for the year 1938-39.	644	2	4	Balance on the 31st March 1939 (with Divisional Forest Officer's and in the Imperial Bank on the Secretary's account.)	1,485	8	10
Total ..	<u>4,782</u>	<u>8</u>	<u>10</u>	Total ..	<u>4,782</u>	<u>8</u>	<u>10</u>

STATEMENT No. III
Forecast budget for 1939-40

Cash for benevolence

		R.	a.	p.
Balance on the 1st April 1939	..	1,485	8	10
Subscriptions estimated	..	2,192	0	0
Interest estimated	..	750	0	0
		<hr/>		
Total	..	4,427	8	10
		<hr/>		

S. R. DAVER
*Honorary Secretary,
Forest Benevolent Fund,
Central Provinces and Berar.*

GOVERNMENT OF THE
CENTRAL PROVINCES AND BERAR



REPORT
ON THE
FOREST ADMINISTRATION
OF THE
CENTRAL PROVINCES & BERAR
FOR THE YEAR ENDING
31ST MARCH 1939

STATEMENTS

NAGPUR
GOVERNMENT PRINTING, C. P. & BERAR
1940

**Agents for the Sale of Publications issued by the Government of the
Central Provinces and Berar**

[NOTE.—Appointments of all official Agents in the United Kingdom and on the Continent for the Sale of Government Publications have been terminated with effect from the 1st April 1925. All publications in future are obtainable either direct from the High Commissioner for India, India House, Aldwych, London, W.C. 2, or through any bookseller.]

INDIA

AKOLA

The Proprietor, Shri Ramdas Stores,
Tajnapeeth.

ALIGARH

The Manager, Rama Book Depôt, University
Booksellers, etc., Sarai Hakim.

ALLAHABAD

Mr. Ram Narain Lal, Publisher, etc.,
1, Bank Road.

The Superintendent, Nazair Kanun Hind
Press.

AMRAOTI

Thakur & Co., Ltd., Booksellers.

BARODA

Mr. M. C. Kothari, Bookseller & Publisher,
Raopura Road.

BHANDARA

S. S. Dharashivkar, Esq., Opposite Municipality
Water Reservoir.

BILASPUR

Mr. M. A. Subhan, Bookseller & Publisher.

BOMBAY

D. B. Taraporevala, Sons & Co., Treasure
House of Books, Taj Building, 210,
Hornby Road, Fort.

Radhabai Atmaram Sagoon.

Sunder Pandurang, 25, Kalbadevi Road.

Thacker & Co., Ltd.

The Proprietors, New Book Co.

CALCUTTA

The Book Company, 4/4-A, College Street.
Butterworth & Co. (India), Ltd., Avenue
House, Post Box No. 251.

The Indian School Supply Depôt.

M. C. Sircar & Sons, 75, Harrison Road.

Newman & Co.

R. Cambray & Co.

S. K. Lahiri & Co.

Thacker, Spink & Co.

CHHINDWARA

Mr. Mannilal Ganesh Prasad Gupta,
General Merchants, and Bookseller.

The Proprietor, Verma Book Depôt.

COOCH BEHAR

Babu S. C. Taluqdar, Proprietor, Students
& Co.

DELHI

The Oxford Book & Stationery Co.

JODHPUR

Messrs. B. S. Mathur & Co., Chaturvilas,
Paota, Civil Lines, Jodhpur (Rajputana).

JUBBULPORE

The Manager, Educational Book Depôt.

The Proprietor, Nerbudha Book Depôt.

The Manager, Bhargava Book Co., Publishers,
Booksellers & Stationers.

JUBBULPORE—concl'd.

Radhamohan, Esq., Proprietor, Shyam
Stationery Mart, Andherdeo.

KARACHI

The Standard Bookstall.

KHAMGAON

Sakalkale Typewriting Institute.

LAHORE

The Punjab Sanskrit Book Depôt.

Rai Sahib M. Gulab Singh & Sons.

Messrs. Careers & Co., Moheni Road.

LUCKNOW

The Proprietor, Newal Kishore Press.

The Upper India Publishing House, Ltd.,
41, Aminabad Park.

MADRAS

Higginbotham & Co.

S. Murthy & Co., Post Box No. 152.

The Proprietor, The City Book Co., Post
Box No. 283.

NAGPUR

Aidan Binzani, Proprietors, Karmavir
Book Depôt, Mahal.

G. G. Khot & Sons, Sitabuldi.

Messrs. Shastri & Sons, Walker Road.

The Manager, Educational Book Depôt.

The Manager, "The Hitwada".

The Proprietors, Bhisey Brothers, Book-
sellers & Publishers.

Mr. D. M. Dhurnal, Proprietor, Provincial
Book Binding Works.

The Manager, Nagpur Law Journal,
Central Law House, Tulsi Bag Road,
Mahal.

Neston Jacques & Co., Kamptee Road.

PATNA

The Patna Law Press Co.

Laxmi Trading Co., Padri-Ki-Haveli,
Patna City.

PESHAWAR CANTONMENT

Faqirchand Marwah, Bookseller.

POONA

The Manager, International Book Service,
Deccan Gymkhana Colony.

The Manager, "Harija", Fergusson
College Road.

RAIPUR

The Proprietor, Chaube Printing Works.

RANGOON

The Superintendent, American Baptist
Mission Press.

VELLORE

A. Venkatasubban, Law Bookseller.

YEOTMAL

V. N. Saraswat.

Mr. M. G. Bakshi, Law Books Agent.

Annual Form No. 7.—Area of reserved forests, protected forests, unclassified or public forest land and leased forests, 1938-39.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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)
Eastern circle											
<i>Reserved Forest—A class.</i>											
Saugor	Rehli	Saugor	Whole range	126,720	198	37,991	19,676	145,035	227	Additions and subtractions shown in columns 7 and 8 are due to the amalgamation of Damoh division with Saugor division. Central Provinces Government notification Nos. 470-511-XI, dated the 9th May 1938, 514-593-XI, dated the 2nd June 1938 and Erratum no. 1157-1037-XI, dated the 28th July 1938.	
	Deori	Saugor	Do.	93,317	146	48,594	18,252	123,659	193		
	Saugor	Saugor	Do.	59,421	93	37,928	25,374	71,975	112		
	Khursi	Saugor	Do.	89,800.88	140	25,374	..	115,174.88	180		
	Banda	Saugor	Do.	112,699.20	176	..	..	112,699.20	176		
	Damoh	Saugor	Do.	..	..	167,378	..	167,378	262		
	Tendukhera.	Saugor	Do.	..	..	176,152	..	176,102	275		
	Fatehpur	Saugor	Do.	..	..	118,903	..	118,903	186		
			Total of Saugor division	481,958.08	753	612,270	63,302	1,030,926.08	1,611		
Damoh	..	Saugor	Whole division	548,968	858	..	548,968	..	..	Do.	do.
			Total Damoh division	548,968	858	..	548,968	..	..

Annual Form No. 7.—*Area of reserved forests, protected forests, unclassified or public forest land and leased forests, 1938-39—contd.*

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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)
<i>Eastern circle—concl.</i>											
<i>Reserved forests—A class—contd.</i>											
Jubbulpore.	Murwara	Jubbulpore.	Whole range	86,736.89	135	50,657	..	137,393.89	215	Changes in column No. 7 and 8 are due to amalgamation of Sihora range with Murwara and Jubbulpore ranges <i>vide</i> Chief Conservator of Forests' No. 533-F-310-37, dated the 17th February 1938.	
	Jubbulpore.	Jubbulpore.	Do.	70,018	109	5,198	..	75,216	117		
	Sihora ..	Jubbulpore.	Do.	55,855	88	..	55,855	..	..		Do. do.
	Mandla..	Mandla..	Do.	89,175	139	..	..	89,175	139		
	Narainganj.	Mandla..	Do.	100,058	157	..	..	100,058	157		

	Dhanwahi	Mandla ..	Whole range ..	93,591	146	*243'77	†237'96	93,596'81	146	*Added <i>vide</i> notification No. 678-736-XI, dated the 20th July 1938.
			Total Jubulpore division.	495,433'89	774	56,098'77	56,092'96	495,439'70	774	†Excluded <i>vide</i> notification No. 16-XI, dated the 5th January 1939, Erratum No. 421-499-XI, dated the 9th May 1939.
Mandla ..	Dindori ..	Mandla ..	Whole range ..	170,457	267	..	230	170,227	266	Notification No. 155-133-XI, dated the 22nd February 1939.
	Motinala	Mandla ..	Do. ..	179,038	281	..	9'88	179,028'12	281	Notification No. 635-642-XI, dated the 12th July 1938.
	Sarastal ..	Mandla ..	Do. ..	162,371	253	..	4,899	157,472	246	Notification No. 85-1401-XI, dated the 20th January 1939.
	..	Do.	Remainder of the division.	478,092	746	..	..	478,092	746	
			Total Mandla division	989,958	1,547	..	5,138'88	984,819'12	1,539	
Balaghat ..	Lamta ..	Balaghat.	Whole Range ..	98,157	153	33,168	..	131,325	205	Addition and subtractions in column Nos. 6 and 7 are due to amalgamation of Lanji range <i>vide</i> Chief Conservator of Forests' notification No. 30, dated the 27th April 1939.
	Dhansua.	Do. ..	Do. ..	129,814'18	203	43,731	33,168	140,377'18	220	
	Lanji ..	Do. ..	Do. ..	43,731	69	..	43,731	..	508	
	..	Do. ..	Remainder of the division.	325,413	508	..	..	325,413	..	
			Total Balaghat division	597,115'18	933	76,899	76,899	597,115'18	933	
Bilaspur.	..	Bilaspur and Raipur.	Whole division ..	677,238	1,058	..	..	677,238	1,058	
			Total Bilaspur division.	677,238	1,058	..	..	677,238	1,058	
Raipur ..	..	Raipur ..	Whole division ..	621,913'5	972	..	..	621,913'5	972	
			Total Raipur division.	621,913'5	972	621,913'5	972	
			Total Eastern circle ..	4,412,584'65	6,895	745,267'77	750,400'8	4,407,451'58	6,887	

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Annual Form No. 7.—Area of reserved forests, protected forests, unclassified or public forest land and leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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								
				<i>Reserved forests—A class—concl'd.</i>								
Seoni	Whole division.	Chhindwara and Hoshangabad.	Whole division	591,988	925	..	..	591,988	925		
			Total Seoni division	591,988	925	..	..	591,988	925		
Chhindwara.	Whole division.	Chhindwara.	Whole division	423,829	662	..	..	423,829	662		
			Total Chhindwara division.	423,829	662	..	..	423,829	662		

North Chanda.	Warora ..	Chanda ..	Warora ..	72,434	113	..	12	72,422	113	Chief Conservator of Forests' No. 1431-H-102-36, dated the 4th May 1938.	Due to recalculation.
	Brahmapuri.	Do. ..	Brahmapuri ..	79,138	124	..	1'03	79,137	124	Conservator of Forests' No. 1933-A-III, dated the 14th April 1938.	Due to correction of boundary.
	Sindowahi	Chanda	Sindowahi ..	112,536	176	1,190'60	..	113,727	177	1176-1029-XI, dated the 30th September 1938.	Afforested.
	Wairagarh	Do. ..	Wairagarh ..	80,342	125	332'06	..	80,674	126	422-458-XI, dated the 21st April 1938.	Afforested.
	..	Do. ...	Remainder ..	366,494	573	366,494	573		
			Total A class ..	710,944	1,111	1,522'66	13'03	712,454	1,113		

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Annual Form No. 7.—Area of reserved forests, protected forests, unclassed or public forest land and leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition, or transfer, etc.	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—concl.											
<i>B class.</i>											
North Chanda.	Chanda..	Chanda..	Chand ..	6,136	10	*265	†278	6,123	10	* Chief Conservator of Forests' No. 1431-H-102-38, dated the 4th May 1938. † No. 434-444-XI, dated the 26th April 1938.	Due to recalculation.
	..	Do. ..	Remainder ..	89,801	140	..	..	89,801	140		
			Total B class	95,937	150	265	278	95,924			150
Total North Chanda ..				806,881	1,261	1,788	291	808,378	1,263		
<i>A class</i>											
South Chanda.	Whole Division.	Chanda..	Whole Division ..	623,286	974	..	..	623,286	974		Disforested.
			Total A class ..	623,286	974	..	..	623,286	974		

	Sironcha	Do. ..	Sironcha ..	29,280	46	..	144	29,136	46	No. 1215-1150-XI, dated 26th October 1938.	Disforested.		
			..	Do. ..	Remsinder ..	129,187	202			129,187	202
			Total B class ..		158,467	248	..	144	158,323			248	
			Total South Chanda ..		781,753	1,222	..	144	781,609			1,222	
Nagpur Wardha	Whole division.	Nagpur Wardha.	Whole division ..	456,457	713	456,457	713				
			Total Nagpur Wardha	456,457	713	456,457	713				
Bhandara	Partabgarh.	Bhandara	Partabgarh ..	111,833	175	17,188	..	129,021	202	No. 1111-432-XI, dated 15th September 1938.	Afforestation.		
			Do. ..	Remainder ..	225,914	353	225,914			353	
	Total A class ..		337,747	528	17,188	..	354,935	555					
	Do. ..	Do. ..	Whole division ..	2,978	4	2,978	4				
Total B class ..			2,978	4	2,978	4					
Total Bhandara division.		340,725	532	17,188	..	3,57,913	559						
Total A and B class ..		3,401,633	5,315	18,976	435	3,420,174	5,344						
Total A class ..		3,144,251	4,913	18,711	13	3,162,949	4,942						
Total B class ..		257,382		265	422	257,225	402						
Total Central circle ..		3,401,633	5,315	18,976	435	3,420,174	5,344						

Annual Form No. 7.—Area of reserved forests, protected forests, unclassified or public forest land and leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year		Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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)		
				Western circle									
				<i>Timber and fuel reserve—A class.</i>									
Melghat..	D h u l-ghat.	Amraoti..	Rupagarh ..	27,651	43	..	11	27,640	43	Conservator of Forests, Western Circle, Central Provinces No. 1715-9-D, dated 24th June 1937.	Excluded due to correction.		
	All Ranges.	Amraoti..	All Forests ..	728,014	1,138	..	..	728,014	1,138		
			Total Melghat division	755,665	1,181	..	11	755,654	1,181				
Amraoti ..	Amraoti	Amraoti..	Various babul bans ..	3,441	6	76	26	3,491	6	No. 566-625-XI, dated 20th June 1938.	Afforested .. A-g. 75 37		

Morsi	Do.	Do.	3,597	6	*2	3,599	6	No. 1200-1059-XI, dated 10th October 1938.	Disforested. *For rounding off.	26
All Ranges including Berar portion of Sawalmandha range.			45,838	71		45,838	71			
Total Amraoti division			52,876	83	78	26	52,928	83		
Yeotmal	Ghatanji	Yeotmal	Aite	2,289	4	90	2,379	4	No. 253-255-XI, dated 7th March 1938.	Afforested .. 43 23
									No. 256-254-XI, dated 7th March 1938.	Do. .. 24 17
									No. 1166-1053-XI, dated 29th September 1938.	Do. .. 22 21
									Total ..	90 21*
Do.	Do.	Nidha	11,901	19		35	11,866	19	No. 254-255-XI, dated 7th March 1938.	Disforested .. 35 0

*21 gunthas not taken into account to confirm with the total area of the range.

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Annual Form No. 7.—Area of reserved forests, protected forests, unclassified or public forest land and leased forests, 1933-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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)
Western circle—contd.											
<i>Timber and fuel reserve—A class—concl'd.</i>											
Yeotmal ..	All Range.	Yeotmal ..	All forests ..	484,315	756	..	..	484,315	756		
			Total Yeotmal division	498,505	779	90	35	498,560	779		
West Berar	Morna ..	Akola ..	Morna ..	19,025	30	17	14	19,028	30	No. 458-496-X I, dated the 7th May 1938.	Afforested 17 15
										No. 459-496-XI, dated the 7th May 1938.	Disforested 14 6

Murtizapur	Akola ..	Sendon ..	..	..	3,001	..	3,001	5	No. 1369-1197-XI, dated the 21st November 1938.	Transferred from C to A Class.	3,000 36
Chikhli	Buldana	Dhotra Ramna ..	235	..	..	3	232	..	No. 582-628-XI, dated the 28th June 1938.	Disforested.	2 21
Do. ..	Buldana	Januna Ramna ..	181	..	..	37	144	..		Do. ..	36 39
All ranges	Akola and Buldana.	All forests ..	281,136	439	..	..	281,136	439			
		Total West Berar division.	300,577	469	3,018	54	303,541	474			
		Total A class Berar ..	1,607,623	2,512	3,186	126	1,610,683	2,517			
					C class.						
Melghat ..	Chikal da	Amra o t i	Dhamangaon ..	2,061	3	..	2,061	3			
	Khirpani	Do. ..	Chinchona and Nimkhera.	2,368	4	..	2,368	4			
			Total C class Melghat division.	4,429	7	..	4,429	7			

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Annual Form No. 7.—Area of reserved forests, protec'ed forests, unclassified or public forest land and leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Exclud- ed or trans-ferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	Remarks		
				Acres	Equi- valent in square miles			Acres	Acres			Acres	Equi- valent in square miles
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
				Western Circle—contd.									
				C class—concl'd.									
Amraoti..	Amra o t i	Amra o t i	All forests ..	44,683	70	..	..	44,683	70		
	Sa w a l- mendha.	Do. ..	Do: ..	14,421	22	..	..	14,421	22		A. g.
	Morsi ..	Do. ..	Morsi taluq ..	30,120	47	26	15	30,131	47	No. 670-726- XI, dated the 19th April 1938. No. 671-726- XI, dated the 19th July 1938.	Afforested. 25 26 Disforested. 14 20		
Total C class Amraoti division.				89,224	139	26	15	89,235	139				

Yeotmal..	Darwha..	Yeotmal..	Darwha taluq	..	74,973	117	..	8	74,965	117	No. 464-197- XI, dated the 7th May 1938	Disforested	0
	Kelapur	Do. ..	Kelapur taluq	..	29,197	45	..	12	29,185	45	No. 1167- 1053-XI, dated the 25th Sep- tember 1938.	do. ..	0
	All other ranges.	Do. ..	All forests	..	146,293	229	..	..	146,293	229	No. 257-254- XI, dated the 7th March 1938	do. ..	12 0
			Total C class Yeotmal division.		250,463	391	..	20	250,473	391			
West Berar	Morna ..	Akola ..	Basim taluq	..	436	1	..	75	361	1			
	Murtizapur.	Do. ..	Do.	..	3,938	6	75	436	3,547	5			
	Do. ..	Do. ..	Mangrul taluq	..	26,824	42	..	3,661	23,823	37	No. 1361- 1197-XI, dated the 21st No- vember 1938.	Transferred from C to A class.	3,000 36
	Mehkar..	Buldana	Basim taluq	..	..	..	436	..	436	1			
	All ranges	Akola and Buldana.	All forests	..	148,481	232	..	..	148,481	232			
			Total C class West Berar division.		179,649	281	511	3,512	176,648	276			
			Total C class Western circle.		523,765	818	537	3,547	520,755	813			
			Total A and C clas- ses Berar.		2,131,388	3,330	3,723	3,673	2,131,438	3,330			

Annual Form No. 7.—Area of reserved forests, protected forests unclassified or public forest land and leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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)		
				<i>Western circle—contd.</i>									
				<i>A Class C. P. Forests.</i>									
Amraoti	Sawalmendha and Dabka.	Betul	All forests	146,706	229	..	..	145,706	229		
Nimar	Khandwa	Nimar	Kirgaon	45,597	72	2	..	45,599	72	Conservator of Forests, Western circle, Central Provinces memorandum No. 3227-9-C-5, dated the 31st October 1938.	Added by cor- 2 0 rection.		

Nimar ..	Punasa ..	Nimar ..	Gunjari ..	2,763	4	..	1	2,762	4	Conservator of Forests, Western circle, C. P. memorandum No. 2407-9-C-5, dated the 22nd August 1938.	Excluded 20 by correction.
	All Ranges.	Nimar ..	All forests ..	1,028,265	1,606	..	..	1,028,265	1,606		
			Total Nimar division ..	1,076,625	1,682	2	1	1,076,626	1,682		
Betul ..	All Ranges.	Betul ..	All forests ..	598,474	935	..	..	598,474	935		
Hoshangabad.	All Ranges.	Hoshangabad	All forests ..	641,972	1,003	..	..	641,972	1,003		
	Seoni ..	Hoshangabad.	Barasal 19 ..	13,795	22	..	14	13,781	22	Conservator of Forests, Western circle C. P. No. 2295-4-B, dated the 11th August 1938.	Excluded 140 by correction.
			Total Hoshangabad division.	655,767	1,025	..	14	655,753	1,025		
			Total A class Betul Nimar and Hoshangabad.	2,477,572	3,871	2	15	2,477,559	3,871		
			Total Western Circle ..	4,608,960	7,201	3,725	3,688	4,608,997	7,201		
			Grand Total Central Provinces and Berar.	12,423,177'65	19,411	767,968'77	754,523'84	12,436,622'58	19,432		

Annual Form No. 7.—Area of reserved forests, protected forests, unclassified or public forest land and leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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)
Eastern circle											
<i>Reserved forest under the management of the Public Works and Irrigation Department.</i>											
*Saugor..	Banda ..	Saugor ..	..	320	1	..	..	320	1	*Saugor Division includes old Damoh division.	
	Damoh ..	Do. ..	Baraiakhera block No. 29.	26·80	..	..	..	26·80	..		
	Damoh ..	Do. ..	Baheria block No. 61..	80·5	..	..	..	80·5	..		
Ju b b u l-pore.	†Murwara and Jub b u l-pore.	Jub b u l-pore.	..	885·24	1	..	..	885·24	1	†Includes old Sihora range.	
Balaghat..	Sonawani, Bai h a r and Su-pkhar.	Belaghat	..	1,038·94	2	..	..	1,038·94	2		

Bilaspur..	K o t a L o r m i	Bilaspur	..	10,426'52	16	..	..	10,426'52	16
	N o r t h L a o n B a l o d.	N o r t h R a i p u r.	..	12'67	..	..	..	12'67	..
Raipur ..	B a l o d a a n d D h a m - t a r i.	Drug and Raipur.	Balod	..	586	1	..	586	1
			Botha block	..	349	..	..	349	..
			Maramsilli block	..	376	1	..	376	1
			Total	..	14,101'67	22	..	14,101'67	..

Reserved forest under the management of Roads and Buildings.

Balaghat..	Sonawani, L a m t a a n d B a i h a r.	Balaghat	..	228	..	..	..	228	..
Bilaspur..	Baloda ..	Bilaspur	Banka	..	4'15	..	..	4'15	..
			Total	..	232'15	..	..	232'15	..

Reserved forest transferred to Public Works Department for metal quarry.

Bilaspur..	M a h a s a - m u n d.	Raipur ..	Kuhri	..	3'67	..	..	3'67	..
			Total	..	3'67	..	..	3'67	..

Annual Form 1.0. 7.—Area of reserved forests, protected forests, unclassified or public forest land and Leased forests, 1938-39—contd.

Division	Range	Civil district or territory	Name of forest	Area on 1st April 1938		Added during the year	Excluded or transferred to other heads	Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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											
<i>Reserved forests under the Management of the Irrigation Department.</i>											
<i>A class.</i>											
Seoni ..	Whole division.	Chhindwara.	A class ..	92.42	..	..	..	92.42	..		
			Total Seoni ..	92.42	..	..	..	92.42	..		
Chhindwara.	Whole division.	Chhindwara.	A Class ..	..	..	..	..	..	..
North Chanda.	Do. ..	Chanda ..	A Class ..	7,877.76	12	..	..	7,877.76	12		
	Do. ..	Do. ..	B Class ..	549.65	1	..	..	549.65	1		
			Total North Chanda ..	8,427.41	13	..	..	8,427.41	13		

South Chanda.	Whole division.	Chanda...	B Class	..	13	..	..	..	13	..
			Total South Chanda	..	13	..	..	..	13	..
Nagpur-Wardha.	Whole division.	Nagpur and Wardha.	A Class	..	..	..	..	..	..	..
Bhandara.	Bawan-thari Tirora and Bhandara.	Bhandara	A class	..	2,842	4	..	..	2,842	4
			Total Bhandara	..	2,842	4	..	..	2,842	4
			Total	..	11,375	17	..	..	11,375	17
<i>Reserved forests under the management of the Public Works Department.</i>										
Seoni	Whole division.	Chhindwara.		..	..	..	..	..	..	..
Chhindwara.	Do. ..	Do. ..		..	..	..	..	..	..	..

Annual Form No. 7.—Area of reserved forests protected forests, unclassified or public forest land and leased forests, 1938-39—concl'd.

Division	Range	Civil district or territory	Name of forest	Area on 1st July 1938		Added during the year		Area on 31st March 1939		No. and date of notification of addition or transfer, etc.	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—concl'd.											
<i>Reserved forests under the Management of the Public Works Department—concl'd.</i>											
N o r t h Chanda.	W h o l e division.	Chanda..	A class	..	298	..	..	..	298	..	
S o u t h Chanda.	Do. ..	Chanda..	A and B class	..	410	..	..	..	410	..	
						2				2	
N a g p u r- Wardha.	Do. ..	N a g p u r a n d Wardha.	A class	..	147	..	..	..	147	..	
B h a n d a r a	Do. ..	B h a n d a r a	A class	..	108	..	..	..	108	..	
			Total	..	963	2	..	..	963	2	
			Total Central Circle	..	12,338	19	..	..	12,338	19	

Form No. 8.—Progress made in forest settlements during the year 1938-39.

Circle	Civil district or territory	Name of forest	Area in square miles			Cost during the year		Entire cost per square mile of areas finally settled	Government notification of settlement	
			Finally settled during the year	In hand at commencement of year	Taken in hand during the year	In forest accounts	In other accounts		No.	Date
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Eastern circle	..		0.38	..	0.38	..	..	..
Central circle	:		29.36*	29.36*	5.73	..	..	..
Western circle	..		0.34	0.37	0.07	..	..	..
		Total Central Provinces and Berar.	30.08	29.73	6.18	..	..	..

*One square mile has been excluded in order to extinguish the rights of the inferior proprietors and other tenants, etc.

Form No. 9.—Record of demarcation and maintenance of boundaries, 1938-39

Circle	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 close of the year	Length of boundaries still to be demarcated at close of the year	Length of natural boundaries not requiring artificial marks	Total length of boundaries at the close 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)
	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Rs.	Rs.	
Eastern circle ..	..	1,791	7,291	9,082	..	1,464	10,546	..	3,365	
Central circle ..	11	1,433	6,369	7,813	26	857	8,696	329	2,265	
Western circle ..	17	1,732	12,322	14,071	..	1,371	15,442	..	4,506	
Total Central Provinces and Berar.	28	4,956	25,982	30,966	26	3,692	34,684	329	10,136	

N. B.—Boundaries include besides the outer perimeter, the limits of enclosures of private or [other lands within the forests, but not the limits of sub-divisions, such as compartments and coupes, etc.

Form No. 10.—Statement showing forest areas surveyed and under survey by the Survey of India Department during the year 1938-39.

Circle	Topographical Surveys						Ordinary surveys not paid for by Forest Department.				Boundary surveys		Total area surveyed.	Area remaining to be surveyed.	Total Area as per Form 7	Remarks
	Special surveys paid for by Forest Department.															
	Previous.		Of the year		Cost.		Previous.		Of the year		Previous	Of the year.				
	4"=1 mile	2"=1 mile	4"=1 mile	2"=1 mile	Incur- red during year	Total to the end of year	2"=1 mile	Smal- ler scales	2"=1 mile	Smal- ler scales						
(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.	Rs.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	L. m.	L. m.	Sq. m.	Sq. m.	Sq. m.	
Eastern circle	6,805	..	..	..	..	6,41,599	26	(a)	..	..	..	..	6,831	56	6,887	(a) 1,474 square miles of the Govt., forest of the Raipur and Bilaspur Divisions were surveyed by the Survey of India No. 5 Party, Eastern Circle, Shillong between 1933-34 to 1937-38 for which no payment was made by the Forest Department.
Central circle	5,313	..	..	..	..	3,17,871	..	..	..	..	..	..	5,313	31	5,344	
Western circle	3,922	1,232	..	..	..	3,11,565	1,314	725	..	..	..	..	7,193	8	7,201	
Total Central Provinces and Berar	16,040	1,232	..	..	..	12,71,035	1,340	725	..	..	..	..	19,337	95	19,432	

NOTE.—Columns 2, 3, 4, 5, 8, 9, 10 and 11 should show the work up to date. The total added to column 15 should equal the total forest area in column 16.

Form No. 11.—Progress made in working plans, Central Provinces and Berar during the year 1938-39.

Circle	Area under sanctioned working plans					Area not under working plans			Total forest area in form No. 76 (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 at 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.	Per cent	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
Eastern circle ..	6,890	..	8	6,882	100	..	5	..	6,887	342	342	514	2,437	
Central circle ..	4,917	2	..	4,919	92	27	..	398	5,344	..	1,221	925	1,796	
Western circle ..	6,331	..	..	6,331	88	20	..	850	7,201	1,243	1,281	779	1,357	
Total Central Provinces and Berar.	18,138	2	8	18,132	93	47	5	1,248	19,432	1,585	2,844	2,218	5,590	

- (i) No entries referring to revisions of sanctioned plans will be made in columns 2 to 9.
(ii) Notes will be made in column 15 to explain whether entries in columns 3 and 4 refer to new work, to corrections of area or to abandonment of working plan prescriptions.
(iii) No entries will be made in column 4 regarding temporary suspensions pending revision.
(iv) New areas included in or areas thrown out during revisions, will be shown in columns 3, 4 and 7 and not in columns 12 and 13.
(v) Honoraria granted for the compilation of working plan will be shown in the remarks columns only.

Form No. 12.—Statement showing communications and buildings during the year 1938-39.

Circle (1)	New works undertaken during the year															
	Buildings					Total expenditure incurred (3)	Roads and paths						Total length of paths or roads. (5)	Total expenditure incurred (6)	Other works Expenditure incurred (7)	Total expenditure on new works (8)
	Expenditure on				Cart-roads		Bridle-paths		Others							
	Headquarter houses (2-a)	Rest-houses (2-b)	Houses for subordinate establishment (2-c)	Others (2-d)	Length (4-a)		Cost (4-b)	Length (4-c)	Cost (4-d)	Length (4-e)	Cost (4-f)					
Rs.	Rs.	Rs.	Rs.	Rs.	M. ch.	Rs.	M. ch.	Rs.	M. ch.	Rs.	M. ch.	Rs.	Rs.	Rs.		
Eastern circle	1,112	..	1,112	15.8	3,849	..	..	..	..	15.8	3,849	1,624	6,585	
Central circle	597	..	597	2.53	839	..	..	..	..	2.53	839	1,140	2,576	
Western circle	860	..	860	12.16	12,136	..	..	..	..	12.16	12,136	729	13,725	
Total Central Provinces and Bihar.	2,569	..	2,569	29.77	16,824	..	..	..	..	29.77	16,824	3,493	22,886	

Form No. 12.—Statement showing communications and buildings during the year 1938-39—concl'd.

(1)	Repairs executed during the year														
	Buildings					Roads and paths						Other works			
	Expenditure on				Total expenditure incurred	Cart-roads		Bridle-paths		Others		Total length of paths or roads	Total expenditure incurred.	Total expenditure incurred	Total expenditure incurred
	Headquarter houses	Rest-houses	Houses for subordinate establishment	Others		Length	Cost	Length	Cost	Length	Cost				
(9-a)	(9-b)	(9-c)	(9-d)	(10)	(11-a)	(11-b)	(11-c)	(11-d)	(11-e)	(11-f)	(12)	(13)	(14)	(15)	
Rs.	Rs.	Rs.	Rs.	Rs.	M. ch.	Rs.	M. ch.	Rs.	M. ch.	Rs.	M.	Rs.	Rs.	Rs.	
Eastern circle ..	1,991	6,124	13,911	1,590	23,616	3,308	37,785	..	..	28	145	3,336	37,930	4,133	65,679
Central circle ..	542	7,251	8,888	1,169	17,850	2,576	31,438	5	31	18	60	2,599	31,529	2,322	51,701
Western circle ..	1,043	6,345	15,624	911	23,923	4,230	43,446	28	51	31	677	4,289	*44,174	3,715	71,812
Total Central Provinces and Berar.	3,576	19,720	38,423	3,670	65,389	10,114	1,12,669	33	82	77	882	10,224	1,13,633	10,170	1,89,192

*Rs. 3,418 from A-I-a and A-II.

Form No. 13.—Statement showing register of breaches of forest rules during the year 1938-39.

Circle	Cases pending from previous year			New cases of the year															Total cases			
				Injury to forest by fire			Unauthorized felling			Unauthorized grazing			Other offences			Total						
	A	B	All	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
Eastern circle	16	1,010	1,026	1	42	132	55	4,688	395	32	3,047	26	7	273	8	95	8,050	561	111	9,060	561	9,732
Central circle	43	936	979	7	57	109	21	8,19	270	28	2,150	7	14	397	13	70	5,423	399	113	6,359	399	6,871
Western circle	29	2,105	2,134	7	93	180	33	3,367	295	63	4,526	28	16	1,049	11	119	9,035	514	148	11,140	514	11,802
Total Central Provinces and Berar.	88	4,051	4,139	15	192	421	109	10,874	960	123	9,723	61	37	1,719	32	284	22,508	1,474	372	26,559	1,474	28,405

N. B.—A means cases taken to court B means cases disposed of under section 67 of the Indian Forest Act, 1878 C means undeleted cases.

Form No. 13.—Statement showing register of breaches of forest rules during the year 1938-39—concl'd.

Circle	Disposed of during the year															Cases pending at the close of year			Remarks
	Convictions				Acquittals				Total										
	Cases		Persons		Cases		Persons		Cases			Persons							
	A	B	A	B	A	B	A	B	A	B	All	A	B	All	A	B	All		
(1)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	
Eastern circle	45	7,274	103	18,679	(a) 27	847	11	1,910	72	8,121	8,193	114	20,589	20,703	39	939	978	(a) Includes 22 cases withdrawn and compounded.	
Central circle	65	5,100	149	13,341	16	573	71	1,282	81	5,673	5,754	220	14,623	14,843	32	686	718		
Western circle	100	7,703	203	18,311	(b) 27	1,141	107	2,230	127	8,844	8,971	310	20,541	20,851	21	2,296	2,317	(b) Includes 9 cases withdrawn and cases compounded.	
Total Central Provinces and Berar.	210	20,077	455	50,33	70	2,561	189	5,422	280	22,638	22,918	644	55,753	56,397	92	3,921	4,013		

N. B.—A means cases taken into court.

B means cases disposed of under section 67 of the Indian Forest Act, 1878.

Form No. 14.—Area of forest tracts protected from fire during the year 1938-39.

Circle	Forest range	Year in which protection commenced	Area attempted to be protected in * 1937-38	Area actually protected in * 1937-38	Area attempted to be protected in 1938-39	Failures	Area actually protected in † 1938-39	Cost	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	No. of fires.
Eastern circle	3,571,483	3,413,187	3,450,529	160,045	3,290,484	20,775	354
Central circle	2,350,933	2,273,408	2,347,577	86,004	2,261,573	15,402	359
Western circle	3,50,095	3,444,234	4,076,915	135,809	3,941,106	21,404	325
Total Central and Berar Provinces	9,502,511	9,130,829	9,875,021	381,858	9,493,163	57,581	1,038

* Year previous to that of current report.

† Year dealt with in current report.

Form No. 15.—Causes of forest fires during the year 1938-39

Circle	(A) Fires caused by accident or through carelessness in burning fire lines		(B) Fires entering the forest by crossing exterior fire-traces		(C) Fires beginning inside the reserve or fire-traced area							
					Owing to carelessness or accident							
					By workmen employed in the forests, by purchasers of forest-produce and by Ya cutters		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
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Eastern circle	7	185	56	46,987	7	1,591	57	55,173	..	..	..	..
Central circle	40	5,826	34	17,583	3	224	12	1,957	6	892	..	..
Western circle	49	8,328	51	29,031	10	11,857	48	17,637	5	466	4	167
Total Central Provinces and Berar.	96	14,339	141	93,601	20	13,672	117	74,767	11	1,358	4	167

Form No. 15.—Causes of forest fires during the year 1938-39—concl'd.

Circle	(C) Fires beginning inside the reserve or fire-traced area											Total (A) (B) and (C)	
	By intentional firing						Total		Causes unknown				
	In order to obtain new grass		In order to turn out game or to reduce cover		Maliciously fired								
	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)		
Eastern circle	2	496	17	7,923	83	65,183	208	47,690	354	160,045	
Central circle	6	873	27	3,946	258	58,649	359	86,004	
Western circle	67	30,127	158	68,323	325	135,809	
Total Central Provinces and Berar.	2	496	23	8,796	177	99,256	624	174,662	1,038	381,858	

Form No. 16.—Area closed and open to grazing during the year 1938-39.

[Area in square miles]

Circle	Closed to all animals		Open to grazing			
			Of all animals		Of all animals except browsers (camels, sheep and goats).	
	Whole year	Part of year	Whole year	Part of year	Whole year	Part of year
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Eastern circle ..	561	10	1,447	..	4,869	8
Central circle ..	598	10	393	..	4,343	10
Western circle ..	594	115	841	..	5,651	115
Total Central Provinces and Berar	1,753	*135	2,681	..	14,863	133

*133 Sq. miles common.

Form No. 17.—Return of grazing in the state forests of the Central Provinces and Berar during the year 1938-39.

Circle	Grazing on payment							Number of animals						
	At full rates							At privileged rates						
	Buffaloes	Cows and bullocks	Goats	Sheep	Camels	Other animals	Fees received	Buffaloes	Cows and bullocks	Goats	Camels	Other animals	Fees received	
Actual													Value at full rates	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Eastern circle ..	49,642	97,627	1,923	50	..	2,792	Rs. 1,26,151	59,428	685,142	..	..	..	Rs. 1,16,041	Rs. 6,11,628
Central circle ..	21,306	67,413	22,489	17,258	..	86	1,07,115	30,227	555,480	..	..	..	1,10,354	5,68,899
Western circle ..	134,023	343,248	152,993	69,075	7	3,126	4,59,267	17,604	514,025	2	..	..	1,28,810	4,56,734
Total Central Provinces and Berar	204,971	508,288	177,405	86,383	7	6,004	Rs. 6,92,533	1,07,259	1,754,647	2	..	..	Rs. 3,55,205	Rs. 16,37,261

Circle	Grazing free						Number of animals							Grand total of value at full rates
	By right under settlement						During pleasure Government, or otherwise than under settlement						Total value of fees at full rates	
	Buffaloes	Cows and bullocks	Goats and sheep	Camels	Other animals	Value of fees at full rates	Buffaloes	Cows and bullocks	Goats	Camels	Other animals	Value of fees at full rates		
(1)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
Eastern circle	Rs. 762	34,033	2,412	..	142	Rs. 30,055	Rs. 30,055	Rs. 7,67,834
Central circle	284	12,965	20	..	80	12,607	12,607	6,88,621
Western circle	375	..	..	..	375	1,082	204,004	1,665	..	147	1,27,418	1,27,793	10,43,794
Total Central Provinces and Berar.	..	375	..	..	..	Rs. 375	2,128	251,002	4,097	..	369	Rs. 1,70,080	Rs. 1,70,455	Rs. 25,00,249

Form No. 18.— *Progress made in concentrated regeneration and afforestation during the year 1938-39.*

Circle	Area regenerated during the year		Area afforested during the year	Total	Cost of regeneration and afforestation during the year including tending
	Mainly natural	Mainly artificial			
(1)	(2)	(3)	(4)	(5)	(6)
	Acres	Acres	Acres	Acres	Rs.
Eastern circle ..	27,811	27	..	27,838	14,062
Central circle ..	43,997	383	..	44,380	10,845
Western circle ..	33,370	1,032	..	34,402	46,180
Total Central Provinces and Berar ..	105,178	1,442	..	106,620	71,087

Form No. 19.—*Outturn (in thousand cubic feet, solid) of Timber and Fuel during the year 1938-39 and agency of exploitation.*

Circle	Timber in the rough; logs					Timber in the rough; poles					Sawn or square 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)
Eastern circle ..	C. ft. 522	C. ft. 852	C. ft. 51	C. ft. ..	C. ft. 1,425	C. ft. 560	C. ft. 909	C. ft. 166	C. ft. ..	C. ft. 1,635	C. ft. 388	C. ft. 33	C. ft. 1	C. ft. ..	C. ft. 422
Central circle ..	1,148	1,375	15	..	2,538	362	1,340	71	..	1,773	103	..	..	..	103
Western circle ..	789	190	21	..	1,000	904	666	17	..	1,587	243	99	..	..	342
Total Central Provinces and Berar	2,459	2,417	87	..	4,963	1,826	2,915	254	..	4,995	734	132	1	..	867

Circle	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	
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
Eastern circle ..	C. ft. ..	C. ft. ..	C. ft. ..	C. ft. ..	C. ft. ..	C. ft. 1,470	C. ft. 1,794	C. ft. 218	C. ft. ..	C. ft. 3,482	C. ft. 1,344	C. ft. 9,043	C. ft. 292	C. ft. ..	C. ft. 10,679	C. ft. 14,161
Central circle ..	143	..	1	..	144	1,756	2,715	87	..	4,558	1,712	9,905	179	..	11,796	16,354
Western circle ..	354	153	39	..	546	2,290	1,108	77	..	3,475	4,020	3,536	589	118	8,263	11,738
Total Central Provinces and Berar.	497	153	40	..	690	5,516	5,617	382	..	11,515	7,076	22,484	1,060	118	30,738	42,253

Form No 20.—*Outturn of minor forest produce during the year 1938-39.*

Circle	Produce removed or utilized										Remarks.
	By Government agency.		By purchasers		By free grantees		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)	(12)
		Rs.		Rs.		Rs.		Rs.		Rs.	
<i>I.—Reserve Forests.</i>											
Eastern circle	..	27,548	..	4,08,447	..	40,574	..	..	..	4,76,569	
Central circle	..	8,216	..	3,68,085	..	22,504	..	..	..	3,98,805	
Western circle	..	7,299	..	1,32,181	..	1,52,321	..	2,775	..	9,94,476	
Total Central Provinces and Berar.	..	43,063	..	16,08,613	..	2,15,399	..	2,775	..	18,69,850	

Form No. 21.—Account of Timber and other Produce cut or collected by Government Agency and brought to Depots, sold locally, or otherwise disposed of during the year 1938-39.

Name of circle	Balance at commencement of the year in forest and sale depots	Received during the year	Total	Disposed of during the year	Balance in hand at close of the year in forests and sale depots
(1)	(2)	(3)	(4)	(5)	(6)
	C.ft.	C.ft.	C.ft.	C.ft.	C.ft.
Timber					
Eastern circle ..	711,594	1,447,652	2,159,246	1,558,324	600,922
Central circle ..	615,106	1,756,403	2,371,509	1,615,713	755,796
Western circle ..	955,118	2,290,295	3,245,413	2,548,088	697,325
Total Central Provinces and Berar.	2,281,818	5,494,350	7,776,168	5,722,125	2,054,043
Fuel					
Eastern circle ..	807,294	1,368,219	2,175,513	1,447,648	727,865
Central circle ..	234,250	1,711,809	1,946,059	1,580,359	365,700
Western circle ..	2,395,673	4,019,547	6,415,220	4,521,661	1,893,559
Total Central Provinces and Berar.	3,437,217	7,099,575	10,536,792	7,549,668	2,987,124
Minor Forest Produce value					
	Rs.	Rs.	Rs.	Rs.	Rs.
Eastern circle ..	3,342	27,548	30,890	23,472	7,418
Central circle ..	4,466	8,216	12,682	8,444	4,238
Western circle ..	1,329	7,299	8,628	4,350	4,278
Total Central Provinces and Berar.	9,137	43,063	52,200	36,266	15,934

Form No. 22.—Abstract showing the value of Timber and other Produce at Sale Depots for the year 1938-39.

Circle	On hand at commencement of the year			On hand at close of the year			Difference in value	
	No.	C.ft.	Value	No.	C.ft.	Value	In favour of the year	Against the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Rs.			Rs.	Rs.	Rs.
Timber								
Eastern circle		66,944	71,318	..	84,955	81,757	10,439	..
Central circle		44,031	21,800	..	70,984	35,831	14,031	..
Western circle		42,115	33,765	..	38,791	26,562	..	7,203
Total Central Provinces and Berar.	..	153,090	1,26,883	..	194,730	1,44,150	24,470	7,203
Fuel								
Eastern circle		2,977	375	..	2,412	7,813	7,438	..
Central circle
Western circle
Total Central Provinces and Berar.	..	2,977	375	..	2,412	7,813	7,438	..
Minor Forest Produce								
Eastern circle	1,252	..	..	2,368	1,116	..
Central circle
Western circle
Total Central Provinces and Berar.	1,252	..	..	2,368	1,116	..
Sleepers and scantlings								
Eastern circle		10,034	10,779	..	13,499	19,545	8,766	..
Central circle
Western circle
Total Central Provinces and Berar.	..	10,034	10,779	..	13,499	19,545	8,766	..
Grand total for Central Provinces and Berar.	1,39,289	..	..	1,73,876	41,790	7,203

Form No 23.—*Abstract showing the value of live and dead-stock for the year 1938-39.*

Description of live and dead-stock (1)	On hand at commencement of the year		On hand at close of the year		Difference in value	
	Number (2)	Value (3)	Number (4)	Value (5)	In favour of the year (6)	Against the year (7)
Elephants		Rs.		Rs.	Rs.	Rs.
Eastern circle ..	4	4,914	4	4,454	..	460
Central circle ..	10	16,734	9	15,607	1,473	2,600
Western circle ..	5	7,823	6	9,061	1,238	..
Total elephants ..	19	29,471	19	29,122	2,711	3,060
Other Live-stock						
Eastern circle ..	11	433	11	363	..	70
Central circle ..	31	1,225	30	968	..	257
Western circle ..	6	199	34	686	487	..
Total other Live-stock ..	48	1,857	75	2,017	487	327
Dead-stock						
Eastern circle ..	..	3,49,521	..	3,31,674	..	17,847
Central circle ..	..	2,64,813	..	2,54,129	560	11,244
Western circle ..	..	4,79,336	..	4,63,342	..	15,994
Total Dead-stock ..	..	10,93,670	..	10,49,145	560	45,085
Grand total for Central Provinces and Berar. ..	..	11,24,990	..	10,80,284	3,758	48,472

Form No. 24.—Statement of revenue for the year 1938-39.

X.—Forest—Revenue (1)	Central circle (2)	Eastern circle (3)	Western circle (4)	General direction (5)	Raipur Forest Tramway (6)	Total (7)
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed from the forests by Government Agency—						
(a) Timber ..	4,78,587	4,08,509	7,22,469	..	..	16,09,565
(b) Firewood and charcoal ..	50,529	29,437	63,703	..	..	1,43,669
(c) Bamboos ..	1,403	19,249	1,514	..	..	22,166
(d) Lac ..	3,655	1,614	177	..	..	5,446
(e) Grass and other minor produce ..	779	6,149	561	..	..	7,489
Total ..	5,34,953	4,64,958	7,88,424	..	..	17,88,335
II.—Timber and other produce removed from the forests by consumers or purchasers—						
(a) Timber ..	3,31,886	1,42,551	2,01,656	..	..	6,76,093
(b) Firewood and charcoal ..	1,48,977	1,64,903	91,163	..	..	4,05,043
(c) Bamboos ..	46,504	59,850	98,252	..	..	2,04,606
(d) Grazing and fodder grass ..	2,35,594	2,73,859	6,85,647	..	..	11,95,100
(e) Other minor produce ..	81,660	66,586	46,824	..	..	1,95,070
(f) Other items ..	..	6,852	..	..	..	6,852
(g) Commutation fees ..	4,327	18,244	1,358	..	..	23,929
Total ..	8,48,948	7,32,845	11,24,900	..	..	27,06,693

III.—Drift and waif wood and confiscated forest produce ..	1,550	76	81	..	..	1,707
IV.—(a) Revenue from forests not managed by Government ..	..	..	..	..	..	..
(b) Revenue from shared and private forests ..	5,530	..	1,173	..	..	6,703
Total ..	5,530	..	1,173	..	..	6,703
V.—Miscellaneous—						
(a) Fines and forfeitures ..	399	236	454	..	..	1,089
(b) Other receipts ..	49,830	59,967	97,857	1,267	..	2,08,921
(c) Refunds ..	7	..	466	..	..	473
(d) Receipts of Raipur Forest Tramway ..	..	..	..	..	1,57,059	1,57,059
(e) Contribution for leave salary, etc., of officers lent on Foreign Service.	20	583	..	1,315	..	1,918
(f) Contribution from District Council for the maintenance of forest roads used by public.	85	660	593	..	..	1,338
Total ..	50,341	61,446	99,370	2,582	1,57,059	3,70,798
Deduct—Refunds ..	—3,901	—801	—1,246	..	..	—5,948
Total—Revenue ..	14,37,421	12,58,524	20,12,702	2,582	1,57,059	48,68,288

Form No. 24.—Statement of expenditure for the year 1938-39—contd.

X.—Forest—Expenditure (1)	Central circle (2)	Eastern circle (3)	Western circle (4)	General direction (5)	Raipur Forest Tramway (6)	Total (7)
General Direction	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Pay of Officers—						
<i>Charged.</i>						
(a) Chief Conservator .. ..	..	..	..	30,516	..	30,516
(b) Superior Officers .. ..	..	..	..	82,475	..	82,475
Total .. ..	..	..	..	1,12,991	..	1,12,991
<i>Voted.</i>						
(c) Superior Officers .. ..	..	..	..	8,867	..	8,867
Total .. ..	..	..	..	8,867	..	8,867
II.—Pay of Establishment—						
(a) Rangers and Deputy Rangers .. ..	..	..	..	2,446	..	2,446
(b) Clerks .. ..	..	32	..	43,387	..	43,419
(c) Servants .. ..	..	12	55	4,800	..	4,867
(d) Elephant Establishment	215	935	404	..	..	1,554
(e) Temporary Establishment	132	..	180	154	..	466
Total	347	979	639	50,787	..	52,752

III—Allowances and Honoraria—						
(a) Expenditure in connection with the training of students in Forest Colleges.	..	..	..	12,848	..	12,848
(b) Dear District and other allowances	..	..	15	661	..	677
Total	..	..	15	13,509	..	13,525
(d) Travelling allowance—						
(i) Travelling allowance— <i>Charged</i>	..	..	..	5,573	..	5,573
(ii) Cost of passages granted under the Superior Civil Service Rules of 1924— <i>Charged</i>.	..	..	..	1,188	..	1,188
Total	..	..	..	6,761	..	6,761
(iii) Superior Officers— <i>Voted</i>	..	..	..	1,481	..	1,481
(iv) Establishment	..	1	74	2,660	..	2,735
Total	..	1	74	4,141	..	4,216
IV.—Contingencies— <i>Charged</i> —Rates and taxes						
Contingencies— <i>Voted</i>	..	702	96	1,122	12,486	14,406
Establishment charges payable to or recoverable from other Departments, etc.	..	..	..	..	..	..
Contribution to Forest Map Office, Dehra Dun	..	..	..	8,240	..	8,240
Grant-in-aid— <i>Charged</i> —Contribution of passages transferred from other Governments— <i>Charged</i>.	..	..	..	1,634	..	1,634
Total—General Direction	..	1,050	1,076	1,850	2,19,434	2,23,410

Form No. 24.—Statement of expenditure for the year 1938-39—contd.

X.—Forest—Expenditure (1)	Central circle (2)	Eastern circle (3)	Western circle (4)	General direction (5)	Raipur Forest Tramway (6)	Total (7)
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A.—Conservancy and Works						
I.—Timber and other produce removed from the forests by Government agency—						
(a) Timber ..	1,82,895	1,95,626	2,83,105	..	..	6,61,626
(b) Firewood and charcoal ..	484	5,552	8,645	..	..	14,681
(c) Bamboos ..	648	7,573	520	..	..	8,741
(d) Lac ..	2,282	2,346	250	..	..	4,878
(e) Grass and other minor produce ..	613	3,209	579	..	..	4,401
Total ..	1,86,922	2,14,306	2,93,099	..	..	6,94,327
II.—Timber and other produce removed from the forests by consumers or purchasers.						
	38,144	42,235	62,592	..	..	1,42,971
III.—Maintenance, repairs and renewals—						
(a) Feed and keep of cattle ..	5,854	2,173	3,246	..	..	11,273
(b) Renewals or replacements of stores, tools and plant.	4,368	7,790	6,557	..	..	18,665
(c) Roads and bridges ..	32,368	41,779	52,890	..	..	1,27,037
(d) Buildings ..	18,448	24,728	24,783	..	..	67,959
(e) Other works ..	3,461	5,757	4,444	..	..	13,662

(f) <i>Deduct</i> —Contributions from District Councils for the maintenance of forest roads used by the public.	..	..	..	..	..	..
Total	..	64,499	82,177	91,920	..	2,38,596
IV.—Conservation and regeneration—						
(a) Maintenance of boundaries	..	2,594	3,365	4,506	..	10,465
(b) Regeneration	..	3,679	2,959	2,389	..	9,027
(c) Fire protection	..	15,402	20,775	21,404	27	57,608
(d) Compensation for land and rights	..	..	12	18,039	..	18,051
(e) Other works	..	26,988	13,653	31,856	497	72,994
(f) Working plans	..	1,796	210	1,357	51	3,414
Total	..	50,459	40,974	79,551	575	1,71,559
V.—Miscellaneous—						
(a) Drift and waif wood and confiscated forest produce.	..	48	30	4	..	82
(b) Revenue from forests not managed by Government.	..	..	..	..	..	..
(c) Rent of forests and payments to shareholders in forests managed by Government.	..	..	..	..	..	..
(d) Law charges	..	302	213	99	..	614
(e) Grain compensation allowance	..	..	..	..	..	..
(f) Clothing	..	3,116	5,657	2,608	..	11,381
(g) Other charges	..	215	1,769	763	..	2,747
Total	..	3,681	7,669	3,474	..	14,824

Form No. 24.—Statement of expenditure for the year 1938-39—contd.

X.—Forest—Expenditure (1)	Central circle (2)	Eastern circle (3)	Western circle (4)	General direction (5)	Raipur Forest Tramway (6)	Total (7)
A.—Conservancy and Works—concl'd.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
VI.—Suspense—						
Suspense—Work advance ..	178	..	75	..	1,02,707	1,02,960
<i>Deduct—Recoveries</i> ..	—166	—222	—75	..	—1,00,517	—1,00,980
Total ..	12	—222	..	..	2,190	1,980
VII.—Raipur Forest Tramway—						
(a) Working expenses ..	..	..	..	..	98,503	98,503
(b) Appropriation to depreciation fund ..	..	..	..	..	29,606	29,606
(c) Renewals and replacements from the depreciation fund.	..	..	..	..	3,691	3,691
<i>Deduct—Expenditure met from the depreciation fund.</i>	..	..	..	..	—3,691	—3,691
Total ..	..	..	..	..	1,28,109	1,28,109
VIII.—Forest village schools ..	2,680	3,299	2,414	..	..	8,393
Total—A.—Conservancy and Works ..	3,46,397	3,90,438	5,33,050	575	1,30,299	14,00,759

B.—Establishment						
—Pay of officers—Charged—						
(a) Conservators	..	..	..	..	..	..
(b) Superior Officers	..	64,276	65,604	58,829	..	1,88,705
(c) Travelling allowance—						
(1) Conservators	..	..	..	..	..	..
(2) Superior Officers	..	5,060	5,347	6,439	..	16,846
(d) Cost of passages granted under the Superior Civil Services Rules of 1924.	..	..	..	4,060	..	4,060
Total—Charged	..	69,336	70,951	69,328	..	2,09,615
(e) Conservators—Voted						
(f) Superior Officers	..	49,939	59,145	51,325	..	1,60,409
Total—Voted	..	49,939	59,145	51,325	..	1,60,409
II.—Pay of establishment—						
(a) Subordinate establishment—						
(1) Permanent	..	2,29,943	2,97,905	3,01,580	..	8,29,428
(2) Temporary	..	3,123	4,786	1,960	..	9,869
(b) Office establishment—						
(1) Permanent	..	65,608	74,087	80,088	210	2,19,993
(2) Temporary	..	5,523	3,878	4,344	..	13,745
Total	..	3,04,197	3,80,656	3,87,972	210	10,73,035

Form No. 24.—Statement of expenditure for the year 1938-39—concl'd.

X.—Forest—Expenditure (1)	Central circle (2)	Eastern circle (3)	Western circle (4)	General direction (5)	Raipur Forest Tramway (6)	Total (7)
B.—Establishment—concl'd.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
III.—Allowances and Honoraria—						
(a) Expenditure in connection with the training of students in Forest Colleges.	35	13,376	141	..	..	13,552
(b) Dear district and other allowances ..	349	295	2,527	..	..	3,171
(c) Grain compensation allowance ..	..	..	..	..	..	..
(d) Travelling allowance—						
(i) Conservators ..	..	..	..	..	..	..
(ii) Superior Officers ..	4,639	6,206	8,093	..	..	18,938
(iii) Subordinate forest establishment ..	35,246	43,676	49,797	..	..	1,28,719
(iv) Office establishment ..	2,585	4,480	3,561	..	..	10,626
Total ..	42,854	68,033	64,119	..	..	1,75,006
IV.—Contingencies—						
(a) Stationery ..	879	572	877	..	..	2,328
(b) Carriage of tents and records ..	11,497	14,348	15,357	..	..	41,202
(c) Tents ..	971	2,109	2,191	..	..	5,271
(d) Official postage ..	4,632	7,128	6,872	..	..	18,632
(e) Other contingencies ..	8,113	11,429	9,922	..	..	29,464

(f) Losses	..	17	364	..	..	381
Total	26,092	35,603	35,583	..	..	97,278
V.—Contingencies—Rates and taxes— <i>Charged</i>	1,420	1,045	1,651	..	..	4,116
VI.—Establishment charges payable to or recoverable from other Government Departments, etc.						
<i>Deduct</i> —Establishment charges recoverable on account of cost of management of forests leased to Government—						
<i>Charged</i>	—2,130	..	..	..	..	—2,130
<i>Voted</i>	—7,391	..	..	..	..	—7,391
Total—B.—Establishment	4,84,317	6,15,433	6,09,978	210	..	17,09,938
C.—Interest on Capital Outlay	..	..	..	72,091	..	72,091
D.—Loss of exchange on leave allowances, etc., excluding stores— <i>Charged</i>.	..	..	..	461	..	461
E.—Loss by exchange on leave allowances, etc., excluding stores— <i>Voted</i>.	..	..	..	22	..	22
Total—B. F.—General direction	1,050	1,076	1,850	2,19,434	..	2,23,410
Total—B. F.—A.—Conservancy, etc.	3,46,397	3,90,438	5,33,050	575	1,30,299	14,00,759
Charges in England paid by the High Commissioner for India—						
(i) Leave salary and deputation pay— <i>Voted</i>	..	..	..	4,040	..	4,040
(ii) Leave salary and deputation pay— <i>Charged</i>	..	..	..	44,645	..	44,645
(iii) Sterling overseas pay— <i>Charged</i>	..	..	..	32,799	..	32,799
X.—Forest—Grand Total	8,31,764	10,06,947	11,44,878	3,74,277	1,30,299	34,88,165

Form No. 26.—Revenue received and outstanding on account of revenue during the year 1938-39.

Circle	Particulars	Outstandings at commencement of the year	Value of sales and other revenue during the year	Total	Amount realised during the year	Balance due to the department at end of the year	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Rs.	Rs.	Rs.	Rs.	Rs.	
Eastern Circle	35,181	12,71,241	13,06,422	12,58,524	47,898	* In the past net outstanding was being shown by the Divisional Forest Officer, South Chanda, instead of gross outstanding hence the difference.
Central Circle	*71,519	14,47,662	15,19,181	14,37,421	81,760	
Western Circle	60,933	20,38,027	20,98,960	20,12,702	86,258	
Total	1,67,633	47,56,930	49,24,563	47,08,647	2,15,916	
<i>Add—General Direction Division including Raipur Forest Tramway.</i>	1,59,641	1,59,641	1,59,641	..	
Grand Total Central Provinces and Berar.	1,67,633	49,16,571	50,84,204	48,68,288	2,15,916	

Form 27.—Outstandings and liabilities on account of contractors and disbursers for the year 1938-39.

Circle	Department debtor			Department creditor			Balance due	
	Opening cash and value of balance	Recoveries in supplies and work done during the year	Total	Opening balance	Payments made during the year	Total	To department (outstandings)	By department (liabilities)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. 'a. p.
Eastern Circle	8,70,332 4 3	8,70,332 4 3	39,496 6 11	8,36,121 6 3	8,75,617 13 2	5,285 8 11	..
Central Circle	6,89,835 8 8	6,89,835 8 8	17,450 10 1	6,92,147 13 7	7,09,598 7 8	19,762 15 0	..
Western Circle	10,60,502 5 8	10,60,502 5 8	18,498 12 0	10,63,666 3 3	10,82,164 15 3	21,662 9 7	..
Total	26,20,670 2 7	26,20,670 2 7	75,445 13 0	25,91,935 7 1	26,67,381 4 1	46,711 1 6	..
Add—General Direction Division.	..	59,910 8 7	59,910 8 7	276 10 4	59,843 9 9	60,120 4 1	209 11 6	..
Grand Total Central Provinces and Berar.	..	26,80,580 11 2	26,80,580 11 2	75,722 7 4	26,51,779 0 10	27,27,501 8 2	46,920 13 0	..

TABLE II.—Forest area by ownerships (in square miles).

Province (1)	Type of forest (2)	The state			Corporate bodies (6)	Private individuals (6)	Total [columns (5)+(6)+(7)] (8)	Remarks (9)
		Dedicated to timber production (3)	Other forests (4)	Total (5)				
Central Provinces and Berar.	Merchantable	12,403	3,333+2,488 Ryotwari forests	18,224	..	15,290	33,514	
	Unprofitable or in- accessible.	2,040	1,656+1,166 Ryotwari forests	4,862	..	9,160	14,022	
	Grand Total	14,443	8,643	23,086	..	24,450	47,536	

TABLE II.—Forest area by ownerships (in square miles).

Province (1)	Type of forest (2)	The state			Corporate bodies (6)	Private individuals (6)	Total [columns (5)+(6)+(7)] (8)	Remarks (9)
		Dedicated to timber production (3)	Other forests (4)	Total (5)				
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	Grand Total ..	14,443	8,643	23,086	..	24,450	47,536	