Public Works Department.

Government {1897} of Madras.

REVENUE.

Recd. } 1897. *Enclosures*

Regd. *Spare copies*

G.O., No. 446, 9th June 1897.

Fe 1858 W 8-7-97

Recorded with the remark that the estimate for the

JUNE. proposed timber basin at Mangalore is under consideration.

H/7 D. Br. C
DW

To the S.E. IV circle for information.

South Canara Forests.

Recording, with remarks, Board's Proceedings reviewing the inspection report on the —.

A.E. 30.6.96

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Land Revenue), Forest No. 182, dated 4th May 1897 :—

Read—the following letter from E. D. M. HOOPER, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue (through the Collector of South Canara), dated Coimbatore, 10th February 1897, No. 2964 :—

I have the honour to submit, for the orders of the Forest Member, an inspection note dealing with a recent visit to South Canara.

INSPECTION NOTE—SOUTH CANARA.

January 1897.

Inspection Notes.

Collector's Remarks.

On this occasion after inspecting the District Forest-office in Mangalore, the depôt on the Bunder and the Tannirbhavi plantation, I travelled to Pane Mangalore where a few logs are stored and on to Mani and Puttur; thence *viâ* Kavu and Jalsúr to Sullia. I examined the logs at Ulwar on the road to Sampaji and left the district *vid* Coorg.

The full and complete account of forest operations recorded in my previous inspection note has been consulted on the present occasion and the note now submitted is merely a succinct record of the progress made in carrying out the programme therein laid down and of the amendments now considered advisable.

2. *Selection.*—This work is complete in Coondapoor range except as regards the Hannar magne in which the boundaries of selected blocks are under revision for fresh notification. Of the proposed blocks referred to in my last inspection note four have been notified for settlement as follows :—

	Estimated area.
	ACS.
Dottinaberu	1,920
Baindur	3,840
Sarpanamane extension ...	250
Mavinagulli	1,280

the other proposals being abandoned.

Selection is also complete in the Udipi range. In the past two years the original proposals have been revised and many small blocks discarded. The following

Collector's Remarks.

Inspection Notes.

ten blocks are now being surveyed prior to notification for settlement :—

Mensinakan.	Vorwadi.
Upparijeddu.	Nagarthikan.
Kuchurmulkal.	Jantragudde.
Nire.	Keradakadu.
Malarpadavu.	Brahmawar.

In the Mangalore range a number of blocks proposed have been abandoned. Selection is now complete, and of those areas shown in 1895 as under selection the following only remain :—

Panamberi.	Kodiamale.
Hurabe.	Marodi.
Naranji.	Kipparadi.
Yekkar.	

of which Hurabe is under settlement and the last two are fresh selections under preliminary consideration.

In the Uppinangadi present range the following areas are still under selection :—

Bangadi and land adjoining Charmadi, Dharmastulu and Menal.

While fresh selections will include Kombar, Kadaba, Niladi, Kokada, Rekia; all timber forests each over 1 square mile in extent.

In the Puthur range we have under selection land adjoining Bhagmale, Jalsúr, Aletti, Pumale, Buntamale, Panja, Aithur, Nerimogar.

Of the areas formerly under selection in Kasaragod taluk a few have been notified for settlement and most of the others await the revenue settlement for final decision as to their reservation, meanwhile they are classed as reserved lands. This delay in notification is under the orders of the Board of Revenue on the understanding that the claimants to warg kumeries will demur to paying assessment on portions of the area they claim and the Forest department will take what they abandon. The more recent survey operations in the magnes of Sullia and Amara show that areas are being demarcated on the application of private owners who claim very large extents as kans when the title-deed (chitta) only shows an area of a few acres in every case. For instance, the temple of Subramaniya claims 379 acres of forest on a chitta of only 11 acres. Practically the whole of Sullia and Amara magnes has now been demarcated as private property and it will be for the decision of

Inspection Notes.

Collector's Remarks.

the Forest Settlement-officer whether the claimants have any right to them at all, and it is hoped if such right be declared that it can be commuted by grant of kumakies. The District Forest-officer is confident that the exchange will be acceptable when the wargdars are not given all the land demarcated out as their property.

3. *Settlement.*—The work has been transferred from Divisional officers to a Special Forest Settlement-officer, Mr. Mullins, who is only now commencing the work. The outturn of the past two years has been as follows :—

Reserved finally in Coondapoor—

Sarpanamane.	Mudaregudde.
Kadike.	Darlegudde.
Karnagudde.	Honnukodlu.
Abbigudde.	Guruvanakote.

and none in the other ranges.

The area under settlement has been increased by notifying under section 4 the following areas :—

Coondapoor taluk—
- Sarpanamane extension.
- Dottinarberu.
- Baindur.
- Mavinagulli.

Udipi range—
- Chinkramale extension.
- Mavinukodlu.

Mangalore range—
- Hurabe.

Puthur range—
- Virakamba.
- Muliar.
- Karadka.

The settlement has been delayed by the frequent change of Divisional officer in the northern taluks and in the case of blocks in Uppinangadi the numerous claims to kans and banes led to the cancelment of settlement notification. The final report of settlement in the large blocks of Naravi and Charmadi is under preparation and would have been completed but for the recent change of officers.

Operations in the immediate future will commence with inquiry in the Coondapoor hill forests and the final settlement of the few plain tracts of the range still incomplete. This will be followed by the completion of the large Naravi block leaving the Udipi hill tracts for next season, and if the Forest Settlement-officer finds leisure from his other work on the coast,

Dodderi and Alelti in Puttur range—*Fort St. George Gazette*, Part I, page 1260, dated 20th October 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

we may expect to witness the conclusion of settlement in South Canara in 1899 with the exception, perhaps, of the southern portion of Kasaragod taluk where are the awkward warg kumeries.

4. *Survey.*—During the past two years the revenue survey work has been completed in Kasaragod, Udipi and Mangalore taluks though maps are not yet available for all villages. Our selection in plain blocks has been thereby simplified. The work of our own surveyors is complete except for correction of previous work and the survey of some plain blocks in Udipi for which maps are urgently required. Forest surveyors will then no longer be necessary; the rest of the hill forests awaiting survey by the Government of India survey, though it is understood the Naravi block, if not the others, will be undertaken by the revenue survey who have also interested themselves in the work of forest survey in Uppinangadi and have agreed to supply maps of all our forest area on our clearing the necessary base line. This action on their part has been of great assistance to us and our acknowledgments are due to the Superintendent.

5. *Maps.*—Village maps are supplied as published by the revenue survey. The Mangalore and Kasaragod skeleton taluk maps have been received. The District Forest-officer has maps from departmental surveys of all reserved forests and of all blocks under settlement, but it is found that the survey was too hurried to secure necessary accuracy and errors have to be corrected.

6. *Demarcation.*—The work of late has been carried on in all the taluks except Kasaragod. The estimate of 1895 for future work provided Rs. 20 per mile for final demarcation, but Mr. Battie is sanguine of being able to execute it at an average cost of Rs. 15 per mile while the total expenditure will be reduced by the fact of the Revenue survey cutting adjoining kumaki lines in Uppinangadi taluk and this will have the effect also of quickening the demarcation work generally. The total work up to date is as follows :—

	Miles.	Cost. Rs.
Final demarcation	308	5,358
Preliminary demarcation ...	2,100	1,606

The rapid re-growth of vegetation in Canara will necessitate a larger constant outlay on re-clearing than in other districts.

Inspection Notes.

7. *Working arrangements.*—A plan of working was drawn up for the Pumale block by Mr. Foulkes, but it was in general terms and considered only sufficiently detailed to determine the maximum amount of produce to extract yearly and upon it to base our operations for export. The catechu forests in the working circle of Honekodlu are still being worked satisfactorily. A working plan has been approved for a circle including Sarpanamane, Sarvimtagudde, Kadiki, Kernagudde, Baindur and Guruvanakota. The produce is firewood exported from Baindur. The forests of Sabladi, Poitaji, Chembagudde, Kerailpilla, Pilarkan, Kutiyar, Chitur, Ajarkadu and Mulyar are being worked in rotation under arrangements in force for some years but under no definitely sanctioned plan. Similarly the plantations at Mangalore, viz., Ullal, Tannirbhavi are worked in regular order as also the thinnings in Parappa plantations. The rest of the forests are either closed or under felling by contract, the purchaser taking a fixed quantity of material at prices agreed to in each case. The demand for timber is very slack, but, on the other hand, firewood is much wanted in increasing quantities near the coast and for its supply some further located fellings can be arranged in forests along rivers but elsewhere the present difficulty of carriage has to be overcome before timber extraction can go on, and until the work of settlement and demarcation are nearer completion, regular working will be delayed.

It is noted that the former felling arrangements in Udipi have been stopped. Under them we paid the transport contractor 67 per cent. of the total value received by sale of produce we brought to depôt.

In their place departmental collection has been resorted to and the cost reduced to about 50 per cent. of the selling price.

A system has grown up of leasing the right to charge import dues on fuel brought to the following large towns:—

Coondapoor.	* Gungoli.
Udipi.	* Busra.
Kárkal.	* Mulki.
Mangalore.	* Múdabidri.
Buntwal.	* Ullal.
Pani Mangalore.	* Uppinangadi.
Puttúr.	* Vitla.
Kasaragod.	* Mungeshwar.

Collector's Remarks.

Poitaji and Chembagudde are under orders of abandonment—*vide* Proceedings, Forest No. 5[illegible] Board's Pro-ceedings, Forest No. 5[illegible]355, dated 11th December 1896.

(Intld.) W.H.W.,
Collector.

The Contractors being authorised to act as thanadars their action practically controls the transit of timber. The notification is at page 18, District Gazette, for February 1897.

(Intld.) W.H.W,
Collector.

Collector's Remarks.

Inspection Notes.

Of these the towns marked with an asterisk have been contracted for this year for the first time. The produce is from unreserved lands, kumakis and unassessed hadis, since free export from these latter is not permitted under the rules. As regards minor produce in the past year Coondapoor alone had cinnamon oil stills, 42 in all, which brought in each Rs. 5 monthly.

This season similar stills are at work in Coondapoor and Udipi. On the other hand sandal stills have not been asked for, the reason alleged being the fall in price of sandal oil.

The contract for kadshige has been arranged in the north of Coondapoor, but no one accepted the terms offered for it in Puttúr. Horns have been collected departmentally and a stock of 627 lb. is now on hand ready for sale in Mangalore.

Improvement fellings were commenced in 1895 in Someshwar in the interest of the *Hopea parviflora* and are being continued. It is too soon to judge of the results, but as expected the operation is not remunerative, the cut produce giving little return.

In the old reserve of Pilarkhan, similar work has been carried on for some years, and the forest being near the market the produce is readily sold and initial cost recovered. Creeper cuttings have still to be systematically arranged throughout the north forests.

On the other hand the suggested fellings of *Terminalia paniculata* in Coondapoor have not been effected; as on consideration it was rightly decided to be inadvisable until the produce becomes saleable, the presence of the trees not being harmful.

It is noteworthy that from Baindur, Tirúr and from Coondapoor, the most northern parts, there is an increasing export of firewood to Bombay City by native craft chartered for the purpose and it is expected that our timber forests whereof comparatively valueless species will be indented upon to supply this market where conveniently accessible to the sea. Other prospective arrangements anticipated in 1895 have had to give way owing to the abandonment of small reserves less than a square mile in extent.

Inspection Notes.

8. *Forest Fire Conservancy.*—The policy proposed two years since is being adhered to. The only additions to the area under rigid fire conservancy are those cleared in located fellings. It is also under consideration whether to abandon the rigid protection of Dharmastala. This reserve is one of almost pure *Xylia* which has grown up on abandoned kumeris. The growth is regular and over 30 feet and it is thought that fire passing through has only limited power for harm especially as there is a marked absence of grass and inflammable undergrowth, while the cost of the current protection is high. It will be better therefore to seek a less expensive system for protecting it and abandon the operation if we are assured the forest is naturally protected.

9. *Artificial reproduction.*—The experiment of dibbling seed and putting out nursery plants is being continued on a small inexpensive scale in the reserves of Someshwar, Pilarkhan, Jalsur, Subladi and Parapa. The species chosen were *Pterocarpus*, *Artocarpus*, *Hopia* and Blackwood, but the result has been disappointing. Apart from the failure to germinate of the dibbled seed even on ploughed land, the plants put out have been extensively damaged by the browsing of deer and the mischief of monkeys. The work is however, being persevered in and is being given serious attention. As regards the established plantations, it must be noted that the teak in Parapa is not progressing and its future treatment is now being considered.

The Casuarina plantation at Ullal is not being extended, for no ground is available, but the young plants put out to replace the stunted *Calophyllum* were watered in 1895 and are now being left to themselves.

The plantation of Tannirbhavi has been worked in rotation for thinnings which are now complete. The inroad of the sea has swept away a large number of trees and it is advisable to fell all trees in dangerous proximity to the sea. We have a demand for the produce which is supplied to the Mangalore jail. I would thereupon advocate the extension of the plantation hut to the south instead of to the north, for on the split facing the

Collector's Remarks.

Collector's Remarks.

The Port officer Mr. Brown has informed me that he does not think the Marine Department would object. The District Forest-officer should ascertain whether the municipality makes any claim or objection.

(Intld.) W.H.W.,
Collector.

Some offenders give false names so that they may get off with an admonition more than once. This gives trouble to guards and watchers, but I think it is a good system that every one should be let off once.

(Intld.) W.H.W.,
Collector.

Inspection Notes.

bunder there is fixed sand which would grow the trees and they would pay better than the trees we possess further off. It would be as well too to notify the area under section 4 after preliminary enquiry as to its being within the municipality in which case the rating might prevent our planting.

10. *Cultural operations.*—There is nothing new to record under this head. The compilation of Sylvicultural notes is continued and Mr. Foulkes has published a valuable record of the qualities of the principal species of trees found in the district. These notes are for constant correction and to be added to.

11. *General Protection.*—The number of reported offences remains high and the policy of punishing trespass and the removal of head loads by simple admonishing has not yet borne fruit. The abandonment of small reserves should have the effect of keeping down the number of petty offences which are rife only in the plain forests.

The figures for the six months ending 31st December are as follows :—

Range.	Felling.	Grazing.	Fire.	Total.	Petty offences.
Coondapoor	58	9	..	67	486
Udipi	67	16	..	83	163
Mangalore	15	2	..	17	42
Puttûr	211	3	..	214	239
Uppinangadi	35	2	..	37	28
Total ..	..	..	..	418	951

The present District Forest-officer restricts his exercise of the authority to compound mainly to cases where reserved trees the produce of kumakis is cut without license. The number of major offences is largely composed of kumeri cases, while the petty cases are especially numerous in Coondapoor north plain blocks.

12. *Establishment.*—With the abandonment of small blocks of reserved forests there has been a reduction in the staff of temporary establishment employed.

13. *Revenue.*—The figures for the past two years are as follows :—

	1894-95.	1895-96.
	Rs.	Rs.
I.—(*a*) Timber ...	8,896	6,783
(*b*) Fuel	4,523	1,812
(*c*) Bamboos ...	24	...
(*e*) Minor produce.	9,762	8,739

Inspection Notes.

	1894–95.	1895–96.
	Rs.	Rs.
II.—(*a*) Timber ...	867	1,587
(*b*) Fuel	5,567	11,309
(*c*) Bamboos ...	1,442	1,468
(*d*) Grazing grass...	4,014	3,521
(*e*) Minor produce.	22,674	19,157
III.—Confiscation ...	504	1,983
V.—(*a*) Fines	302	174
(*c*) Others	5,409	2,891
Total ...	63,984	59,424

Collector's Remarks.

Comparing this return with the rough estimate made in 1895, the anticipated expansion has not come about under all heads. There has been an increase under timber and fuel removed by purchasers but it has been absorbed by the reduction under minor produce leases and the total disappearance of revenue from sandal stills. The budget estimate for 1896–97 was Rs. 74,600 but is now considered probable that only Rs. 64,000 will be collected.

The revenue will now be dealt with by sub-heads separately.

Revenue, I (a) Timber.—The estimate of 10,000 cubic feet as our annual yield is being worked up to. The forests worked are, in Puttur range, the Pumale and surrounding blocks, and in Udipi range the Someshwar block. The system of contracting out the work has been stopped in favour of departmental fellings, the transport only being done on contract. The logs from Puttur were for the most part formerly sawn before extraction, but it was found to be wasteful [illegible] and unprofitable. The timber is now sent to Mangalore in the log and there sold at fixed rates without difficulty. The total costs amount to between 7 and 8 annas per cubic foot and the prices realized are as follows :—

	Per cubic feet. Rs.	A.	P.
Tirma (Xylia)	0	10	4
Banapa (T. tomentosa) ...	0	15	6
Blackwood (Dalbergia) ...	1	2	0
Vengai (Pterocarpus) ...	0	15	6
Kiralbhogi (Hopea) Jack (Artocarpus)	1	1	0
Maruva (T. Paniculata) ...	0	9	0
Benteak (Lagerstrœmia).	0	13	0
Teak (Tectona)	1	12	0

Most of the timber is Xylia and Banapu and the purchasers use the material in Mangalore town where it competes with produce brought from Malabar. The net profit of the Mangalore timber after deducting petty establishment charges will amount to Rs. 3,000 a year. The Udipi timber is more profitable, the distance from forest to market being less. The total volume yearly is about 3,000 cubic feet mostly, Banapu and Kiralbhogi (Hopea) bringing in Rs. 2,000, from which if we deduct charges at As. 5 per cubic foot, the net profit will be Rs. 1,000.

The gross revenue from timber departmentally collected amounts to Rs. 10,000 which sum will not be increased until our working is developed.

Revenue, I (b) Fuel.—There is no revenue expected under this head, our fuel works all being conducted by contractors.

Revenue, I (c) Bamboos.—The same remarks apply.

Revenue, I (e) Minor Produce.—Our only source of revenue under this head is catechu which brings in Rs. 7,000 per annum at an expenditure of Rs. 3,000. Until lately the cost was much greater. In the next few years we may anticipate a revenue increased to Rs. 8,500 at a cost of Rs. 3,500 from the extension of operations to a second circle and to certain unreserved lands in the Coondapoor range.

Revenue, II (a) Timber.—The revenue estimated will be Rs. 2,000 to Rs. 2,500 yearly. This is an increase over past figures chiefly due to previous error in classifying dead timber trees under fuel.

Revenue, II (b) Fuel.—The expansion of the revenue under this head anticipated in 1895 has been fully realised. The budget estimate for 1896–97 is Rs. 10,000 and our income will in all likelihood reach Rs. 12,000. It is hoped that we shall secure as much as Rs. 15,000 within another three years from regulated fellings in Coondapoor.

Revenue, II (c) Bamboos.—The expansion under this head has not been fully realized, the budget estimate of Rs. 2,000 will however be recovered and a yearly increase of a small amount can still be hoped for.

Revenue, II (d) Grass and Grazing.—The sum budgeted under this head is Rs. 5,000 and it will be recovered. The policy of abandoning the small reserves has resulted in a loss of revenue from grazing which has only partially been compensated by the increased rates sanctioned by Government. It is not expected that our revenue will develop from this source at present.

When these operations are going on, villagers are given leaves and loppings free under Mr. Foulke's arrangement. In some places this concession is gladly availed of, in others neglected.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Collector's Remarks.

Inspection Notes.

Inspection Notes.

Revenue, II (e) Minor Produce.—The budget amount is Rs. 22,000, but the contracts only total Rs. 19,000. This is a fluctuating income due to unstable prices for nutmegs, wild mace, myrabolams and shigikoi, &c.

Dealing with the total revenue, we may expect Rs. 65,000 per annum steadily after three years. The previous estimate was Rs. 75,000 and the deficiency is mostly due to cessation of sandal distillation of which no recommencement is anticipated also to smaller returns under grazing and bamboos.

14. The expenditure for the past two years has been as follows :—

		1894–95.	1895–96.
		Rs.	Rs.
A-I.	(a) Timber ...	11,502	4,517
	(b) Fuel ...	1,359	1,337
	(c) Bamboos ...	12	...
	(e) Minor Produce	3,608	5,525
A-II.	...	6,673	7,237
III.	...	1	...
VI.	(a) Elephant ...	1,900	...
	(b) Feed ...	628	496
	(c) Stores ...	465	223
A-VII.	(a) Buildings. ...	524	348
	(c) Other works.	2	1
A-VIII	(a) Demarcation.	318	412
	(e) Surveys ...	2,883	2,172
	(d) Working plans	...	46
	(e) Sowing and planting ...	445	germi-
	(f) Fire protection.	973	808 plon
	(g) Other works.	1,976	1,0 ve been
IX.	(a) Refunds ...	257	browsing
	(b) Law charges.		monkeys.
	(c) Other charges.		28
			being persever- 1,637
			serious attenti 362
			the established plant ... 1
			cated that the 854 731
			timber is no ab
			there s
		34,380	27,281

After discussing the works for execution with the District Forest-officer, we have together decided that our probable expenditure in the next few years will be based on the following considerations :—

A-I (a) Timber.—As recorded under revenue head I (*a*) we propose to expend Rs. 6,000 on bringing timber to Mangalore and Udipi. With the opening of the roads now suggested, larger consignments can be made. It is probable that we shall at no distant date entirely displace Malabar wood from Mangalore, but until our general administration is more advanced and establishment stronger, we cannot do better than carry out the present small programme.

Malabar private importers have an advantage by taking possession of the best site for their timber depôt. The Conservator does not mention the timber basin among the proposed items of expenditure. It seems to me advisable to oust the

Collector's Remarks.

Abandonment of smaller reserves assists the decline in grazing. It is reported also that some Forest subordinates make a regular surreptitious income by permitting grazing and free removal of head-loads, for which they get Rs. 4 and a fowl annually, also assistance in clearing boundaries and fire traces.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Collector's Remarks.

interlopers and secure a proper place for handling our timber. Delay may cause difficulties. I do not see why this should not come under A-VII (*b*) if the Public Works Department does not enter it in their budget.

(Intld.) W.H.W.,
Collector.

The Local Fund supervisor has examined the line. Unfortunately the Taluk Board is not much in favour of contributing to this project.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Inspection Notes.

A-I (b) Fuel.—The present charge will not continue.

A-I (e) Minor produce.—The Revenue note explains why we shall require a sum of Rs. 3,500 commencing in 1897–98 and included in the budget estimates.

A-II.—The cost under this head has been Rs. 8,000 in 1896–97 and it is probable that this sum will be increased by transfer to it of establishment charges on account of watchers hitherto partly classed under A-VIII (*g*) (other works). We shall require from Rs. 9,000 to Rs. 10,000 instead of in all Rs. 11,000 for the watching establishment as at present; the present scale will not be entertained for reasons elsewhere recorded.

A-VI (b) Elephant feed.—Within the next three years an additional pair of elephants will be required for timber-dragging, but at present the sum of Rs. 600 suffices each year.

A-VI (c).—Stores will necessitate an outlay of Rs. 200 yearly.

A-VII (a) Roads.—The road from Savanal to Guruvankiri is already constructed but old and disused. It is for further investigation whether it will be profitable to improve it for the extraction of bamboo. It is proposed to open out roads in Coondapoor, Udipi and Uppinangadi as follows :—

I. Coondapoor range—Wandse to Yelgit, 14 miles.—A road of general utility tapping several forests under regular working and an alternative route to the Coast road which is at times obliterated by sand. The Forest Department will contribute Rs. 1,000 to its construction cost in 1897–98 and provision is made in the budget.

II. Jadkal to Madiberi, 10 miles.—This road will open up the Madiberi reserve which contains mature timber. Its length will be 10 miles and will be a forest undertaking costing Rs. 2,000. This should be spent in 1898–99 and provision included in next budget.

Udipi Range.—Branch roads to open up Someshwar blocks should be constructed and provision made in next budget estimate for 5 miles at Rs. 150, or in all Rs. 750.

Inspection Notes.

Uppinangadi Range—I Subramania to Gundia.—This work is now being constructed by Local Fund department and a grant from forests to the extent of Rs. 1,000 will be made in 1897–98. This will open up the reserves of Bhagmale, Kombhur and Gundia.

II. *Meyar to Rekhia*, 16 miles, to join the Charmadi and Sheradi ghaut roads and passing through the reserves of Kokada, Subaji, Karinjia and Meyar. This is a road of great importance, as it opens up mature forests within easy access to the market, and on this account should be taken in hand without delay. This road will cost Rs. 5,000 and, if sanctioned, should be commenced on savings when available. It will not require to be constructed throughout at once for every mile will be of immediate use.

Puthur Range.—Certain roads will be necessary to open up Kiribug and Kilarmale, but these forests need not be worked so soon as those in Uppinangadi range which are nearer the market.

The total expenditure on new roads in the next three years may be anticipated to amount to Rs. 10,000, or annually with repairs Rs. 3,500.

A-VII (*b*), *Buildings.*—These proposals will be built on the registered plan amended where necessary to suit local conditions and are estimated to cost with out-houses and stables Rs. 800 each or with a well Rs. 1,000. The localities selected are as follows :—

In Coondapoor Range.—Kadiki now under construction.

Alur.—Provision is made in the budget for 1897–98 for this work.

Madaberi.—This building will be carried on with the road work between Jadkal and Madeberi in 1898–99.

In Udipi Range.—A building will be erected in connection with the works on the Someshwar blocks in 1898–99.

In Uppinangadi Range.—A building on the Meyar-Rekkia road in 1898–99. A building at Kombhur on the Subramania-Gundia road budgeted for in 1897–98.

It is not proposed at present to build in Puthur range.

Collector's Remarks.

A very useful road. It will facilitate transit of cattle to Kulgunda fair down the Manzarabad ghaut.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

The total expenditure on these original works will therefore be as follows :—

	Rs.
In 1896–97	800
„ 1897–98	1,600
„ 1898–99	2,400

Adding on account of forest huts Rs. 500 yearly and cost of annual repairs to Rangs offices, depôts, &c., Rs. 500 and total allotment will be required as follows :—

	Rs.
In 1897–98	2,600
„ 1898–99	3,500

A-VII (*c*) *Other works*.—Under this head the cost of wells will amount to Rs. 500 yearly in connection with present and new buildings. I have discussed with the District Forest-officer the practicability and usefulness of opening up the Natravati and Kumardari rivers. In the case of Natravati, floating was carried out for some years from Uppinangadi, the produce floated coming from the forests of Shiradi. But at the present day there is much mature timber available towards Subramaniya which we could bring to market if the Kumardari and Kempa Halla streams permitted our floating it down. We think it worthwhile to arrange for a practical survey of the river-bed to discover how far without interference with the storage of water it will be possible to float down moderate size timber between September and January and at my suggestion the preliminary enquiries will now be instituted and I would advocate expenditure up to Rs. 500 without delay.

A-VIII (*a*) *Demarcation.*—In this Inspection note a general reference has been made to the demarcation work still to be carried out. Our immediate requirements are calculated to be as follows yearly :—

Coondapoor ...	Rs. 600 for 5 years.
Udipi ...	„ 350 for 3 „
Mangalore ...	„ 300 for 3 „
Uppinangadi.	„ 500 for 5 „
Puthur ...	„ 800 for 5 „

or in all Rs. 11,000 in five years.

It must be remembered that the great reduction in this revised estimate is almost entirely due to the arrangements which the Survey department has enabled us to make.

A-VIII (*c*) *Surveys.*—There will be no regular charge under this head.

A-VIII (*d*) *Working plans.*—Such plans as will be made will be prepared without special expenditure.

Inspection Notes.

Collector's Remarks.

A-VIII (*e*) *Sawing and Planting.*—At present experimental works are costing Rs. 200 per annum and this will continue. In addition a plantation of casuarina over 50 acres is proposed on the sand pit opposite the Bandur to cost Rs. 2,500 in five years so that under this head Rs. 700 will be required.

A-VIII (*f*) *Fire-protection.*—At present the allotment is Rs. 1,000 yearly. It is proposed not to exceed this.

A-VIII (*g*) *Other works.*—The expenditure hitherto has been incurred on employing watchers, the staff of which is being reduced, the remainder being chargeable to A-II. The sum of Rs. 700 per annum is proposed for improvement fellings in the various ranges, Rs. 400 of which will be spent in Coondapoor and Puthur ranges. This sum is very small, but it will be necessary to thoroughly organize our operations on a small scale before extending them which should be done when the supervising establishment is at length strengthened.

A-IX.—The charges under this head cannot be foreseen.

15. *Office.*—The District Forest-office was examined and a separate report submitted. The office is in good condition on the whole and the staff of clerks satisfactory.

16. (i) *General remarks.*—During the year, the Uppinangadi range has been amalgamated with the Kasaragod range and split up into the two ranges known as Puthur and Uppinangadi. With reference to paragraph 4 of Board's Resolution, Forest No. 361, dated 17th June 1895, this arrangement has been considered as temporary. Its object is to secure for portions of Uppinangadi more supervision that was possible while worked with the forests of the rest of the taluk seeing that together they include some of the richest portions of the ghâts likely to come under early working.

(ii) The Kumaki rules are now at work and there are various points which still cause doubt as to the privileges to be retained especially in connection with unassessed kans which there is a tendency to treat on all fours with assessed kans and to consider as enjoying equal privileges notwithstanding the profound difference of status and treatment ordered by

I append a copy of this office Dis. No. 860-Ver. of 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

the rules. It is true that, in the correspondence leading up to the rules, unassessed kans are not referred to. Sullia and Amara, however, contain the only assessed kans in the district, but in the more northern Magnes there are very many unassessed and it is for interpretation whether kans so declared prior to 1812 or 1819 are to be considered assessed.

(iii) *Kumakis.*—Already there are applications for extra Kumaki by ryots with no ancestral or long standing claim to such holdings. It is difficult for a Collector to make exceptions in the matter of grant so long as there is unreserved land for the purpose.

(iv) Mr. Battie has been in the district for sixteen months and has secured a good grasp of its forest administration.

(Signed) E. D. M. HOOPER,
Ag. Conservator of Forests,
Southern Circle.

APPENDIX.

Read—Proceedings of the Acting Collector of South Canara, dated 22nd May 1896, Dis. No. 860-Ver.

Read report, Ref. on Cur. No. 703, dated 9th April 1896, submitted to the District Forest-officer by the Tahsildar of Uppinangadi taluk, requesting that the word "assessed" in the term "assessed kans" may be defined.

Order—

The Tahsildar is informed that no distinction appears to have been made between kans that bear shist (assessed kans) and those that do not bear shist (unassessed kans) as regards claims to obtain pepper or cardamom from them, as such claims were made to depend on the fact whether a kan was found mentioned in the chittas of 1800—1801, or of 1812 or of 1819. Claims proved by any of these public records are admissible.

The attention of the Forest Department is drawn to the Collector's suggestion contained in the last part of paragraph 23 of letter, No. 794, dated 3rd April 1884, printed in Board's Proceedings, Forest No. 3084-273, dated 2nd September 1884 which has met with the Secretary of State's approval.

(Signed) L. C. MILLER,
Acting Collector.

(True Copy.)

(Signed) W. H. WELSH,
Collector.

Endorsement by the Collector of South Canara, dated 25th February 1897, Dis. on Cur. No. 3548-For.

Forwarded.

Resolution—Forest No. 182, dated 4th May 1897.

Recorded.

2. *Paragraph 2 of the Inspection Note.*—The Collector is requested to submit a special report on the statement that practically the whole of the Sullia and Amara magnes have been demarcated by the Survey department as private property, although many of the claims seem *primâ facie* to be grossly exaggerated.

Paragraph 3.—The Board learns with much satisfaction that there is a fair prospect of the settlement of the District being completed in 1899, save in the southern magnies of the Kasaragod taluk, where selection has been necessarily delayed.

Paragraph 7.—With reference to the Collector's remark that Poitaji and Chembaguddi reserves were ordered to be abandoned, the Board observes that Government has since sanctioned their retention (*vide* Government Order communicated in Board's Proceedings, Forest Mis. No. 189, dated 25th February 1897). The Collector is requested to state whether the working plan for the Poitaji and Kayapulla blocks submitted by him and recorded in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896, requires modification, and if so, in what respects. The plan and the Conservator's letter thereon are herewith sent to the Collector for reference.

Paragraph 8.—The Conservator's advice for minimizing the cost of fire-protection should receive the careful attention of the District Forest-officer.

Paragraph 9.—The Board approves of the Conservator's instructions regarding the conservancy and extension of the Tannirbhavi plantation, subject to an explicit statement from the Marine Department that it has no longer any objection thereto.

Paragraph 11.—From the large number of petty offences reported during the six months ending 31st December 1896, the Board fears that the penal provisions of the Act are being worked in an unnecessarily harassing and oppressive manner. The Collector is requested to give the matter very serious attention, and to make every endeavour to dispense with prosecutions in cases in which offences are of a mere technical character involving no appreciable damage to the forest. He should at once report what effect has been given to the instructions of Government and the Board that simple trespass should not ordinarily be treated as an offence at all (Board's Proceedings, No. 823, dated 12th June 1895).

Paragraph 13.—(1) The disappearance of revenue from sandalwood stills is attributed in paragraph 8 to a fall in the price of sandal oil being assigned as a reason for the non-submission of application for stills. The Collector is requested to report whether private stills continue to be worked.

(2) *Xylia* seems from this paragraph to be in general demand in the district, and in paragraph 8, as well as in former reports, there is an allusion to forests of almost pure *Xylia* which have grown up on abandoned kumeris. The Collector is requested to report whether any of these forests are in a condition to be profitably worked for railway sleepers, if a saw mill were erected in the neighbourhood.

(3) The free grant of leaves and loppings to villagers arranged for by Mr. Foulkes should be encouraged as far as possible. In some cases, it is said that the concession was neglected. The Board would be glad to know whether, in these cases, the villagers concerned had been duly informed of the concession before felling operations were commenced.

(4) The illicit dealings of forest subordinates in the matter of grazing, &c., referred to by the Collector should be made the subject of special investigation.

(5) The estimate for constructing a timber basin at Mangalore has been submitted to Government in Board's Proceedings, Forest Mis. No. 23, dated 11th January 1897. As stated therein, the cost will have to be provided from the Public Works budget. The Collector's remark that the delay in carrying out the work may cause difficulties will be brought to the notice of Government.

Paragraph 14.—*A-VII (c)* The Board has no objection to an early expenditure of Rs. 500 on a river survey, provided the work is entrusted to an officer who knows exactly what is required.

Paragraph 16.—(ii) The Board observes that the Collector has rightly decided that so-called unassessed káns mentioned in the chittas of 1800–1801 or of 1812 or of 1819 are *bonâ fide* assessed káns. A kán may be subject to assessment although the assessment thereon does not appear separately in the accounts.

(True Copy and Extract.)

(Signed) N. S. BRODIE,
Ag. Secretary.

To the Secretary to Government, Revenue Department.
" Collector of South Canara, with the working plan and the Conservator's letter in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896.
" Conservator of Forests, Southern Circle.

Order—No. 446, Revenue, dated 9th June 1897.

Forest No. 97.

Recorded.

2. As regards the remarks contained in paragraph 2 of the Proceedings read above on the subject of a timber basin at Mangalore, the Board's attention will be drawn to G.O., Mis. No. 2710, dated 28th May 1897, from which it will be seen that the Government has since approved of the proposal of the Collector and Conservator and that the estimate is under scrutiny in the Public Works Department.

(True Extract.)

(Signed) G. STOKES,
Ag. Secretary to Government.

To the Board of Revenue (Land Revenue).
Copy to the Public Works Department.

Bxd. Shaik Karim.

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REVENUE.

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OP 6445/97

G.O., No. 446, 9th June 1897.

JUNE.

South Canara Forests.

Recording, with remarks, Board's Proceedings reviewing the inspection report on the —.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Land Revenue), Forest No. 182, dated 4th May 1897 :—

Read—the following letter from E. D. M. HOOPER, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue (through the Collector of South Canara), dated Coimbatore, 10th February 1897, No. 2964 :—

I have the honour to submit, for the orders of the Forest Member, an inspection note dealing with a recent visit to South Canara.

INSPECTION NOTE—SOUTH CANARA.

January 1897.

Inspection Notes.

On this occasion after inspecting the District Forest-office in Mangalore, the depôt on the Bunder and the Tannirbhavi plantation, I travelled to Pane Mangalore where a few logs are stored and on to Mani and Puttur; thence *viâ* Kavu and Jalsúr to Sullia. I examined the logs at Ulwar on the road to Sampaji and left the district *viâ* Coorg.

Collector's Remarks.

The full and complete account of forest operations recorded in my previous inspection note has been consulted on the present occasion and the note now submitted is merely a succinct record of the progress made in carrying out the programme therein laid down and of the amendments now considered advisable.

2. *Selection.*—This work is complete in Coondapoor range except as regards the Hannar magne in which the boundaries of selected blocks are under revision for fresh notification. Of the proposed blocks referred to in my last inspection note four have been notified for settlement as follows :—

	Estimated area.
	ACS.
Dottinaberu	1,920
Baindur	3,840
Sarpanamane extension ...	250
Mavinagulli	1,280

the other proposals being abandoned.

Selection is also complete in the Udipi range. In the past two years the original proposals have been revised and many small blocks discarded. The following

Collector's Remarks.

Inspection Notes.

ten blocks are now being surveyed prior to notification for settlement :—

Mensinakan.	Vorwadi.
Upparijeddu.	Nagarthikan.
Kuchurmulkal.	Jantragudde.
Nire.	Keradakadu.
Malarpadavu.	Brahmawar.

In the Mangalore range a number of blocks proposed have been abandoned. Selection is now complete, and of those areas shown in 1895 as under selection the following only remain :—

Panamberi.	Kodiamale.
Hurabe.	Marodi.
Naranji.	Kipparadi.
Yekkar.	

of which Hurabe is under settlement and the last two are fresh selections under preliminary consideration.

In the Uppinangadi present range the following areas are still under selection :—

Bangadi and land adjoining Charmadi, Dharmastulu and Menal.

While fresh selections will include Kombar, Kadaba, Niladi, Kokada, Rekia; all timber forests each over 1 square mile in extent.

In the Puthur range we have under selection land adjoining Bhagmale, Jalsúr, Aletti, Pumale, Buntamale, Panja, Aithur, Nerimogar.

Of the areas formerly under selection in Kasaragod taluk a few have been notified for settlement and most of the others await the revenue settlement for final decision as to their reservation, meanwhile they are classed as reserved lands. This delay in notification is under the orders of the Board of Revenue on the understanding that the claimants to warg kumeries will demur to paying assessment on portions of the area they claim and the Forest department will take what they abandon. The more recent survey operations in the magnes of Sullia and Amara show that areas are being demarcated on the application of private owners who claim very large extents as kans when the title-deed (chitta) only shows an area of a few acres in every case. For instance, the temple of Subramaniya claims 379 acres of forest on a chitta of only 11 acres. Practically the whole of Sullia and Amara magnes has now been demarcated as private property and it will be for the decision of

Inspection Notes.

the Forest Settlement-officer whether the claimants have any right to them at all, and it is hoped if such right be declared that it can be commuted by grant of kumakies. The District Forest-officer is confident that the exchange will be acceptable when the wargdars are not given all the land demarcated out as their property.

3. *Settlement.*—The work has been transferred from Divisional officers to a Special Forest Settlement-officer, Mr. Mullins, who is only now commencing the work. The outturn of the past two years has been as follows:—

Reserved finally in Coondapoor—

Sarpanamane.	Mudaregudde.
Kadike.	Darlegudde.
Karnagudde.	Honnukodlu.
Abbigudde.	Guruvanakote.

and none in the other ranges.

The area under settlement has been increased by notifying under section 4 the following areas:—

Coondapoor taluk—
- Sarpanamane extension.
- Dottinarberu.
- Baindur.
- Mavinagulli.

Udipi range—
- Chinkramale extension.
- Mavinukodlu.

Mangalore range—
- Hurabe.

Puthur range—
- Virakamba.
- Muliar.
- Karadka.

The settlement has been delayed by the frequent change of Divisional officer in the northern taluks and in the case of blocks in Uppinangadi the numerous claims to kans and banes led to the cancelment of settlement notification. The final report of settlement in the large blocks of Naravi and Charmadi is under preparation and would have been completed but for the recent change of officers.

Operations in the immediate future will commence with inquiry in the Coondapoor hill forests and the final settlement of the few plain tracts of the range still incomplete. This will be followed by the completion of the large Naravi block leaving the Udipi hill tracts for next season, and if the Forest Settlement-officer finds leisure from his other work on the coast,

Collector's Remarks.

Dodderi and Alelti in Puttur range—*Fort St. George Gazette*, Part I, page 1260, dated 20th October 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

we may expect to witness the conclusion of settlement in South Canara in 1899 with the exception, perhaps, of the southern portion of Kasaragod taluk where are the awkward warg kumeries.

4. *Survey.*—During the past two years the revenue survey work has been completed in Kasaragod, Udipi and Mangalore taluks though maps are not yet available for all villages. Our selection in plain blocks has been thereby simplified. The work of our own surveyors is complete except for correction of previous work and the survey of some plain blocks in Udipi for which maps are urgently required. Forest surveyors will then no longer be necessary; the rest of the hill forests awaiting survey by the Government of India survey, though it is understood the Naravi block, if not the others, will be undertaken by the revenue survey who have also interested themselves in the work of forest survey in Uppinangadi and have agreed to supply maps of all our forest area on our clearing the necessary base line. This action on their part has been of great assistance to us and our acknowledgments are due to the Superintendent.

5. *Maps.*—Village maps are supplied as published by the revenue survey. The Mangalore and Kasaragod skeleton taluk maps have been received. The District Forest-officer has maps from departmental surveys of all reserved forests and of all blocks under settlement, but it is found that the survey was too hurried to secure necessary accuracy and errors have to be corrected.

6. *Demarcation.*—The work of late has been carried on in all the taluks except Kasaragod. The estimate of 1895 for future work provided Rs. 20 per mile for final demarcation, but Mr. Battie is sanguine of being able to execute it at an average cost of Rs. 15 per mile while the total expenditure will be reduced by the fact of the Revenue survey cutting adjoining kumaki lines in Uppinangadi taluk and this will have the effect also of quickening the demarcation work generally. The total work up to date is as follows:—

	Miles.	Cost. Rs.
Final demarcation	308	5,358
Preliminary demarcation ...	2,100	1,606

The rapid re-growth of vegetation in Canara will necessitate a larger constant outlay on re-clearing than in other districts.

Inspection Notes.

7. *Working arrangements.*—A plan of working was drawn up for the Pumale block by Mr. Foulkes, but it was in general terms and considered only sufficiently detailed to determine the maximum amount of produce to extract yearly and upon it to base our operations for export. The catechu forests in the working circle of Honekodlu are still being worked satisfactorily. A working plan has been approved for a circle including Sarpanamane, Sarvimtagudde, Kadiki, Kernagudde, Baindur and Guruvanakota. The produce is firewood exported from Baindur. The forests of Sabladi, Poitaji, Chembagudde, Kerailpilla, Pilarkan, Kutiyar, Chitur, Ajarkadu and Mulyar are being worked in rotation under arrangements in force for some years but under no definitely sanctioned plan. Similarly the plantations at Mangalore, viz., Ullal, Tannirbhavi are worked in regular order as also the thinnings in Parappa plantations. The rest of the forests are either closed or under felling by contract, the purchaser taking a fixed quantity of material at prices agreed to in each case. The demand for timber is very slack, but, on the other hand, firewood is much wanted in increasing quantities near the coast and for its supply some further located fellings can be arranged in forests along rivers but elsewhere the present difficulty of carriage has to be overcome before timber extraction can go on, and until the work of settlement and demarcation are nearer completion, regular working will be delayed.

It is noted that the former felling arrangements in Udipi have been stopped. Under them we paid the transport contractor 67 per cent. of the total value received by sale of produce we brought to depôt.

In their place departmental collection has been resorted to and the cost reduced to about 50 per cent. of the selling price.

A system has grown up of leasing the right to charge import dues on fuel brought to the following large towns:—

Coondapoor.	* Gungoli.
Udipi.	* Busra.
Kárkal.	* Mulki.
Mangalore.	* Múdabidri.
Buntwal.	* Ullal.
Pani Mangalore.	* Uppinangadi.
Puttúr.	* Vitla.
Kasaragod.	* Mungeshwar.

Collector's Remarks.

Poitaji and Chembagudde are under orders of abandonment—*vide* Board's Proceedings, Forest No. 565, dated 11th December 1896.

(Intld.) W.H.W.,
Collector.

The Contractors being authorised to act as thanadars their action practically controls the transit of timber. The notification is at page 18, District Gazette, for February 1897.

(Intld.) W.H.W,
Collector.

Collector's Remarks.

Inspection Notes.

Of these the towns marked with an asterisk have been contracted for this year for the first time. The produce is from unreserved lands, kumakis and unassessed hadis, since free export from these latter is not permitted under the rules. As regards minor produce in the past year Coondapoor alone had cinnamon oil stills, 42 in all, which brought in each Rs. 5 monthly.

This season similar stills are at work in Coondapoor and Udipi. On the other hand sandal stills have not been asked for, the reason alleged being the fall in price of sandal oil.

The contract for kadshige has been arranged in the north of Coondapoor, but no one accepted the terms offered for it in Puttúr. Horns have been collected departmentally and a stock of 627 lb. is now on hand ready for sale in Mangalore.

Improvement fellings were commenced in 1895 in Someshwar in the interest of the *Hopea parviflora* and are being continued. It is too soon to judge of the results, but as expected the operation is not remunerative, the cut produce giving little return.

In the old reserve of Pilarkhan, similar work has been carried on for some years, and the forest being near the market the produce is readily sold and initial cost recovered. Creeper cuttings have still to be systematically arranged throughout the north forests.

On the other hand the suggested fellings of *Terminalia paniculata* in Coondapoor have not been effected; as on consideration it was rightly decided to be inadvisable until the produce becomes saleable, the presence of the trees not being harmful.

It is noteworthy that from Baindur, Tirúr and from Coondapoor, the most northern parts, there is an increasing export of firewood to Bombay City by native craft chartered for the purpose and it is expected that our timber forests whereof comparatively valueless species will be indented upon to supply this market where conveniently accessible to the sea. Other prospective arrangements anticipated in 1895 have had to give way owing to the abandonment of small reserves less than a square mile in extent.

Inspection Notes.

8. *Forest Fire Conservancy.*—The policy proposed two years since is being adhered to. The only additions to the area under rigid fire conservancy are those cleared in located fellings. It is also under consideration whether to abandon the rigid protection of Dharmastala. This reserve is one of almost pure *Xylia* which has grown up on abandoned kumeris. The growth is regular and over 30 feet and it is thought that fire passing through has only limited power for harm especially as there is a marked absence of grass and inflammable undergrowth, while the cost of the current protection is high. It will be better therefore to seek a less expensive system for protecting it and abandon the operation if we are assured the forest is naturally protected.

9. *Artificial reproduction.*—The experiment of dibbling seed and putting out nursery plants is being continued on a small inexpensive scale in the reserves of Someshwar, Pilarkhan, Jalsur, Subladi and Parapa. The species chosen were *Pterocarpus*, *Artocarpus*, *Hopia* and Blackwood, but the result has been disappointing. Apart from the failure to germinate of the dibbled seed even on ploughed land, the plants put out have been extensively damaged by the browsing of deer and the mischief of monkeys. The work is however, being persevered in and is being given serious attention. As regards the established plantations, it must be noted that the teak in Parapa is not progressing and its future treatment is now being considered.

The Casuarina plantation at Ullal is not being extended, for no ground is available, but the young plants put out to replace the stunted *Calophyllum* were watered in 1895 and are now being left to themselves.

The plantation of Tannirbhavi has been worked in rotation for thinnings which are now complete. The inroad of the sea has swept away a large number of trees and it is advisable to fell all trees in dangerous proximity to the sea. We have a demand for the produce which is supplied to the Mangalore jail. I would thereupon advocate the extension of the plantation hut to the south instead of to the north, for on the split facing the

Collector's Remarks.

Collector's Remarks.

The Port officer Mr. Brown has informed me that he does not think the Marine Department would object. The District Forest-officer should ascertain whether the municipality makes any claim or objection.

(Intld.) W.H.W.,
Collector.

Some offenders give false names so that they may get off with an admonition more than once. This gives trouble to guards and watchers, but I think it is a good system that every one should be let off once.

(Intld.) W.H.W.,
Collector.

Inspection Notes.

bunder there is fixed sand which would grow the trees and they would pay better than the trees we possess further off. It would be as well too to notify the area under section 4 after preliminary enquiry as to its being within the municipality in which case the rating might prevent our planting.

10. *Cultural operations.*—There is nothing new to record under this head. The compilation of Sylvicultural notes is continued and Mr. Foulkes has published a valuable record of the qualities of the principal species of trees found in the district. These notes are for constant correction and to be added to.

11. *General Protection.*—The number of reported offences remains high and the policy of punishing trespass and the removal of head loads by simple admonishing has not yet borne fruit. The abandonment of small reserves should have the effect of keeping down the number of petty offences which are rife only in the plain forests.

The figures for the six months ending 31st December are as follows :—

Range.	Felling.	Grazing.	Fire.	Total.	Petty offences.
Coondapoor	58	9	..	67	486
Udipi	67	16	..	83	163
Mangalore	15	2	..	17	42
Puttur	211	3	..	214	239
Uppinangadi	35	2	..	37	28
Total ..	..	..	..	418	951

The present District Forest-officer restricts his exercise of the authority to compound mainly to cases where reserved trees the produce of kumakis is cut without license. The number of major offences is largely composed of kumeri cases, while the petty cases are especially numerous in Coondapoor north plain blocks.

12. *Establishment.*—With the abandonment of small blocks of reserved forests there has been a reduction in the staff of temporary establishment employed.

13. *Revenue.*—The figures for the past two years are as follows :—

	1894-95.	1895-96.
	Rs.	Rs.
I.—(*a*) Timber ...	8,896	6,783
(*b*) Fuel	4,523	1,812
(*c*) Bamboos ...	24	...
(*e*) Minor produce.	9,762	8,739

Inspection Notes.

	1894–95.	1895–96.
	Rs.	Rs.
II.—(*a*) Timber ...	867	1,587
(*b*) Fuel	5,567	11,309
(*c*) Bamboos ...	1,442	1,468
(*d*) Grazing grass...	4,014	3,521
(*e*) Minor produce.	22,674	19,157
III.—Confiscation ...	504	1,983
V.—(*a*) Fines	302	174
(*c*) Others	5,409	2,891
Total ...	63,984	59,424

Comparing this return with the rough estimate made in 1895, the anticipated expansion has not come about under all heads. There has been an increase under timber and fuel removed by purchasers but it has been absorbed by the reduction under minor produce leases and the total disappearance of revenue from sandal stills. The budget estimate for 1896–97 was Rs. 74,600 but is now considered probable that only Rs. 64,000 will be collected.

The revenue will now be dealt with by sub-heads separately.

Revenue, I (a) Timber.—The estimate of 10,000 cubic feet as our annual yield is being worked up to. The forests worked are, in Puttur range, the Pumale and surrounding blocks, and in Udipi range the Someshwar block. The system of contracting out the work has been stopped in favour of departmental fellings, the transport only being done on contract. The logs from Puttur were for the most part formerly sawn before extraction, but it was found to be wasteful and unprofitable. The timber is now sent to Mangalore in the log and there sold at fixed rates without difficulty. The total costs amount to between 7 and 8 annas per cubic foot and the prices realized are as follows :—

	Per cubic feet. Rs.	A.	P.
Tirma (Xylia)	0	10	4
Banapa (T. tomentosa) ...	0	15	6
Blackwood (Dalbergia) ...	1	2	0
Vengai (Pterocarpus) ...	0	15	6
Kiralbhogi (Hopea) Jack (Artocarpus)	1	1	0
Maruva (T. Paniculata) ...	0	9	0
Benteak (Lagerstrœmia).	0	13	0
Teak (Tectona)	1	12	0

Most of the timber is Xylia and Banapu and the purchasers use the material in Mangalore town where it competes with produce brought from Malabar. The net profit of the Mangalore timber after

Collector's Remarks.

When these operations are going on, villagers are given leaves and loppings free under Mr. Foulke's arrangement. In some places this concession is gladly availed of, in others neglected.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Collector's Remarks.

Inspection Notes.

deducting petty establishment charges will amount to Rs. 3,000 a year. The Udipi timber is more profitable, the distance from forest to market being less. The total volume yearly is about 3,000 cubic feet mostly, Banapu and Kiralbhogi (Hopea) bringing in Rs. 2,000, from which if we deduct charges at As. 5 per cubic foot, the net profit will be Rs. 1,000.

The gross revenue from timber departmentally collected amounts to Rs. 10,000 which sum will not be increased until our working is developed.

Revenue, I (b) Fuel.—There is no revenue expected under this head, our fuel works all being conducted by contractors.

Revenue, I (c) Bamboos.—The same remarks apply.

Revenue, I (e) Minor Produce.—Our only source of revenue under this head is catechu which brings in Rs. 7,000 per annum at an expenditure of Rs. 3,000. Until lately the cost was much greater. In the next few years we may anticipate a revenue increased to Rs. 8,500 at a cost of Rs. 3,500 from the extension of operations to a second circle and to certain unreserved lands in the Coondapoor range.

Revenue, II (a) Timber.—The revenue estimated will be Rs. 2,000 to Rs. 2,500 yearly. This is an increase over past figures chiefly due to previous error in classifying dead timber trees under fuel.

Revenue, II (b) Fuel.—The expansion of the revenue under this head anticipated in 1895 has been fully realised. The budget estimate for 1896–97 is Rs. 10,000 and our income will in all likelihood reach Rs. 12,000. It is hoped that we shall secure as much as Rs. 15,000 within another three years from regulated fellings in Coondapoor.

Revenue, II (c) Bamboos.—The expansion under this head has not been fully realized, the budget estimate of Rs. 2,000 will however be recovered and a yearly increase of a small amount can still be hoped for.

Revenue, II (d) Grass and Grazing.—The sum budgeted under this head is Rs. 5,000 and it will be recovered. The policy of abandoning the small reserves has resulted in a loss of revenue from grazing which has only partially been compensated by the increased rates sanctioned by Government. It is not expected that our revenue will develop from this source at present.

Inspection Notes.

Revenue, II (e) Minor Produce.—The budget amount is Rs. 22,000, but the contracts only total Rs. 19,000. This is a fluctuating income due to unstable prices for nutmegs, wild mace, myrabolams and shigikoi, &c.

Dealing with the total revenue, we may expect Rs. 65,000 per annum steadily after three years. The previous estimate was Rs. 75,000 and the deficiency is mostly due to cessation of sandal distillation of which no recommencement is anticipated also to smaller returns under grazing and bamboos.

14. The expenditure for the past two years has been as follows :—

		1894-95.	1895-96.
		RS.	RS.
A-I.	(*a*) Timber ...	11,502	4,517
	(*b*) Fuel ...	1,359	1,337
	(*c*) Bamboos ...	12	...
	(*e*) Minor Produce	3,608	5,525
A-II.	...	6,673	7,237
III.	...	1	...
VI.	(*a*) Elephant ...	1,900	...
	(*b*) Feed ...	628	496
	(*c*) Stores ...	465	223
A-VII.	(*a*) Buildings. ...	524	348
	(*c*) Other works.	2	1
A-VIII	(*a*) Demarcation.	318	412
	(*c*) Surveys ...	2,883	2,172
	(*d*) Working plans	...	46
	(*e*) Sowing and planting ...	445	808
	(*f*) Fire protection.	973	1,028
	(*g*) Other works.	1,976	1,637
IX.	(*a*) Refunds ...	257	362
	(*b*) Law charges.	...	1
	(*c*) Other charges.	854	731
		34,380	27,281

After discussing the works for execution with the District Forest-officer, we have together decided that our probable expenditure in the next few years will be based on the following considerations :—

A-I (a) Timber.—As recorded under revenue head I (*a*) we propose to expend Rs. 6,000 on bringing timber to Mangalore and Udipi. With the opening of the roads now suggested, larger consignments can be made. It is probable that we shall at no distant date entirely displace Malabar wood from Mangalore, but until our general administration is more advanced and establishment stronger, we cannot do better than carry out the present small programme.

Collector's Remarks.

Abandonment of smaller reserves assists the decline in grazing. It is reported also that some Forest subordinates make a regular surreptitious income by permitting grazing and free removal of head-loads, for which they get Rs. 4 and a fowl annually, also assistance in clearing boundaries and fire traces.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Malabar private importers have an advantage by taking possession of the best site for their timber depôt. The Conservator does not mention the timber basin among the proposed items of expenditure. It seems to me advisable to oust the

Collector's Remarks.

interlopers and secure a proper place for handling our timber. Delay may cause difficulties. I do not see why this should not come under A-VII (*b*) if the Public Works Department does not enter it in their budget.

(Intld.) W.H.W.,
Collector.

The Local Fund supervisor has examined the line. Unfortunately the Taluk Board is not much in favour of contributing to this project.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Inspection Notes.

A-I (b) Fuel.—The present charge will not continue.

A-I (e) Minor produce.—The Revenue note explains why we shall require a sum of Rs. 3,500 commencing in 1897-98 and included in the budget estimates.

A-II.—The cost under this head has been Rs. 8,000 in 1896-97 and it is probable that this sum will be increased by transfer to it of establishment charges on account of watchers hitherto partly classed under A-VIII (*g*) (other works). We shall require from Rs. 9,000 to Rs. 10,000 instead of in all Rs. 11,000 for the watching establishment as at present; the present scale will not be entertained for reasons elsewhere recorded.

A-VI (b) Elephant feed.—Within the next three years an additional pair of elephants will be required for timber-dragging, but at present the sum of Rs. 600 suffices each year.

A-VI (c).—Stores will necessitate an outlay of Rs. 200 yearly.

A-VII (a) Roads.—The road from Savanal to Guruvankiri is already constructed but old and disused. It is for further investigation whether it will be profitable to improve it for the extraction of bamboo. It is proposed to open out roads in Coondapoor, Udipi and Uppinangadi as follows :—

I. Coondapoor range—Wandse to Yelgit, 14 miles.—A road of general utility tapping several forests under regular working and an alternative route to the Coast road which is at times obliterated by sand. The Forest Department will contribute Rs. 1,000 to its construction cost in 1897-98 and provision is made in the budget.

II. Jadkal to Madiberi, 10 miles.—This road will open up the Madiberi reserve which contains mature timber. Its length will be 10 miles and will be a forest undertaking costing Rs. 2,000. This should be spent in 1898-99 and provision included in next budget.

Udipi Range.—Branch roads to open up Someshwar blocks should be constructed and provision made in next budget estimate for 5 miles at Rs. 150, or in all Rs. 750.

Inspection Notes.

Uppinangadi Range—I Subramania to Gundia.—This work is now being constructed by Local Fund department and a grant from forests to the extent of Rs. 1,000 will be made in 1897–98. This will open up the reserves of Bhagmale, Kombhur and Gundia.

II. *Meyar to Rekhia*, 16 miles, to join the Charmadi and Sheradi ghaut roads and passing through the reserves of Kokada, Subaji, Karinjia and Meyar. This is a road of great importance, as it opens up mature forests within easy access to the market, and on this account should be taken in hand without delay. This road will cost Rs. 5,000 and, if sanctioned, should be commenced on savings when available. It will not require to be constructed throughout at once for every mile will be of immediate use.

Puthur Range.—Certain roads will be necessary to open up Kiribug and Kilarmale, but these forests need not be worked so soon as those in Uppinangadi range which are nearer the market.

The total expenditure on new roads in the next three years may be anticipated to amount to Rs. 10,000, or annually with repairs Rs. 3,500.

A-VII (*b*), *Buildings.*—These proposals will be built on the registered plan amended where necessary to suit local conditions and are estimated to cost with out-houses and stables Rs. 800 each or with a well Rs. 1,000. The localities selected are as follows :—

In Coondapoor Range.—Kadiki now under construction.

Alur.—Provision is made in the budget for 1897–98 for this work.

Madaberi.—This building will be carried on with the road work between Jadkal and Madeberi in 1898–99.

In Udipi Range.—A building will be erected in connection with the works on the Someshwar blocks in 1898–99.

In Uppinangadi Range.—A building on the Meyar-Rekkia road in 1898–99. A building at Kombhur on the Subramania-Gundia road budgeted for in 1897–98.

It is not proposed at present to build in Puthur range.

Collector's Remarks.

A very useful road. It will facilitate transit of cattle to Kulgunda fair down the Manzarabad ghaut.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

The total expenditure on these original works will therefore be as follows :—

	Rs.
In 1896–97	800
„ 1897–98	1,600
„ 1898–99	2,400

Adding on account of forest huts Rs. 500 yearly and cost of annual repairs to Rangs offices, depôts, &c., Rs. 500 and total allotment will be required as follows :—

	Rs.
In 1897–98	2,600
„ 1898–99	3,500

A-VII (*c*) *Other works* —Under this head the cost of wells will amount to Rs. 500 yearly in connection with present and new buildings. I have discussed with the District Forest-officer the practicability and usefulness of opening up the Natravati and Kumardari rivers. In the case of Natravati, floating was carried out for some years from Uppinangadi, the produce floated coming from the forests of Shiradi. But at the present day there is much mature timber available towards Subramaniya which we could bring to market if the Kumardari and Kempa Halla streams permitted our floating it down. We think it worthwhile to arrange for a practical survey of the river-bed to discover how far without interference with the storage of water it will be possible to float down moderate size timber between September and January and at my suggestion the preliminary enquiries will now be instituted and I would advocate expenditure up to Rs. 500 without delay.

A-VIII (*a*) *Demarcation.*—In this Inspection note a general reference has been made to the demarcation work still to be carried out. Our immediate requirements are calculated to be as follows yearly :—

Coondapoor ...	Rs. 600 for 5 years.	
Udipi ...	„ 350 for 3	„
Mangalore ...	„ 300 for 3	„
Uppinangadi.	„ 500 for 5	„
Puthur ...	„ 800 for 5	„

or in all Rs. 11,000 in five years.

It must be remembered that the great reduction in this revised estimate is almost entirely due to the arrangements which the Survey department has enabled us to make.

A-VIII (*c*) *Surveys.*—There will be no regular charge under this head.

A-VIII (*d*) *Working plans.*—Such plans as will be made will be prepared without special expenditure.

Inspection Notes.

A-VIII (*e*) *Sawing and Planting.*—At present experimental works are costing Rs. 200 per annum and this will continue. In addition a plantation of casuarina over 50 acres is proposed on the sand pit opposite the Bandur to cost Rs. 2,500 in five years so that under this head Rs. 700 will be required.

A-VIII (*f*) *Fire-protection.*—At present the allotment is Rs. 1,000 yearly. It is proposed not to exceed this.

A-VIII (*g*) *Other works.*—The expenditure hitherto has been incurred on employing watchers, the staff of which is being reduced, the remainder being chargeable to A-II. The sum of Rs. 700 per annum is proposed for improvement fellings in the various ranges, Rs. 400 of which will be spent in Coondapoor and Puthur ranges. This sum is very small, but it will be necessary to thoroughly organize our operations on a small scale before extending them which should be done when the supervising establishment is at length strengthened.

A-IX.—The charges under this head cannot be foreseen.

15. *Office.*—The District Forest-office was examined and a separate report submitted. The office is in good condition on the whole and the staff of clerks satisfactory.

16. (i) *General remarks.*—During the year, the Uppinangadi range has been amalgamated with the Kasaragod range and split up into the two ranges known as Puthur and Uppinangadi. With reference to paragraph 4 of Board's Resolution, Forest No. 361, dated 17th June 1895, this arrangement has been considered as temporary. Its object is to secure for portions of Uppinangadi more supervision that was possible while worked with the forests of the rest of the taluk seeing that together they include some of the richest portions of the ghâts likely to come under early working.

(ii) The Kumaki rules are now at work and there are various points which still cause doubt as to the privileges to be retained especially in connection with unassessed kans which there is a tendency to treat on all fours with assessed kans and to consider as enjoying equal privileges notwithstanding the profound differance of status and treatment ordered by

Collector's Remarks.

I append a copy of this office Dis. No. 860-Ver. of 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

the rules. It is true that, in the correspondence leading up to the rules, unassessed kans are not referred to. Sullia and Amara, however, contain the only assessed kans in the district, but in the more northern Magnes there are very many unassessed and it is for interpretation whether kans so declared prior to 1812 or 1819 are to be considered assessed.

(iii) *Kumakis.*—Already there are applications for extra Kumaki by ryots with no ancestral or long standing claim to such holdings. It is difficult for a Collector to make exceptions in the matter of grant so long as there is unreserved land for the purpose.

(iv) Mr. Battie has been in the district for sixteen months and has secured a good grasp of its forest administration.

(Signed) E. D. M. HOOPER,
Ag. Conservator of Forests,
Southern Circle.

APPENDIX.

Read—Proceedings of the Acting Collector of South Canara, dated 22nd May 1896, Dis. No. 860-Ver.

Read report, Ref. on Cur. No. 703, dated 9th April 1896, submitted to the District Forest-officer by the Tahsildar of Uppinangadi taluk, requesting that the word "assessed" in the term "assessed kans" may be defined.

Order—

The Tahsildar is informed that no distinction appears to have been made between kans that bear shist (assessed kans) and those that do not bear shist (unassessed kans) as regards claims to obtain pepper or cardamom from them, as such claims were made to depend on the fact whether a kan was found mentioned in the chittas of 1800—1801, or of 1812 or of 1819. Claims proved by any of these public records are admissible.

The attention of the Forest Department is drawn to the Collector's suggestion contained in the last part of paragraph 23 of letter, No. 794, dated 3rd April 1884, printed in Board's Proceedings, Forest No. 3084-273, dated 2nd September 1884 which has met with the Secretary of State's approval.

(Signed) L. C. MILLER,
Acting Collector.

(True Copy.)

(Signed) W. H. WELSH,
Collector.

Endorsement by the Collector of South Canara, dated 25th February 1897, Dis. on Cur. No. 3548-For.

Forwarded.

Resolution—Forest No. 182, dated 4th May 1897.

Recorded.

2. *Paragraph* 2 *of the Inspection Note.*—The Collector is requested to submit a special report on the statement that practically the whole of the Sullia and Amara magnes have been demarcated by the Survey department as private property, although many of the claims seem *primâ facie* to be grossly exaggerated.

Paragraph 3.—The Board learns with much satisfaction that there is a fair prospect of the settlement of the District being completed in 1899, save in the southern magnies of the Kasaragod taluk, where selection has been necessarily delayed.

Paragraph 7.—With reference to the Collector's remark that Poitaji and Chembaguddi reserves were ordered to be abandoned, the Board observes that Government has since sanctioned their retention (*vide* Government Order communicated in Board's Proceedings, Forest Mis. No. 189, dated 25th February 1897). The Collector is requested to state whether the working plan for the Poitaji and Kayapulla blocks submitted by him and recorded in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896, requires modification, and if so, in what respects. The plan and the Conservator's letter thereon are herewith sent to the Collector for reference.

Paragraph 8.—The Conservator's advice for minimizing the cost of fire-protection should receive the careful attention of the District Forest-officer.

Paragraph 9.—The Board approves of the Conservator's instructions regarding the conservancy and extension of the Tannirbhavi plantation, subject to an explicit statement from the Marine Department that it has no longer any objection thereto.

Paragraph 11.—From the large number of petty offences reported during the six months ending 31st December 1896, the Board fears that the penal provisions of the Act are being worked in an unnecessarily harassing and oppressive manner. The Collector is requested to give the matter very serious attention, and to make every endeavour to dispense with prosecutions in cases in which offences are of a mere technical character involving no appreciable damage to the forest. He should at once report what effect has been given to the instructions of Government and the Board that simple trespass should not ordinarily be treated as an offence at all (Board's Proceedings, No. 823, dated 12th June 1895).

Paragraph 13.—(1) The disappearance of revenue from sandalwood stills is attributed in paragraph 8 to a fall in the price of sandal oil being assigned as a reason for the non-submission of application for stills. The Collector is requested to report whether private stills continue to be worked.

(2) *Xylia* seems from this paragraph to be in general demand in the district, and in paragraph 8, as well as in former reports, there is an allusion to forests of almost pure *Xylia* which have grown up on abandoned kumeris. The Collector is requested to report whether any of these forests are in a condition to be profitably worked for railway sleepers, if a saw mill were erected in the neighbourhood.

(3) The free grant of leaves and loppings to villagers arranged for by Mr. Foulkes should be encouraged as far as possible. In some cases, it is said that the concession was neglected. The Board would be glad to know whether, in these cases, the villagers concerned had been duly informed of the concession before felling operations were commenced.

(4) The illicit dealings of forest subordinates in the matter of grazing, &c., referred to by the Collector should be made the subject of special investigation.

(5) The estimate for constructing a timber basin at Mangalore has been submitted to Government in Board's Proceedings, Forest Mis. No. 23, dated 11th January 1897. As stated therein, the cost will have to be provided from the Public Works budget. The Collector's remark that the delay in carrying out the work may cause difficulties will be brought to the notice of Government.

Paragraph 14.—*A-VII* (*c*) The Board has no objection to an early expenditure of Rs. 500 on a river survey, provided the work is entrusted to an officer who knows exactly what is required.

Paragraph 16.—(ii) The Board observes that the Collector has rightly decided that so-called unassessed káns mentioned in the chittas of 1800–1801 or of 1812 or of 1819 are *bonâ fide* assessed káns. A kán may be subject to assessment although the assessment thereon does not appear separately in the accounts.

(True Copy and Extract.)

(Signed) N. S. BRODIE,
Ag. Secretary.

To the Secretary to Government, Revenue Department.
" Collector of South Canara, with the working plan and the Conservator's letter in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896.
" Conservator of Forests, Southern Circle.

Order—No. 446, Revenue, dated 9th June 1897.

Forest No. 97.

Recorded.

2. As regards the remarks contained in paragraph 2 of the Proceedings read above on the subject of a timber basin at Mangalore, the Board's attention will be drawn to G.O., Mis. No. 2710, dated 28th May 1897, from which it will be seen that the Government has since approved of the proposal of the Collector and Conservator and that the estimate is under scrutiny in the Public Works Department.

(True Extract.)

(Signed) G. STOKES,
Ag. Secretary to Government.

To the Board of Revenue (Land Revenue).
Copy to the Public Works Department.

Md. Shaik Karim.

50 Copies.

Government {1897} of Madras.

REVENUE.

Recd.	1897.	*Enclosures*
Regd.		*Spare copies*

G.O., No. 446, 9th June 1897.

JUNE.

South Canara Forests.

Recording, with remarks, Board's Proceedings reviewing the inspection report on the —.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Land Revenue), Forest No. 182, dated 4th May 1897:—

Read—the following letter from E. D. M. HOOPER, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue (through the Collector of South Canara), dated Coimbatore, 10th February 1897, No. 2964:—

I have the honour to submit, for the orders of the Forest Member, an inspection note dealing with a recent visit to South Canara.

INSPECTION NOTE—SOUTH CANARA.

January 1897.

Inspection Notes.

Collector's Remarks.

On this occasion after inspecting the District Forest-office in Mangalore, the depôt on the Bunder and the Tannirbhavi plantation, I travelled to Pane Mangalore where a few logs are stored and on to Mani and Puttur; thence *viâ* Kavu and Jalsúr to Sullia. I examined the logs at Ulwar on the road to Sampaji and left the district *viâ* Coorg.

The full and complete account of forest operations recorded in my previous inspection note has been consulted on the present occasion and the note now submitted is merely a succinct record of the progress made in carrying out the programme therein laid down and of the amendments now considered advisable.

2. *Selection.*—This work is complete in Coondapoor range except as regards the Hannar magne in which the boundaries of selected blocks are under revision for fresh notification. Of the proposed blocks referred to in my last inspection note four have been notified for settlement as follows:—

	Estimated area.
	ACS.
Dottinaberu	1,920
Baindur	3,840
Sarpanamane extension ...	250
Mavinagulli	1,280

the other proposals being abandoned.

Selection is also complete in the Udipi range. In the past two years the original proposals have been revised and many small blocks discarded. The following

Collector's Remarks.

Inspection Notes.

ten blocks are now being surveyed prior to notification for settlement:—

Mensinakan.	Vorwadi.
Upparijeddu.	Nagarthikan.
Kuchurmulkal.	Jantragudde.
Nire.	Keradakadu.
Malarpadavu.	Brahmawar.

In the Mangalore range a number of blocks proposed have been abandoned. Selection is now complete, and of those areas shown in 1895 as under selection the following only remain:—

Panamberi.	Kodiamale.
Hurabe.	Marodi.
Naranji.	Kipparadi.
Yekkar.	

of which Hurabe is under settlement and the last two are fresh selections under preliminary consideration.

In the Uppinangadi present range the following areas are still under selection:—

Bangadi and land adjoining Charmadi, Dharmastulu and Menal.

While fresh selections will include Kombar, Kadaba, Niladi, Kokada, Rekia; all timber forests each over 1 square mile in extent.

In the Puthur range we have under selection land adjoining Bhagmale, Jalsúr, Aletti, Pumale, Buntamale, Panja, Aithur, Nerimogar.

Of the areas formerly under selection in Kasaragod taluk a few have been notified for settlement and most of the others await the revenue settlement for final decision as to their reservation, meanwhile they are classed as reserved lands. This delay in notification is under the orders of the Board of Revenue on the understanding that the claimants to warg kumeries will demur to paying assessment on portions of the area they claim and the Forest department will take what they abandon. The more recent survey operations in the magnes of Sullia and Amara show that areas are being demarcated on the application of private owners who claim very large extents as kans when the title-deed (chitta) only shows an area of a few acres in every case. For instance, the temple of Subramaniya claims 379 acres of forest on a chitta of only 11 acres. Practically the whole of Sullia and Amara magnes has now been demarcated as private property and it will be for the decision of

Inspection Notes.

Collector's Remarks.

the Forest Settlement-officer whether the claimants have any right to them at all, and it is hoped if such right be declared that it can be commuted by grant of kumakies. The District Forest-officer is confident that the exchange will be acceptable when the wargdars are not given all the land demarcated out as their property.

3. *Settlement.*—The work has been transferred from Divisional officers to a Special Forest Settlement-officer, Mr. Mullins, who is only now commencing the work. The outturn of the past two years has been as follows :—

Reserved finally in Coondapoor—

Sarpanamane.	Mudaregudde.
Kadike.	Darlegudde.
Karnagudde.	Honnukodlu.
Abbigudde.	Guruvanakote.

and none in the other ranges.

The area under settlement has been increased by notifying under section 4 the following areas :—

Coondapoor taluk—
- Sarpanamane extension.
- Dottinarberu.
- Baindur.
- Mavinagulli.

Udipi range—
- Chinkramale extension.
- Mavinukodlu.

Mangalore range—
- Hurabe.

Puthur range—
- Virakamba.
- Muliar.
- Karadka.

The settlement has been delayed by the frequent change of Divisional officer in the northern taluks and in the case of blocks in Uppinangadi the numerous claims to kans and banes led to the cancelment of settlement notification. The final report of settlement in the large blocks of Naravi and Charmadi is under preparation and would have been completed but for the recent change of officers.

Operations in the immediate future will commence with inquiry in the Coondapoor hill forests and the final settlement of the few plain tracts of the range still incomplete. This will be followed by the completion of the large Naravi block leaving the Udipi hill tracts for next season, and if the Forest Settlement-officer finds leisure from his other work on the coast,

Dodderi and Alelti in Puttur range—*Fort St. George Gazette*, Part I, page 1260, dated 20th October 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

we may expect to witness the conclusion of settlement in South Canara in 1899 with the exception, perhaps, of the southern portion of Kasaragod taluk where are the awkward warg kumeries.

4. *Survey.*—During the past two years the revenue survey work has been completed in Kasaragod, Udipi and Mangalore taluks though maps are not yet available for all villages. Our selection in plain blocks has been thereby simplified. The work of our own surveyors is complete except for correction of previous work and the survey of some plain blocks in Udipi for which maps are urgently required. Forest surveyors will then no longer be necessary; the rest of the hill forests awaiting survey by the Government of India survey, though it is understood the Naravi block, if not the others, will be undertaken by the revenue survey who have also interested themselves in the work of forest survey in Uppinangadi and have agreed to supply maps of all our forest area on our clearing the necessary base line. This action on their part has been of great assistance to us and our acknowledgments are due to the Superintendent.

5. *Maps.*—Village maps are supplied as published by the revenue survey. The Mangalore and Kasaragod skeleton taluk maps have been received. The District Forest-officer has maps from departmental surveys of all reserved forests and of all blocks under settlement, but it is found that the survey was too hurried to secure necessary accuracy and errors have to be corrected.

6. *Demarcation.*—The work of late has been carried on in all the taluks except Kasaragod. The estimate of 1895 for future work provided Rs. 20 per mile for final demarcation, but Mr. Battie is sanguine of being able to execute it at an average cost of Rs. 15 per mile while the total expenditure will be reduced by the fact of the Revenue survey cutting adjoining kumaki lines in Uppinangadi taluk and this will have the effect also of quickening the demarcation work generally. The total work up to date is as follows :—

	Miles.	Cost. Rs.
Final demarcation	308	5,358
Preliminary demarcation ...	2,100	1,606

The rapid re-growth of vegetation in Canara will necessitate a larger constant outlay on re-clearing than in other districts.

Inspection Notes.

7. *Working arrangements.*—A plan of working was drawn up for the Pumale block by Mr. Foulkes, but it was in general terms and considered only sufficiently detailed to determine the maximum amount of produce to extract yearly and upon it to base our operations for export. The catechu forests in the working circle of Honekodlu are still being worked satisfactorily. A working plan has been approved for a circle including Sarpanamane, Sarvimtagudde, Kadiki, Kernagudde, Baindur and Guruvanakota. The produce is firewood exported from Baindur. The forests of Sabladi, Poitaji, Chembagudde, Kerailpilla, Pilarkan, Kutiyar, Chitur, Ajarkadu and Mulyar are being worked in rotation under arrangements in force for some years but under no definitely sanctioned plan. Similarly the plantations at Mangalore, viz., Ullal, Tannirbhavi are worked in regular order as also the thinnings in Parappa plantations. The rest of the forests are either closed or under felling by contract, the purchaser taking a fixed quantity of material at prices agreed to in each case. The demand for timber is very slack, but, on the other hand, firewood is much wanted in increasing quantities near the coast and for its supply some further located fellings can be arranged in forests along rivers but elsewhere the present difficulty of carriage has to be overcome before timber extraction can go on, and until the work of settlement and demarcation are nearer completion, regular working will be delayed.

It is noted that the former felling arrangements in Udipi have been stopped. Under them we paid the transport contractor 67 per cent. of the total value received by sale of produce we brought to depôt.

In their place departmental collection has been resorted to and the cost reduced to about 50 per cent. of the selling price.

A system has grown up of leasing the right to charge import dues on fuel brought to the following large towns :—

Coondapoor.	* Gungoli.
Udipi.	* Busra.
Kárkal.	* Mulki.
Mangalore.	* Múdabidri.
Buntwal.	* Ullal.
Pani Mangalore.	* Uppinangadi.
Puttúr.	* Vitla.
Kasaragod.	* Mungeshwar.

Collector's Remarks.

Poitaji and Chembagudde are under orders of abandonment—*vide* Board's Proceedings, Forest No. 565, dated 11th December 1896.

(Intld.) W.H.W.,
Collector.

The Contractors being authorised to act as thanadars their action practically controls the transit of timber. The notification is at page 18, District Gazette, for February 1897.

(Intld.) W.H.W,
Collector.

Collector's Remarks.

Inspection Notes.

Of these the towns marked with an asterisk have been contracted for this year for the first time. The produce is from unreserved lands, kumakis and unassessed hadis, since free export from these latter is not permitted under the rules. As regards minor produce in the past year Coondapoor alone had cinnamon oil stills, 42 in all, which brought in each Rs. 5 monthly.

This season similar stills are at work in Coondapoor and Udipi. On the other hand sandal stills have not been asked for, the reason alleged being the fall in price of sandal oil.

The contract for kadshige has been arranged in the north of Coondapoor, but no one accepted the terms offered for it in Puttúr. Horns have been collected departmentally and a stock of 627 lb. is now on hand ready for sale in Mangalore.

Improvement fellings were commenced in 1895 in Someshwar in the interest of the *Hopea parviflora* and are being continued. It is too soon to judge of the results, but as expected the operation is not remunerative, the cut produce giving little return.

In the old reserve of Pilarkhan, similar work has been carried on for some years, and the forest being near the market the produce is readily sold and initial cost recovered. Creeper cuttings have still to be systematically arranged throughout the north forests.

On the other hand the suggested fellings of *Terminalia paniculata* in Coondapoor have not been effected ; as on consideration it was rightly decided to be inadvisable until the produce becomes saleable, the presence of the trees not being harmful.

It is noteworthy that from Baindur, Tirúr and from Coondapoor, the most northern parts, there is an increasing export of firewood to Bombay City by native craft chartered for the purpose and it is expected that our timber forests whereof comparatively valueless species will be indented upon to supply this market where conveniently accessible to the sea. Other prospective arrangements anticipated in 1895 have had to give way owing to the abandonment of small reserves less than a square mile in extent.

Inspection Notes.

8. *Forest Fire Conservancy.*—The policy proposed two years since is being adhered to. The only additions to the area under rigid fire conservancy are those cleared in located fellings. It is also under consideration whether to abandon the rigid protection of Dharmastala. This reserve is one of almost pure *Xylia* which has grown up on abandoned kumeris. The growth is regular and over 30 feet and it is thought that fire passing through has only limited power for harm especially as there is a marked absence of grass and inflammable undergrowth, while the cost of the current protection is high. It will be better therefore to seek a less expensive system for protecting it and abandon the operation if we are assured the forest is naturally protected.

9. *Artificial reproduction.*—The experiment of dibbling seed and putting out nursery plants is being continued on a small inexpensive scale in the reserves of Someshwar, Pilarkhan, Jalsur, Subladi and Parapa. The species chosen were *Pterocarpus*, *Artocarpus*, *Hopia* and Blackwood, but the result has been disappointing. Apart from the failure to germinate of the dibbled seed even on ploughed land, the plants put out have been extensively damaged by the browsing of deer and the mischief of monkeys. The work is however, being persevered in and is being given serious attention. As regards the established plantations, it must be noted that the teak in Parapa is not progressing and its future treatment is now being considered.

The Casuarina plantation at Ullal is not being extended, for no ground is available, but the young plants put out to replace the stunted *Calophyllum* were watered in 1895 and are now being left to themselves.

The plantation of Tannirbhavi has been worked in rotation for thinnings which are now complete. The inroad of the sea has swept away a large number of trees and it is advisable to fell all trees in dangerous proximity to the sea. We have a demand for the produce which is supplied to the Mangalore jail. I would thereupon advocate the extension of the plantation hut to the south instead of to the north, for on the split facing the

Collector's Remarks.

Collector's Remarks.

The Port officer Mr. Brown has informed me that he does not think the Marine Department would object. The District Forest-officer should ascertain whether the municipality makes any claim or objection.

(Intld.) W.H.W.,
Collector.

Some offenders give false names so that they may get off with an admonition more than once. This gives trouble to guards and watchers, but I think it is a good system that every one should be let off once.

(Intld.) W.H.W.,
Collector.

Inspection Notes.

bunder there is fixed sand which would grow the trees and they would pay better than the trees we possess further off. It would be as well too to notify the area under section 4 after preliminary enquiry as to its being within the municipality in which case the rating might prevent our planting.

10. *Cultural operations.*—There is nothing new to record under this head. The compilation of Sylvicultural notes is continued and Mr. Foulkes has published a valuable record of the qualities of the principal species of trees found in the district. These notes are for constant correction and to be added to.

11. *General Protection.*—The number of reported offences remains high and the policy of punishing trespass and the removal of head loads by simple admonishing has not yet borne fruit. The abandonment of small reserves should have the effect of keeping down the number of petty offences which are rife only in the plain forests.

The figures for the six months ending 31st December are as follows :—

Range.	Felling.	Grazing.	Fire.	Total.	Petty offences.
Coondapoor	58	9	..	67	486
Udipi	67	16	..	83	163
Mangalore	15	2	..	17	42
Puttur	211	3	..	214	239
Uppinangadi	35	2	..	37	28
Total ..	..	..	..	418	951

The present District Forest-officer restricts his exercise of the authority to compound mainly to cases where reserved trees the produce of kumakis is cut without license. The number of major offences is largely composed of kumeri cases, while the petty cases are especially numerous in Coondapoor north plain blocks.

12. *Establishment.*—With the abandonment of small blocks of reserved forests there has been a reduction in the staff of temporary establishment employed.

13. *Revenue.*—The figures for the past two years are as follows :—

	1894-95.	1895-96.
	Rs.	Rs.
I.—(*a*) Timber ...	8,896	6,783
(*b*) Fuel	4,523	1,812
(*c*) Bamboos ...	24	...
(*e*) Minor produce.	9,762	8,739

Inspection Notes.

	1894-95.	1895-96.
	RS.	RS.
II.—(*a*) Timber ...	867	1,587
(*b*) Fuel	5,567	11,309
(*c*) Bamboos ...	1,442	1,468
(*d*) Grazing grass...	4,014	3,521
(*e*) Minor produce.	22,674	19,157
III.—Confiscation ...	504	1,983
V.—(*a*) Fines	302	174
(*c*) Others	5,409	2,891
Total ...	63,984	59,424

Comparing this return with the rough estimate made in 1895, the anticipated expansion has not come about under all heads. There has been an increase under timber and fuel removed by purchasers but it has been absorbed by the reduction under minor produce leases and the total disappearance of revenue from sandal stills. The budget estimate for 1896–97 was Rs. 74,600 but is now considered probable that only Rs. 64,000 will be collected.

The revenue will now be dealt with by sub-heads separately.

Revenue, I (a) Timber.—The estimate of 10,000 cubic feet as our annual yield is being worked up to. The forests worked are, in Puttur range, the Pumale and surrounding blocks, and in Udipi range the Someshwar block. The system of contracting out the work has been stopped in favour of departmental fellings, the transport only being done on contract. The logs from Puttur were for the most part formerly sawn before extraction, but it was found to be wasteful and unprofitable. The timber is now sent to Mangalore in the log and there sold at fixed rates without difficulty. The total costs amount to between 7 and 8 annas per cubic foot and the prices realized are as follows :—

	Per cubic feet. RS. A. P.
Tirma (Xylia)	0 10 4
Banapa (T. tomentosa) ...	0 15 6
Blackwood (Dalbergia) ...	1 2 0
Vengai (Pterocarpus) ...	0 15 6
Kiralbhogi (Hopea) Jack (Artocarpus)	1 1 0
Maruva (T. Paniculata) ...	0 9 0
Benteak (Lagerstrœmia).	0 13 0
Teak (Tectona)	1 12 0

Most of the timber is Xylia and Banapu and the purchasers use the material in Mangalore town where it competes with produce brought from Malabar. The net profit of the Mangalore timber after

Collector's Remarks.

When these operations are going on, villagers are given leaves and loppings free under Mr. Foulke's arrangement. In some places this concession is gladly availed of, in others neglected.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Collector's Remarks.

Inspection Notes.

deducting petty establishment charges will amount to Rs. 3,000 a year. The Udipi timber is more profitable, the distance from forest to market being less. The total volume yearly is about 3,000 cubic feet mostly, Banapu and Kiralbhogi (Hopea) bringing in Rs. 2,000, from which if we deduct charges at As. 5 per cubic foot, the net profit will be Rs. 1,000.

The gross revenue from timber departmentally collected amounts to Rs. 10,000 which sum will not be increased until our working is developed.

Revenue, I (b) Fuel.—There is no revenue expected under this head, our fuel works all being conducted by contractors.

Revenue, I (c) Bamboos.—The same remarks apply.

Revenue, I (e) Minor Produce.—Our only source of revenue under this head is catechu which brings in Rs. 7,000 per annum at an expenditure of Rs. 3,000. Until lately the cost was much greater. In the next few years we may anticipate a revenue increased to Rs. 8,500 at a cost of Rs. 3,500 from the extension of operations to a second circle and to certain unreserved lands in the Coondapoor range.

Revenue, II (a) Timber.—The revenue estimated will be Rs. 2,000 to Rs. 2,500 yearly. This is an increase over past figures chiefly due to previous error in classifying dead timber trees under fuel.

Revenue, II (b) Fuel.—The expansion of the revenue under this head anticipated in 1895 has been fully realised. The budget estimate for 1896–97 is Rs. 10,000 and our income will in all likelihood reach Rs. 12,000. It is hoped that we shall secure as much as Rs. 15,000 within another three years from regulated fellings in Coondapoor.

Revenue, II (c) Bamboos.—The expansion under this head has not been fully realized, the budget estimate of Rs. 2,000 will however be recovered and a yearly increase of a small amount can still be hoped for.

Revenue, II (d) Grass and Grazing.—The sum budgeted under this head is Rs. 5,000 and it will be recovered. The policy of abandoning the small reserves has resulted in a loss of revenue from grazing which has only partially been compensated by the increased rates sanctioned by Government. It is not expected that our revenue will develop from this source at present.

Inspection Notes.

Revenue, II (e) Minor Produce.—The budget amount is Rs. 22,000, but the contracts only total Rs. 19,000. This is a fluctuating income due to unstable prices for nutmegs, wild mace, myrabolams and shigikoi, &c.

Dealing with the total revenue, we may expect Rs. 65,000 per annum steadily after three years. The previous estimate was Rs. 75,000 and the deficiency is mostly due to cessation of sandal distillation of which no recommencement is anticipated also to smaller returns under grazing and bamboos.

14. The expenditure for the past two years has been as follows :—

		1894-95.	1895-96.
		Rs.	Rs.
A-I.	(a) Timber ...	11,502	4,517
	(b) Fuel ...	1,359	1,337
	(c) Bamboos ...	12	...
	(e) Minor Produce	3,608	5,525
A-II.	...	6,673	7,237
III.	...	1	...
VI.	(a) Elephant ...	1,900	...
	(b) Feed ...	628	496
	(c) Stores ...	465	223
A-VII.	(a) Buildings. ...	524	348
	(c) Other works.	2	1
A-VIII	(a) Demarcation.	318	412
	(c) Surveys ...	2,883	2,172
	(d) Working plans	...	46
	(e) Sowing and planting ...	445	808
	(f) Fire protection.	973	1,028
	(g) Other works.	1,976	1,637
IX.	(a) Refunds ...	257	362
	(b) Law charges.	...	1
	(c) Other charges.	854	731
		34,380	27,281

After discussing the wal[illegible] with the District Fna[illegible]orks for execution together decided [illegible]orest-officer, we have penditure in t[illegible] that our probable exbased on [illegible]ne next few years will be [illegible] the following considerations :—

A-I (a) Timber.—As recorded under Revenue head I (a) we propose to expend Rs. 6,000 on bringing timber to Mangalore and Udipi. With the opening of the roads now suggested, larger consignments can be made. It is probable that we shall at no distant date entirely displace Malabar wood from Mangalore, but until our general administration is more advanced and establishment stronger, we cannot do better than carry out the present small programme.

Collector's Remarks.

Abandonment of smaller reserves assists the decline in grazing. It is reported also that some Forest subordinates make a regular surreptitious income by permitting grazing and free removal of head-loads, for which they get Rs. 4 and a fowl annually, also assistance in clearing boundaries and fire traces.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Malabar private importers have an advantage by taking possession of the best site for their timber depôt. The Conservator does not mention the timber basin among the proposed items of expenditure. It seems to me advisable to oust the

Collector's Remarks.

interlopers and secure a proper place for handling our timber. Delay may cause difficulties. I do not see why this should not come under A-VII (b) if the Public Works Department does not enter it in their budget.

(Intld.) W.H.W.,
Collector.

The Local Fund supervisor has examined the line. Unfortunately the Taluk Board is not much in favour of contributing to this project.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Inspection Notes.

A-I (b) Fuel.—The present charge will not continue.

A-I (e) Minor produce.—The Revenue note explains why we shall require a sum of Rs. 3,500 commencing in 1897–98 and included in the budget estimates.

A-II.—The cost under this head has been Rs. 8,000 in 1896–97 and it is probable that this sum will be increased by transfer to it of establishment charges on account of watchers hitherto partly classed under A-VIII (g) (other works). We shall require from Rs. 9,000 to Rs. 10,000 instead of in all Rs. 11,000 for the watching establishment as at present; the present scale will not be entertained for reasons elsewhere recorded.

A-VI (b) Elephant feed.—Within the next three years an additional pair of elephants will be required for timber-dragging, but at present the sum of Rs. 600 suffices each year.

A-VI (c).—Stores will necessitate an outlay of Rs. 200 yearly.

A-VII (a) Roads.—The road from Savanal to Guruvankiri is already constructed but old and disused. It is for further investigation whether it will be profitable to improve it for the extraction of bamboo. It is proposed to open out roads in Coondapoor, Udipi and Uppinangadi as follows :—

I. Coondapoor range—Wandse to Yelgit, 14 miles.—A road of general utility tapping several forests under regular working and an alternative route to the Coast road which is at times obliterated by sand. The Forest Department will contribute Rs. 1,000 to its construction cost in 1897–98 and provision is made in the budget.

II. Jadkal to Madiberi, 10 miles.—This road will open up the Madiberi reserve which contains mature timber. Its length will be 10 miles and will be a forest undertaking costing Rs. 2,000. This should be spent in 1898–99 and provision included in next budget.

Udipi Range.—Branch roads to open up Someshwar blocks should be constructed and provision made in next budget estimate for 5 miles at Rs. 150, or in all Rs. 750.

Inspection Notes.

Uppinangadi Range—I Subramania to Gundia.—This work is now being constructed by Local Fund department and a grant from forests to the extent of Rs. 1,000 will be made in 1897–98. This will open up the reserves of Bhagmale, Kombhur and Gundia.

II. *Meyar to Rekhia*, 16 miles, to join the Charmadi and Sheradi ghaut roads and passing through the reserves of Kokada, Subaji, Karinjia and Meyar. This is a road of great importance, as it opens up mature forests within easy access to the market, and on this account should be taken in hand without delay. This road will cost Rs. 5,000 and, if sanctioned, should be commenced on savings when available. It will not require to be constructed throughout at once for every mile will be of immediate use.

Puthur Range.—Certain roads will be necessary to open up Kiribug and Kilarmale, but these forests need not be worked so soon as those in Uppinangadi range which are nearer the market.

The total expenditure on new roads in the next three years may be anticipated to amount to Rs. 10,000, or annually with repairs Rs. 3,500.

A-VII (*b*), *Buildings.*—These proposals will be built on the registered plan amended where necessary to suit local conditions and are estimated to cost with out-houses and stables Rs. 800 each or with a well Rs. 1,000. The localities selected are as follows :—

In Coondapoor Range.—Kadiki now under construction.

Alur.—Provision is made in the budget for 1897–98 for this work.

Madaberi.—This building will be carried on with the road work between Jadkal and Madeberi in 1898–99.

In Udipi Range.—A building will be erected in connection with the works on the Someshwar blocks in 1898–99.

In Uppinangadi Range.—A building on the Meyar-Rekkia road in 1898–99. A building at Kombhur on the Subramania-Gundia road budgeted for in 1897–98.

It is not proposed at present to build in Puthur range.

Collector's Remarks.

A very useful road. It will facilitate transit of cattle to Kulgunda fair down the Manzarabad ghaut.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

The total expenditure on these original works will therefore be as follows :—

	Rs.
In 1896–97	800
„ 1897–98	1,600
„ 1898–99	2,400

Adding on account of forest huts Rs. 500 yearly and cost of annual repairs to Rangs offices, depôts, &c., Rs. 500 and total allotment will be required as follows :—

	Rs.
In 1897–98	2,600
„ 1898–99	3,500

A-VII (*c*) *Other works*.—Under this head the cost of wells will amount to Rs. 500 yearly in connection with present and new buildings. I have discussed with the District Forest-officer the practicability and usefulness of opening up the Natravati and Kumardari rivers. In the case of Natravati, floating was carried out for some years from Uppinangadi, the produce floated coming from the forests of Shiradi. But at the present day there is much mature timber available towards Subramaniya which we could bring to market if the Kumardari and Kempa Halla streams permitted our floating it down. We think it worthwhile to arrange for a practical survey of the river-bed to discover how far without interference with the storage of water it will be possible to float down moderate size timber between September and January and at my suggestion the preliminary enquiries will now be instituted and I would advocate expenditure up to Rs. 500 without delay.

A-VIII (*a*) *Demarcation.*—In this Inspection note a general reference has been made to the demarcation work still to be carried out. Our immediate requirements are calculated to be as follows yearly :—

Coondapoor ...	Rs. 600 for 5 years.	
Udipi ...	„ 350 for 3	„
Mangalore ...	„ 300 for 3	„
Uppinangadi.	„ 500 for 5	„
Puthur ...	„ 800 for 5	„

or in all Rs. 11,000 in five years.

It must be remembered that the great reduction in this revised estimate is almost entirely due to the arrangements which the Survey department has enabled us to make.

A-VIII (*c*) *Surveys.*—There will be no regular charge under this head.

A-VIII (*d*) *Working plans.*—Such plans as will be made will be prepared without special expenditure.

Inspection Notes.

Collector's Remarks.

A-VIII (*e*) *Sawing and Planting.*—At present experimental works are costing Rs. 200 per annum and this will continue. In addition a plantation of casuarina over 50 acres is proposed on the sand pit opposite the Bandur to cost Rs. 2,500 in five years so that under this head Rs. 700 will be required.

A-VIII (*f*) *Fire-protection.*—At present the allotment is Rs. 1,000 yearly. It is proposed not to exceed this.

A-VIII (*g*) *Other works.*—The expenditure hitherto has been incurred on employing watchers, the staff of which is being reduced, the remainder being chargeable to A-II. The sum of Rs. 700 per annum is proposed for improvement fellings in the various ranges, Rs. 400 of which will be spent in Coondapoor and Puthur ranges. This sum is very small, but it will be necessary to thoroughly organize our operations on a small scale before extending them which should be done when the supervising establishment is at length strengthened.

A-IX.—The charges under this head cannot be foreseen.

15. *Office.*—The District Forest-office was examined and a separate report submitted. The office is in good condition on the whole and the staff of clerks satisfactory.

16. (i) *General remarks.*—During the year, the Uppinangadi range has been amalgamated with the Kasaragod range and split up into the two ranges known as Puthur and Uppinangadi. With reference to paragraph 4 of Board's Resolution, Forest No. 361, dated 17th June 1895, this arrangement has been considered as temporary. Its object is to secure for portions of Uppinangadi more supervision that was possible while worked with the forests of the rest of the taluk seeing that together they include some of the richest portions of the ghâts likely to come under early working.

(ii) The Kumaki rules are now at work and there are various points which still cause doubt as to the privileges to be retained especially in connection with unassessed kans which there is a tendency to treat on all fours with assessed kans and to consider as enjoying equal privileges notwithstanding the profound differance of status and treatment ordered by

I append a copy of this office Dis. No. 860-Ver. of 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

the rules. It is true that, in the correspondence leading up to the rules, unassessed kans are not referred to. Sullia and Amara, however, contain the only assessed kans in the district, but in the more northern Magnes there are very many unassessed and it is for interpretation whether kans so declared prior to 1812 or 1819 are to be considered assessed.

(iii) *Kumakis.*—Already there are applications for extra Kumaki by ryots with no ancestral or long standing claim to such holdings. It is difficult for a Collector to make exceptions in the matter of grant so long as there is unreserved land for the purpose.

(iv) Mr. Battie has been in the district for sixteen months and has secured a good grasp of its forest administration.

(Signed) E. D. M. HOOPER,
Ag. Conservator of Forests,
Southern Circle.

APPENDIX.

Read—Proceedings of the Acting Collector of South Canara, dated 22nd May 1896, Dis. No. 860-Ver.

Read report, Ref. on Cur. No. 703, dated 9th April 1896, submitted to the District Forest-officer by the Tahsildar of Uppinangadi taluk, requesting that the word "assessed" in the term "assessed kans" may be defined.

Order—

The Tahsildar is informed that no distinction appears to have been made between kans that bear shist (assessed kans) and those that do not bear shist (unassessed kans) as regards claims to obtain pepper or cardamom from them, as such claims were made to depend on the fact whether a kan was found mentioned in the chittas of 1800—1801, or of 1812 or of 1819. Claims proved by any of these public records are admissible.

The attention of the Forest Department is drawn to the Collector's suggestion contained in the last part of paragraph 23 of letter, No. 794, dated 3rd April 1884, printed in Board's Proceedings, Forest No. 3084-273, dated 2nd September 1884 which has met with the Secretary of State's approval.

(Signed) L. C. MILLER,
Acting Collector.

(True Copy.)

(Signed) W. H. WELSH,
Collector.

Endorsement by the Collector of South Canara, dated 25th February 1897, Dis. on Cur. No. 3548-For.

Forwarded.

Resolution—Forest No. 182, dated 4th May 1897.

Recorded.

2. *Paragraph* 2 *of the Inspection Note.*—The Collector is requested to submit a special report on the statement that practically the whole of the Sullia and Amara magnes have been demarcated by the Survey department as private property, although many of the claims seem *primâ facie* to be grossly exaggerated.

Paragraph 3.—The Board learns with much satisfaction that there is a fair prospect of the settlement of the District being completed in 1899, save in the southern magnies of the Kasaragod taluk, where selection has been necessarily delayed.

Paragraph 7.—With reference to the Collector's remark that Poitaji and Chembaguddi reserves were ordered to be abandoned, the Board observes that Government has since sanctioned their retention (*vide* Government Order communicated in Board's Proceedings, Forest Mis. No. 189, dated 25th February 1897). The Collector is requested to state whether the working plan for the Poitaji and Kayapulla blocks submitted by him and recorded in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896, requires modification, and if so, in what respects. The plan and the Conservator's letter thereon are herewith sent to the Collector for reference.

Paragraph 8.—The Conservator's advice for minimizing the cost of fire-protection should receive the careful attention of the District Forest-officer.

Paragraph 9.—The Board approves of the Conservator's instructions regarding the conservancy and extension of the Tannirbhavi plantation, subject to an explicit statement from the Marine Department that it has no longer any objection thereto.

Paragraph 11.—From the large number of petty offences reported during the six months ending 31st December 1896, the Board fears that the penal provisions of the Act are being worked in an unnecessarily harassing and oppressive manner. The Collector is requested to give the matter very serious attention, and to make every endeavour to dispense with prosecutions in cases in which offences are of a mere technical character involving no appreciable damage to the forest. He should at once report what effect has been given to the instructions of Government and the Board that simple trespass should not ordinarily be treated as an offence at all (Board's Proceedings, No. 823, dated 12th June 1895).

Paragraph 13.—(1) The disappearance of revenue from sandalwood stills is attributed in paragraph 8 to a fall in the price of sandal oil being assigned as a reason for the non-submission of application for stills. The Collector is requested to report whether private stills continue to be worked.

(2) *Xylia* seems from this paragraph to be in general demand in the district, and in paragraph 8, as well as in former reports, there is an allusion to forests of almost pure *Xylia* which have grown up on abandoned kumeris. The Collector is requested to report whether any of these forests are in a condition to be profitably worked for railway sleepers, if a saw mill were erected in the neighbourhood.

(3) The free grant of leaves and loppings to villagers arranged for by Mr. Foulkes should be encouraged as far as possible. In some cases, it is said that the concession was neglected. The Board would be glad to know whether, in these cases, the villagers concerned had been duly informed of the concession before felling operations were commenced.

(4) The illicit dealings of forest subordinates in the matter of grazing, &c., referred to by the Collector should be made the subject of special investigation.

(5) The estimate for constructing a timber basin at Mangalore has been submitted to Government in Board's Proceedings, Forest Mis. No. 23, dated 11th January 1897. As stated therein, the cost will have to be provided from the Public Works budget. The Collector's remark that the delay in carrying out the work may cause difficulties will be brought to the notice of Government.

Paragraph 14.—*A-VII* (*c*) The Board has no objection to an early expenditure of Rs. 500 on a river survey, provided the work is entrusted to an officer who knows exactly what is required.

Paragraph 16.—(ii) The Board observes that the Collector has rightly decided that so-called unassessed káns mentioned in the chittas of 1800–1801 or of 1812 or of 1819 are *bonâ fide* assessed káns. A kán may be subject to assessment although the assessment thereon does not appear separately in the accounts.

(True Copy and Extract.)

(Signed) N. S. BRODIE,
Ag. Secretary.

To the Secretary to Government, Revenue Department.
" Collector of South Canara, with the working plan and the Conservator's letter in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896.
" Conservator of Forests, Southern Circle.

Order—No. 446, Revenue, dated 9th June 1897.

Forest No. 97.

Recorded.

2. As regards the remarks contained in paragraph 2 of the Proceedings read above on the subject of a timber basin at Mangalore, the Board's attention will be drawn to G.O., Mis. No. 2710, dated 28th May 1897, from which it will be seen that the Government has since approved of the proposal of the Collector and Conservator and that the estimate is under scrutiny in the Public Works Department.

(True Extract.)

(Signed) G. STOKES,
Ag. Secretary to Government.

To the Board of Revenue (Land Revenue).
Copy to the Public Works Department.

Md. Shaik Karim.

50 Copies.

Public Works (1897) Department.

G.O., No. 1858(w)

Dated 9 July 1897

[Despatch Abstract.]

South Canara Forests. Prop: Revenue Deptt: according with remarks Board's Prop: reviewing the Inspector's Report on the — Recorded with the remark that the estimate for the proposed timber basin at Manjalore is under consideration.

[F.W. 25. 8,000—30-11-96.]

Indexed.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Public works (1897) department
Current No. 6449

Government {1897} of Madras.

REVENUE.

Recd. 2.7 } 1897. *Enclosures*

Regd. 2.7 } *Spare copies*

G.O., No. 446, 9th June 1897.

P.S.C. 1858 dt 2.7.97

Recorded with the remarks that the estimate for the proposed timber boom at Mangalore is under consideration

Copy

5/7/97 3/7/97

S.S. IV Circle, Canara Dist

JUNE.

South Canara Forests.

Recording, with remarks, Board's Proceedings reviewing the inspection report on the —.

O.L.S 263 27/7

Ab

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Land Revenue), Forest No. 182, dated 4th May 1897 :—

Read—the following letter from E. D. M. HOOPER, Esq., Acting Conservator of Forests, Southern Circle, to the Secretary to the Commissioners of Land Revenue (through the Collector of South Canara), dated Coimbatore, 10th February 1897, No. 2964 :—

I have the honour to submit, for the orders of the Forest Member, an inspection note dealing with a recent visit to South Canara.

INSPECTION NOTE—SOUTH CANARA.

January 1897.

Inspection Notes.

Collector's Remarks.

On this occasion after inspecting the District Forest-office in Mangalore, the depôt on the Bunder and the Tannirbhavi plantation, I travelled to Pane Mangalore where a few logs are stored and on to Mani and Puttur; thence *viâ* Kavu and Jalsúr to Sullia. I examined the logs at Ulwar on the road to Sampaji and left the district *viâ* Coorg.

The full and complete account of forest operations recorded in my previous inspection note has been consulted on the present occasion and the note now submitted is merely a succinct record of the progress made in carrying out the programme therein laid down and of the amendments now considered advisable.

2. *Selection.*—This work is complete in Coondapoor range except as regards the Hannar magne in which the boundaries of selected blocks are under revision for fresh notification. Of the proposed blocks referred to in my last inspection note four have been notified for settlement as follows:—

	Estimated area.
	Acs.
Dottinaberu	1,920
Baindur	3,840
Sarpanamane extension ...	250
Mavinagulli	1,280

the other proposals being abandoned.

Selection is also complete in the Udipi range. In the past two years the original proposals have been revised and many small blocks discarded. The following

Collector's Remarks.

Inspection Notes.

ten blocks are now being surveyed prior to notification for settlement :—

Mensinakan.	Vorwadi.
Upparijeddu.	Nagarthikan.
Kuchurmulkal.	Jantragudde.
Nire.	Keradakadu.
Malarpadavu.	Brahmawar.

In the Mangalore range a number of blocks proposed have been abandoned. Selection is now complete, and of those areas shown in 1895 as under selection the following only remain :—

Panamberi.	Kodiamale.
Hurabe.	Marodi.
Naranji.	Kipparadi.
Yekkar.	

of which Hurabe is under settlement and the last two are fresh selections under preliminary consideration.

In the Uppinangadi present range the following areas are still under selection :—

Bangadi and land adjoining Charmadi, Dharmastulu and Menal.

While fresh selections will include Kombar, Kadaba, Niladi, Kokada, Rekia; all timber forests each over 1 square mile in extent.

In the Puthur range we have under selection land adjoining Bhagmale, Jalsúr, Aletti, Pumale, Buntamale, Panja, Aithur, Nerimogar.

Of the areas formerly under selection in Kasaragod taluk a few have been notified for settlement and most of the others await the revenue settlement for final decision as to their reservation, meanwhile they are classed as reserved lands. This delay in notification is under the orders of the Board of Revenue on the understanding that the claimants to warg kumeries will demur to paying assessment on portions of the area they claim and the Forest department will take what they abandon. The more recent survey operations in the magnes of Sullia and Amara show that areas are being demarcated on the application of private owners who claim very large extents as kans when the title-deed (chitta) only shows an area of a few acres in every case. For instance, the temple of Subramaniya claims 379 acres of forest on a chitta of only 11 acres. Practically the whole of Sullia and Amara magnes has now been demarcated as private property and it will be for the decision of

Inspection Notes.

Collector's Remarks.

the Forest Settlement-officer whether the claimants have any right to them at all, and it is hoped if such right be declared that it can be commuted by grant of kumakies. The District Forest-officer is confident that the exchange will be acceptable when the wargdars are not given all the land demarcated out as their property.

3. *Settlement.*—The work has been transferred from Divisional officers to a Special Forest Settlement-officer, Mr. Mullins, who is only now commencing the work. The outturn of the past two years has been as follows:—

Reserved finally in Coondapoor—

Sarpanamane.	Mudaregudde.
Kadike.	Darlegudde.
Karnagudde.	Honnukodlu.
Abbigudde.	Guruvanakote.

and none in the other ranges.

The area under settlement has been increased by notifying under section 4 the following areas:—

Coondapoor taluk—
- Sarpanamane extension.
- Dottinarberu.
- Baindur.
- Mavinagulli.

Udipi range—
- Chinkramale extension.
- Mavinukodlu.

Mangalore range—
- Hurabe.

Puthur range—
- Virakamba.
- Muliar.
- Karadka.

The settlement has been delayed by the frequent change of Divisional officer in the northern taluks and in the case of blocks in Uppinangadi the numerous claims to kans and banes led to the cancelment of settlement notification. The final report of settlement in the large blocks of Naravi and Charmadi is under preparation and would have been completed but for the recent change of officers.

Operations in the immediate future will commence with inquiry in the Coondapoor hill forests and the final settlement of the few plain tracts of the range still incomplete. This will be followed by the completion of the large Naravi block leaving the Udipi hill tracts for next season, and if the Forest Settlement-officer finds leisure from his other work on the coast,

Dodderi and Alelti in Puttur range—*Fort St. George Gazette*, Part I, page 1260, dated 20th October 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

we may expect to witness the conclusion of settlement in South Canara in 1899 with the exception, perhaps, of the southern portion of Kasaragod taluk where are the awkward warg kumeries.

4. *Survey.*—During the past two years the revenue survey work has been completed in Kasaragod, Udipi and Mangalore taluks though maps are not yet available for all villages. Our selection in plain blocks has been thereby simplified. The work of our own surveyors is complete except for correction of previous work and the survey of some plain blocks in Udipi for which maps are urgently required. Forest surveyors will then no longer be necessary; the rest of the hill forests awaiting survey by the Government of India survey, though it is understood the Naravi block, if not the others, will be undertaken by the revenue survey who have also interested themselves in the work of forest survey in Uppinangadi and have agreed to supply maps of all our forest area on our clearing the necessary base line. This action on their part has been of great assistance to us and our acknowledgments are due to the Superintendent.

5. *Maps.*—Village maps are supplied as published by the revenue survey. The Mangalore and Kasaragod skeleton taluk maps have been received. The District Forest-officer has maps from departmental surveys of all reserved forests and of all blocks under settlement, but it is found that the survey was too hurried to secure necessary accuracy and errors have to be corrected.

6. *Demarcation.*—The work of late has been carried on in all the taluks except Kasaragod. The estimate of 1895 for future work provided Rs. 20 per mile for final demarcation, but Mr. Battie is sanguine of being able to execute it at an average cost of Rs. 15 per mile while the total expenditure will be reduced by the fact of the Revenue survey cutting adjoining kumaki lines in Uppinangadi taluk and this will have the effect also of quickening the demarcation work generally. The total work up to date is as follows:—

	Miles.	Cost. Rs.
Final demarcation	308	5,358
Preliminary demarcation ...	2,100	1,606

The rapid re-growth of vegetation in Canara will necessitate a larger constant outlay on re-clearing than in other districts.

Inspection Notes.

7. *Working arrangements.*—A plan of working was drawn up for the Pumale block by Mr. Foulkes, but it was in general terms and considered only sufficiently detailed to determine the maximum amount of produce to extract yearly and upon it to base our operations for export. The catechu forests in the working circle of Honekodlu are still being worked satisfactorily. A working plan has been approved for a circle including Sarpanamane, Sarvimtagudde, Kadiki, Kernagudde, Baindur and Guruvanakota. The produce is firewood exported from Baindur. The forests of Sabladi, Poitaji, Chembagudde, Kerailpilla, Pilarkan, Kutiyar, Chitur, Ajarkadu and Mulyar are being worked in rotation under arrangements in force for some years but under no definitely sanctioned plan. Similarly the plantations at Mangalore, viz., Ullal, Tannirbhavi are worked in regular order as also the thinnings in Parappa plantations. The rest of the forests are either closed or under felling by contract, the purchaser taking a fixed quantity of material at prices agreed to in each case. The demand for timber is very slack, but, on the other hand, firewood is much wanted in increasing quantities near the coast and for its supply some further located fellings can be arranged in forests along rivers but elsewhere the present difficulty of carriage has to be overcome before timber extraction can go on, and until the work of settlement and demarcation are nearer completion, regular working will be delayed.

It is noted that the former felling arrangements in Udipi have been stopped. Under them we paid the transport contractor 67 per cent. of the total value received by sale of produce we brought to depôt.

In their place departmental collection has been resorted to and the cost reduced to about 50 per cent. of the selling price.

A system has grown up of leasing the right to charge import dues on fuel brought to the following large towns :—

Coondapoor.	* Gungoli.
Udipi.	* Busra.
Kárkal.	* Mulki.
Mangalore.	* Múdabidri.
Buntwal.	* Ullal.
Pani Mangalore.	* Uppinangadi.
Puttúr.	* Vitla.
Kasaragod.	* Mungeshwar.

Collector's Remarks.

Poitaji and Chembagudde are under orders of abandonment—*vide* Board's Proceedings, Forest No. 565, dated 11th December 1896.

(Intld.) W.H.W.,
Collector.

The Contractors being authorised to act as thanadars their action practically controls the transit of timber. The notification is at page 18, District Gazette, for February 1897.

(Intld.) W.H.W,
Collector.

Collector's Remarks.

Inspection Notes.

Of these the towns marked with an asterisk have been contracted for this year for the first time. The produce is from unreserved lands, kumakis and unassessed hadis, since free export from these latter is not permitted under the rules. As regards minor produce in the past year Coondapoor alone had cinnamon oil stills, 42 in all, which brought in each Rs. 5 monthly.

This season similar stills are at work in Coondapoor and Udipi. On the other hand sandal stills have not been asked for, the reason alleged being the fall in price of sandal oil.

The contract for kadshige has been arranged in the north of Coondapoor, but no one accepted the terms offered for it in Puttúr. Horns have been collected departmentally and a stock of 627 lb. is now on hand ready for sale in Mangalore.

Improvement fellings were commenced in 1895 in Someshwar in the interest of the *Hopea parviflora* and are being continued. It is too soon to judge of the results, but as expected the operation is not remunerative, the cut produce giving little return.

In the old reserve of Pilarkhan, similar work has been carried on for some years, and the forest being near the market the produce is readily sold and initial cost recovered. Creeper cuttings have still to be systematically arranged throughout the north forests.

On the other hand the suggested fellings of *Terminalia paniculata* in Coondapoor have not been effected; as on consideration it was rightly decided to be inadvisable until the produce becomes saleable, the presence of the trees not being harmful.

It is noteworthy that from Baindur, Tirúr and from Coondapoor, the most northern parts, there is an increasing export of firewood to Bombay City by native craft chartered for the purpose and it is expected that our timber forests whereof comparatively valueless species will be indented upon to supply this market where conveniently accessible to the sea. Other prospective arrangements anticipated in 1895 have had to give way owing to the abandonment of small reserves less than a square mile in extent.

Inspection Notes.

8. *Forest Fire Conservancy.*—The policy proposed two years since is being adhered to. The only additions to the area under rigid fire conservancy are those cleared in located fellings. It is also under consideration whether to abandon the rigid protection of Dharmastala. This reserve is one of almost pure *Xylia* which has grown up on abandoned kumeris. The growth is regular and over 30 feet and it is thought that fire passing through has only limited power for harm especially as there is a marked absence of grass and inflammable undergrowth, while the cost of the current protection is high. It will be better therefore to seek a less expensive system for protecting it and abandon the operation if we are assured the forest is naturally protected.

9. *Artificial reproduction.*—The experiment of dibbling seed and putting out nursery plants is being continued on a small inexpensive scale in the reserves of Someshwar, Pilarkhan, Jalsur, Subladi and Parapa. The species chosen were *Pterocarpus*, *Artocarpus*, *Hopia* and Blackwood, but the result has been disappointing. Apart from the failure to germinate of the dibbled seed even on ploughed land, the plants put out have been extensively damaged by the browsing of deer and the mischief of monkeys. The work is however, being persevered in and is being given serious attention. As regards the established plantations, it must be noted that the teak in Parapa is not progressing and its future treatment is now being considered.

The Casuarina plantation at Ullal is not being extended, for no ground is available, but the young plants put out to replace the stunted *Calophyllum* were watered in 1895 and are now being left to themselves.

The plantation of Tannirbhavi has been worked in rotation for thinnings which are now complete. The inroad of the sea has swept away a large number of trees and it is advisable to fell all trees in dangerous proximity to the sea. We have a demand for the produce which is supplied to the Mangalore jail. I would thereupon advocate the extension of the plantation hut to the south instead of to the north, for on the split facing the

Collector's Remarks.

Collector's Remarks.

The Port officer Mr. Brown has informed me that he does not think the Marine Department would object. The District Forest-officer should ascertain whether the municipality makes any claim or objection.

(Intld.) W.H.W.,
Collector.

Some offenders give false names so that they may get off with an admonition more than once. This gives trouble to guards and watchers, but I think it is a good system that every one should be let off once.

(Intld.) W.H.W.,
Collector.

Inspection Notes.

bunder there is fixed sand which would grow the trees and they would pay better than the trees we possess further off. It would be as well too to notify the area under section 4 after preliminary enquiry as to its being within the municipality in which case the rating might prevent our planting.

10. *Cultural operations.*—There is nothing new to record under this head. The compilation of Sylvicultural notes is continued and Mr. Foulkes has published a valuable record of the qualities of the principal species of trees found in the district. These notes are for constant correction and to be added to.

11. *General Protection.*—The number of reported offences remains high and the policy of punishing trespass and the removal of head loads by simple admonishing has not yet borne fruit. The abandonment of small reserves should have the effect of keeping down the number of petty offences which are rife only in the plain forests.

The figures for the six months ending 31st December are as follows :—

Range.	Felling.	Grazing.	Fire.	Total.	Petty offences.
Coondapoor	58	9	..	67	486
Udipi	67	16	..	83	163
Mangalore	15	2	..	17	42
Puttur	211	3	..	214	239
Uppinangadi	35	2	..	37	28
Total ..	..	..	..	418	961

The present District Forest-officer restricts his exercise of the authority to compound mainly to cases where reserved trees the produce of kumakis is cut without license. The number of major offences is largely composed of kumeri cases, while the petty cases are especially numerous in Coondapoor north plain blocks.

12. *Establishment.*—With the abandonment of small blocks of reserved forests there has been a reduction in the staff of temporary establishment employed.

13. *Revenue.*—The figures for the past two years are as follows :—

	1894-95.	1895-96.
	Rs.	Rs.
I.—(*a*) Timber ...	8,896	6,783
(*b*) Fuel	4,523	1,812
(*c*) Bamboos ...	24	...
(*e*) Minor produce.	9,762	8,739

Inspection Notes.

Collector's Remarks.

	1894–95.	1895–96.
	Rs.	Rs.
II.—(*a*) Timber ...	867	1,587
(*b*) Fuel	5,567	11,309
(*c*) Bamboos ...	1,442	1,468
(*d*) Grazing grass...	4,014	3,521
(*e*) Minor produce.	22,674	19,157
III.—Confiscation ...	504	1,983
V.—(*a*) Fines	302	174
(*c*) Others	5,409	2,891
Total ...	63,984	59,424

Comparing this return with the rough estimate made in 1895, the anticipated expansion has not come about under all heads. There has been an increase under timber and fuel removed by purchasers but it has been absorbed by the reduction under minor produce leases and the total disappearance of revenue from sandal stills. The budget estimate for 1896–97 was Rs. 74,600 but is now considered probable that only Rs. 64,000 will be collected.

The revenue will now be dealt with by sub-heads separately.

Revenue, I (a) Timber.—The estimate of 10,000 cubic feet as our annual yield is being worked up to. The forests worked are, in Puttur range, the Pumale and surrounding blocks, and in Udipi range the Someshwar block. The system of contracting out the work has been stopped in favour of departmental fellings, the transport only being done on contract. The logs from Puttur were for the most part formerly sawn before extraction, but it was found to be wasteful and unprofitable. The timber is now sent to Mangalore in the log and there sold at fixed rates without difficulty. The total costs amount to between 7 and 8 annas per cubic foot and the prices realized are as follows :—

	Per cubic feet. Rs. A. P.
Tirma (Xylia)	0 10 4
Banapa (T. tomentosa) ...	0 15 6
Blackwood (Dalbergia) ...	1 2 0
Vengai (Pterocarpus) ...	0 15 6
Kiralbhogi (Hopea) Jack (Artocarpus)	1 1 0
Maruva (T. Paniculata) ...	0 9 0
Benteak (Lagerstrœmia).	0 13 0
Teak (Tectona)	1 12 0

Most of the timber is Xylia and Banapu and the purchasers use the material in Mangalore town where it competes with produce brought from Malabar. The net profit of the Mangalore timber after deducting petty establishment charges will amount to Rs. 3,000 a year. The Udipi timber is more profitable, the distance from forest to market being less. The total volume yearly is about 3,000 cubic feet mostly, Banapu and Kiralbhogi (Hopea) bringing in Rs. 2,000, from which if we deduct charges at As. 5 per cubic foot, the net profit will be Rs. 1,000.

The gross revenue from timber departmentally collected amounts to Rs. 10,000 which sum will not be increased until our working is developed.

Revenue, I (b) Fuel.—There is no revenue expected under this head, our fuel works all being conducted by contractors.

Revenue, I (c) Bamboos.—The same remarks apply.

Revenue, I (e) Minor Produce.—Our only source of revenue under this head is catechu which brings in Rs. 7,000 per annum at an expenditure of Rs. 3,000. Until lately the cost was much greater. In the next few years we may anticipate a revenue increased to Rs. 8,500 at a cost of Rs. 3,500 from the extension of operations to a second circle and to certain unreserved lands in the Coondapoor range.

Revenue, II (a) Timber.—The revenue estimated will be Rs. 2,000 to Rs. 2,500 yearly. This is an increase over past figures chiefly due to previous error in classifying dead timber trees under fuel.

Revenue, II (b) Fuel.—The expansion of the revenue under this head anticipated in 1895 has been fully realised. The budget estimate for 1896–97 is Rs. 10,000 and our income will in all likelihood reach Rs. 12,000. It is hoped that we shall secure as much as Rs. 15,000 within another three years from regulated fellings in Coondapoor.

Revenue, II (c) Bamboos.—The expansion under this head has not been fully realized, the budget estimate of Rs. 2,000 will however be recovered and a yearly increase of a small amount can still be hoped for.

Revenue, II (d) Grass and Grazing.—The sum budgeted under this head is Rs. 5,000 and it will be recovered. The policy of abandoning the small reserves has resulted in a loss of revenue from grazing which has only partially been compensated by the increased rates sanctioned by Government. It is not expected that our revenue will develop from this source at present.

When these operations are going on, villagers are given leaves and loppings free under Mr. Foulke's arrangement. In some places this concession is gladly availed of, in others neglected.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Collector's Remarks.

Inspection Notes.

Inspection Notes.

Revenue, II (e) Minor Produce.—The budget amount is Rs. 22,000, but the contracts only total Rs. 19,000. This is a fluctuating income due to unstable prices for nutmegs, wild mace, myrabolams and shigikoi, &c.

Dealing with the total revenue, we may expect Rs. 65,000 per annum steadily after three years. The previous estimate was Rs. 75,000 and the deficiency is mostly due to cessation of sandal distillation of which no recommencement is anticipated also to smaller returns under grazing and bamboos.

14. The expenditure for the past two years has been as follows :—

		1894-95.	1895-96.
		Rs.	Rs.
A-I. (a)	Timber ...	11,502	4,517
(b)	Fuel ...	1,359	1,337
(c)	Bamboos ...	12	...
(e)	Minor Produce	3,608	5,525
A-II.	...	6,673	7,237
III.	...	1	...
VI. (a)	Elephant ...	1,900	...
(b)	Feed ...	628	496
(c)	Stores ...	465	223
A-VII. (a)	Buildings. ...	524	348
(c)	Other works.	2	1
A-VIII (a)	Demarcation.	318	412
(e)	Surveys ...	2,883	2,172
(d)	Working plans	...	46
(e)	Sowing and planting ...	445	808
(f)	Fire protection.	973	1,028
(g)	Other works.	1,976	1,637
IX. (a)	Refunds ...	257	362
(b)	Law charges.	...	1
(c)	Other charges.	854	731
		34,380	27,281

After discussing the works for execution with the District Forest-officer, we have together decided that our probable expenditure in the next few years will be based on the following considerations :—

A-I (a) Timber.—As recorded under revenue head I (a) we propose to expend Rs. 6,000 on bringing timber to Mangalore and Udipi. With the opening of the roads now suggested, larger consignments can be made. It is probable that we shall at no distant date entirely displace Malabar wood from Mangalore, but until our general administration is more advanced and establishment stronger, we cannot do better than carry out the present small programme.

Collector's Remarks.

Abandonment of smaller reserves assists the decline in grazing. It is reported also that some Forest subordinates make a regular surreptitious income by permitting grazing and free removal of head-loads, for which they get Rs. 4 and a fowl annually, also assistance in clearing boundaries and fire traces.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Malabar private importers have an advantage by taking possession of the best site for their timber depôt. The Conservator does not mention the timber basin among the proposed items of expenditure. It seems to me advisable to oust the

Collector's Remarks.

interlopers and secure a proper place for handling our timber. Delay may cause difficulties. I do not see why this should not come under A-VII (b) if the Public Works Department does not enter it in their budget.

(Intld.) W.H.W.,
Collector.

The Local Fund supervisor has examined the line. Unfortunately the Taluk Board is not much in favour of contributing to this project.

(Intld.) W.H.W.,
Collector.

22nd Feb. 1897.

Inspection Notes.

A-I (b) Fuel.—The present charge will not continue.

A-I (e) Minor produce.—The Revenue note explains why we shall require a sum of Rs. 3,500 commencing in 1897-98 and included in the budget estimates.

A-II.—The cost under this head has been Rs. 8,000 in 1896-97 and it is probable that this sum will be increased by transfer to it of establishment charges on account of watchers hitherto partly classed under A-VIII (g) (other works). We shall require from Rs. 9,000 to Rs. 10,000 instead of in all Rs. 11,000 for the watching establishment as at present; the present scale will not be entertained for reasons elsewhere recorded.

A-VI (b) Elephant feed.—Within the next three years an additional pair of elephants will be required for timber-dragging, but at present the sum of Rs. 600 suffices each year.

A-VI (c).—Stores will necessitate an outlay of Rs. 200 yearly.

A-VII (a) Roads.—The road from Savanal to Guruvankiri is already constructed but old and disused. It is for further investigation whether it will be profitable to improve it for the extraction of bamboo. It is proposed to open out roads in Coondapoor, Udipi and Uppinangadi as follows :—

I. Coondapoor range—Wandse to Yelgit, 14 miles.—A road of general utility tapping several forests under regular working and an alternative route to the Coast road which is at times obliterated by sand. The Forest Department will contribute Rs. 1,000 to its construction cost in 1897-98 and provision is made in the budget.

II. Jadkal to Madiberi, 10 miles.—This road will open up the Madiberi reserve which contains mature timber. Its length will be 10 miles and will be a forest undertaking costing Rs. 2,000. This should be spent in 1898-99 and provision included in next budget.

Udipi Range.—Branch roads to open up Someshwar blocks should be constructed and provision made in next budget estimate for 5 miles at Rs. 150, or in all Rs. 750.

Inspection Notes.

Uppinangadi Range—I Subramania to Gundia.—This work is now being constructed by Local Fund department and a grant from forests to the extent of Rs. 1,000 will be made in 1897–98. This will open up the reserves of Bhagmale, Kombhur and Gundia.

II. *Meyar to Rekhia*, 16 miles, to join the Charmadi and Sheradi ghaut roads and passing through the reserves of Kokada, Subaji, Karinjia and Meyar. This is a road of great importance, as it opens up mature forests within easy access to the market, and on this account should be taken in hand without delay. This road will cost Rs. 5,000 and, if sanctioned, should be commenced on savings when available. It will not require to be constructed throughout at once for every mile will be of immediate use.

Puthur Range.—Certain roads will be necessary to open up Kiribug and Kilarmale, but these forests need not be worked so soon as those in Uppinangadi range which are nearer the market.

The total expenditure on new roads in the next three years may be anticipated to amount to Rs. 10,000, or annually with repairs Rs. 3,500.

A-VII (*b*), *Buildings.*—These proposals will be built on the registered plan amended where necessary to suit local conditions and are estimated to cost with out-houses and stables Rs. 800 each or with a well Rs. 1,000. The localities selected are as follows :—

In Coondapoor Range.—Kadiki now under construction.

Alur.—Provision is made in the budget for 1897–98 for this work.

Madaberi.—This building will be carried on with the road work between Jadkal and Madeberi in 1898–99.

In Udipi Range.—A building will be erected in connection with the works on the Someshwar blocks in 1898–99.

In Uppinangadi Range.—A building on the Meyar-Rekkia road in 1898–99. A building at Kombhur on the Subramania-Gundia road budgeted for in 1897–98.

It is not proposed at present to build in Puthur range.

Collector's Remarks.

A very useful road. It will facilitate transit of cattle to Kulgunda fair down the Manzarabad ghaut.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

Inspection Notes.

The total expenditure on these original works will therefore be as follows :—

	Rs.
In 1896–97	800
„ 1897–98	1,600
„ 1898–99	2,400

Adding on account of forest huts Rs. 500 yearly and cost of annual repairs to Rangs offices, depôts, &c., Rs. 500 and total allotment will be required as follows :—

	Rs.
In 1897–98	2,600
„ 1898–99	3,500

A-VII (*c*) *Other works*.—Under this head the cost of wells will amount to Rs. 500 yearly in connection with present and new buildings. I have discussed with the District Forest-officer the practicability and usefulness of opening up the Natravati and Kumardari rivers. In the case of Natravati, floating was carried out for some years from Uppinangadi, the produce floated coming from the forests of Shiradi. But at the present day there is much mature timber available towards Subramaniya which we could bring to market if the Kumardari and Kempa Halla streams permitted our floating it down. We think it worthwhile to arrange for a practical survey of the river-bed to discover how far without interference with the storage of water it will be possible to float down moderate size timber between September and January and at my suggestion the preliminary enquiries will now be instituted and I would advocate expenditure up to Rs. 500 without delay.

A-VIII (*a*) *Demarcation.*—In this Inspection note a general reference has been made to the demarcation work still to be carried out. Our immediate requirements are calculated to be as follows yearly :—

Coondapoor ...	Rs.	600 for 5 years.
Udipi ...	„	350 for 3 „
Mangalore ...	„	300 for 3 „
Uppinangadi.	„	500 for 5 „
Puthur ...	„	800 for 5 „

or in all Rs. 11,000 in five years.

It must be remembered that the great reduction in this revised estimate is almost entirely due to the arrangements which the Survey department has enabled us to make.

A-VIII (*c*) *Surveys.*—There will be no regular charge under this head.

A-VIII (*d*) *Working plans.*—Such plans as will be made will be prepared without special expenditure.

Inspection Notes.

A-VIII (*e*) *Sawing and Planting.*—At present experimental works are costing Rs. 200 per annum and this will continue. In addition a plantation of casuarina over 50 acres is proposed on the sand pit opposite the Bandur to cost Rs. 2,500 in five years so that under this head Rs. 700 will be required.

A-VIII (*f*) *Fire-protection.*—At present the allotment is Rs. 1,000 yearly. It is proposed not to exceed this.

A-VIII (*g*) *Other works.*—The expenditure hitherto has been incurred on employing watchers, the staff of which is being reduced, the remainder being chargeable to A-II. The sum of Rs. 700 per annum is proposed for improvement fellings in the various ranges, Rs. 400 of which will be spent in Coondapoor and Puthur ranges. This sum is very small, but it will be necessary to thoroughly organize our operations on a small scale before extending them which should be done when the supervising establishment is at length strengthened.

A-IX.—The charges under this head cannot be foreseen.

15. *Office.*—The District Forest-office was examined and a separate report submitted. The office is in good condition on the whole and the staff of clerks satisfactory.

16. (i) *General remarks.*—During the year, the Uppinangadi range has been amalgamated with the Kasaragod range and split up into the two ranges known as Puthur and Uppinangadi. With reference to paragraph 4 of Board's Resolution, Forest No. 361, dated 17th June 1895, this arrangement has been considered as temporary. Its object is to secure for portions of Uppinangadi more supervision that was possible while worked with the forests of the rest of the taluk seeing that together they include some of the richest portions of the ghâts likely to come under early working.

(ii) The Kumaki rules are now at work and there are various points which still cause doubt as to the privileges to be retained especially in connection with unassessed kans which there is a tendency to treat on all fours with assessed kans and to consider as enjoying equal privileges notwithstanding the profound differance of status and treatment ordered by

Collector's Remarks.

I append a copy of this office Dis. No. 860-Ver. of 1896.

(Intld.) W.H.W.,
Collector.

Collector's Remarks.

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the rules. It is true that, in the correspondence leading up to the rules, unassessed kans are not referred to. Sullia and Amara, however, contain the only assessed kans in the district, but in the more northern Magnes there are very many unassessed and it is for interpretation whether kans so declared prior to 1812 or 1819 are to be considered assessed.

(iii) *Kumakis.*—Already there are applications for extra Kumaki by ryots with no ancestral or long standing claim to such holdings. It is difficult for a Collector to make exceptions in the matter of grant so long as there is unreserved land for the purpose.

(iv) Mr. Battie has been in the district for sixteen months and has secured a good grasp of its forest administration.

(Signed) E. D. M. HOOPER,
Ag. Conservator of Forests,
Southern Circle.

APPENDIX.

Read—Proceedings of the Acting Collector of South Canara, dated 22nd May 1896, Dis. No. 860-Ver.

Read report, Ref. on Cur. No. 703, dated 9th April 1896, submitted to the District Forest-officer by the Tahsildar of Uppinangadi taluk, requesting that the word "assessed" in the term "assessed kans" may be defined.

Order—

The Tahsildar is informed that no distinction appears to have been made between kans that bear shist (assessed kans) and those that do not bear shist (unassessed kans) as regards claims to obtain pepper or cardamom from them, as such claims were made to depend on the fact whether a kan was found mentioned in the chittas of 1800—1801, or of 1812 or of 1819. Claims proved by any of these public records are admissible.

The attention of the Forest Department is drawn to the Collector's suggestion contained in the last part of paragraph 23 of letter, No. 794, dated 3rd April 1884, printed in Board's Proceedings, Forest No. 3084-273, dated 2nd September 1884 which has met with the Secretary of State's approval.

(Signed) L. C. MILLER,
Acting Collector.

(True Copy.)

(Signed) W. H. WELSH,
Collector.

Endorsement by the Collector of South Canara, dated 25th February 1897, Dis. on Cur. No. 3548-For.

Forwarded.

BACK PAPERS.

Resolution—Forest No. 182, dated 4th May 1897.

Recorded.

2. *Paragraph* 2 *of the Inspection Note.*—The Collector is requested to submit a special report on the statement that practically the whole of the Sullia and Amara magnes have been demarcated by the Survey department as private property, although many of the claims seem *primâ facie* to be grossly exaggerated.

Paragraph 3.—The Board learns with much satisfaction that there is a fair prospect of the settlement of the District being completed in 1899, save in the southern magnies of the Kasaragod taluk, where selection has been necessarily delayed.

Paragraph 7.—With reference to the Collector's remark that Poitaji and Chembaguddi reserves were ordered to be abandoned, the Board observes that Government has since sanctioned their retention (*vide* Government Order communicated in Board's Proceedings, Forest Mis. No. 189, dated 25th February 1897). The Collector is requested to state whether the working plan for the Poitaji and Kayapulla blocks submitted by him and recorded in Board's Proceedings, Forest No. 630, Routine, dated 5th October 1896, requires modification, and if so, in what respects. The plan and the Conservator's letter thereon are herewith sent to the Collector for reference.

Paragraph 8.—The Conservator's advice for minimizing the cost of fire-protection should receive the careful attention of the District Forest-officer.

Paragraph 9.—The Board approves of the Conservator's instructions regarding the conservancy and extension of the Tannirbhavi plantation, subject to an explicit statement from the Marine Department that it has no longer any objection thereto.

Paragraph 11.—From the large number of petty offences reported during the six months ending 31st December 1896, the Board fears that the penal provisions of the Act are being worked in an unnecessarily harassing and oppressive manner. The Collector is requested to give the matter very serious attention, and to make every endeavour to dispense with prosecutions in cases in which offences are of a mere technical character involving no appreciable damage to the forest. He should at once report what effect has been given to the instructions of Government and the Board that simple trespass should not ordinarily be treated as an offence at all (Board's Proceedings, No. 823, dated 12th June 1895).

Paragraph 13.—(1) The disappearance of revenue from sandalwood stills is attributed in paragraph 8 to a fall in the price of sandal oil being assigned as a reason for the non-submission of application for stills. The Collector is requested to report whether private stills continue to be worked.

(2) *Xylia* seems from this paragraph to be in general demand in the district, and in paragraph 8, as well as in former reports, there is an allusion to forests of almost pure *Xylia* which have grown up on abandoned kumeris. The Collector is requested to report whether any of these forests are in a condition to be profitably worked for railway sleepers, if a saw mill were erected in the neighbourhood.

(3) The free grant of leaves and loppings to villagers arranged for by Mr. Foulkes should be encouraged as far as possible. In some cases, it is said that the concession was neglected. The Board would be glad to know whether, in these cases, the villagers concerned had been duly informed of the concession before felling operations were commenced.

(4) The illicit dealings of forest subordinates in the matter of grazing, &c., referred to by the Collector should be made the subject of special investigation.

(5) The estimate for constructing a timber basin at Mangalore has been submitted to Government in Board's Proceedings, Forest Mis. No. 23, dated 11th January 1897. As stated therein, the cost will have to be provided from the Public Works budget. The Collector's remark that the delay in carrying out the work may cause difficulties will be brought to the notice of Government.

Paragraph 14.—*A-VII* (*c*) The Board has no objection to an early expenditure of Rs. 500 on a river survey, provided the work is entrusted to an officer who knows exactly what is required.

Paragraph 16.—(ii) The Board observes that the Collector has rightly decided that so-called unassessed káns mentioned in the chittas of 1800–1801 or of 1812 or of 1819 are *bonâ fide* assessed káns. A kán may be subject to assessment although the assessment thereon does not appear separately in the accounts.

(True Copy and Extract.)

(Signed) N. S. BRODIE,
Ag. Secretary.

To the Secretary to Government, Revenue Department.
" Collector of South Canara, with the working plan
and the Conservator's letter in Board's Proceedings,
Forest No. 630, Routine, dated 5th October 1896.
" Conservator of Forests, Southern Circle.

Order—No. 446, Revenue, dated 9th June 1897.

Forest No. 97.

Recorded.

2. As regards the remarks contained in paragraph 2 of the Proceedings read above on the subject of a timber basin at Mangalore, the Board's attention will be drawn to G.O., Mis. No. 2710, dated 28th May 1897, from which it will be seen that the Government has since approved of the proposal of the Collector and Conservator and that the estimate is under scrutiny in the Public Works Department.

(True Extract.)

for Ag. Secretary to Government.

To the Board of Revenue (Land Revenue).
Copy to the Public Works Department.

Erd Shaik Karim.

50 Copies.