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MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1068 Press Mis.—

173-174

Dated 11— 5 — 1867.

Not to be folded or roughly handled

No. 173. Read the following Circular from the Government of India, Public Works Department, (Revenue—Forests), dated Fort William, 22nd April 1867, No. 7 :—

Report on demarcation of Forests in the Tanna Collectorate, Bombay.

Read the following papers :—

From Major W. WADDINGTON, Superintendent, Revenue Survey and Assessment, Tanna, and Rutnagherry, to Survey Commissioner, dated 22nd September 1866, No. 496.

1. In forwarding the accompanying report from Captain Lloyd on the demarcation of forests during the past season, I have the honour to offer the following observations.

2. The work was carried on in five talookas of the Tanna Collectorate, of which four are completed, with the exception of the villages of Moorbar bordering on Callian, which were purposely left over by Captain Lloyd. The quantity of land marked off into Imperial forests was 87,942 acres. A larger amount of work, as Captain Lloyd observes, might have been got through under more favourable circumstances, but owing to my not having any Assistant available for the duty, the work could not be commenced until the 1st February, but even under the disadvantages enumerated by Captain Lloyd, the area demarcated was nearly double that of last season.

3. The number of boundary marks erected was 276 against 203 last season, and the average cost of each Rupee 1-0-6 as against Rupees 3-14-0 last season. The decrease in the cost is attributable, to some extent, to labour being cheaper in the districts in which the work was carried on during the present season, but is mainly owing to the judicious arrangements of Captain Lloyd. The total cost of the work was, including supervision, Pies 5·6 per acre, and without it Pies 3·8 against Pies 8·9 last season, exclusive of supervision.

4. The objection advanced by Captain Lloyd against the village reserves being marked off into lots, viz., the amount of supervision the plan would entail, appears to me untenable. The proposal was made not under the impression that a general rush would be made on the village allotments, but to allow each lot an interval in which it might recover itself. If a little vigilance on the part of Tullatees and Patels will suffice, as Captain Lloyd further on observes, to check irregularities as to the sale of wood to outsiders, surely the same supervision will suffice to ensure that only the portion allotted for each year is cut. Captain Lloyd suggests that villages near the Railway, or in which land has been allotted to meet the wants of other villages, would require some extra precaution; and on this point I agree with him.

5. Captain Lloyd's suggestion that the Thakoors of Sonderwadee should be directed to remove into other villages should most certainly be carried out as soon as their present crops are off the ground; and as it appears that plenty of waste land is available in the adjoining villages, there will be no great hardship in their removal.

6. With regard to Captain Lloyd's remarks in his 14th paragraph, I do not think that anything more need be done in Nusrapoor. If the people choose to use

up all their wood, they must buy for themselves—*vide* paragraph 35 of Forest Committee's Report, dated 10th December 1863. The same remark applies to the observations in Captain Lloyd's 17th paragraph. It must be remembered that the village reserves are not intended to supply *rab*, but firewood and wood for agricultural implements; and repressive measures against their being applied to any other purpose should, I think, be introduced, or provision made against it in the Forest Act.

7. It is highly probable, as Captain Lloyd says in his 18th paragraph, that land has been applied for with the sole object of obtaining the trees growing on it; but in all applications the Mamlutdar was invariably called upon to report on the *bonâ fide* nature of the application, and whether any and what trees grew on the land applied for. It is probable that in some instances, through the neglect or connivance of the native officials, land containing trees may have been given out for cultivation; but in several instances where applications have not been complied with, suits have been brought against Government, and invariably with success.

8. It has long been the custom to cry out against the burning of forests; but I am very doubtful whether the damage done by fire has not been exaggerated. I have certainly seen teak forests in Colwan both during and after a fire, and *no* damage was done to the trees, except in the case of old and decayed trunks. Those found by Captain Lloyd partially charred through might have been burned the previous season, though it is possible his hint is correct, and it might be as well to discontinue the practice of selling fallen timber.

9. Captain Lloyd's remarks regarding the hardships the Gowlees would experience if kept out of the Imperial Reserves are just, and his suggestion of restricting them to particular tracts is worthy of attention. His remarks, too, about the Thakoors, Warlees, &c., are very true, and raise a somewhat difficult question for the decision of the Conservator of Forests.

10. Maps of the forests marked off last season have been furnished to the Collector and the Conservator of Forests, and those for the present season shall be furnished as soon as they are ready. I would urge that the connection of the boundary marks by cutting a broad path through the trees, as suggested in my former report, should be no longer delayed, as not only will the boundary of the forests be clearly defined by these means, but the conservancy of the boundary marks facilitated.

Report by Captain LLOYD, Assistant Superintendent, Revenue Survey, Bombay, on the demarcation of Forests in the Tanna Collectorate, Bombay.

1. I have the honour to report the demarcation of forests during the past season in the talooks of *Bhewndy*, *Moorbar*, *Nusrapoor*, *Kolwun*, and *Salsette*, of the Tanna Collectorate.

2. The number of villages in each talook possessing forest, and the total area of the tracts allotted to meet local requirements will be found in the Statement which accompanies this report. For the present I confine my remarks to the subject of Imperial reserves.

Proceedings of the Madras Government, Revenue Department,
11th May 1867.

3. The forest demarcation of the Bhewndy talook was commenced last year by Captain Hobson, and, at the close of the season, six villages were reported to remain for future demarcation: sixteen villages, however, have been marked off this year, containing Imperial reserve 4,818 acres

Bhewndy.

4. Forest demarcation has been carried out in the Moorbar talook, and extends to thirty-two villages, containing Imperial reserve 17,597 acres. A tract of forest to the west of this talook, and extending into the talook of Callian, has been left open for the present. Taken by itself, there is not sufficient forest on the Moorbar side of the boundary after arranging for local demands to admit of a reserve being marked off, but when the Callian portion has been inspected, it is probable that the two together will furnish sufficient for an Imperial number.

Moorbar.

5. The demarcation of the Nusrapoor talook has been completed, and extends to fifty villages, containing Imperial reserve 21,331 acres. There is one village (Khandus) the Khote of which denied the right of Government to reserve forest. Pending a reference on the subject, the boundary of the forest in this village was defined by temporary marks. The question was afterwards decided against the Khote, but the necessary instructions were not received by me until after the close of the season; the erection of the permanent marks, and fixing the sites by theodilite, is therefore deferred until next season, and in the meantime the area of the tract is excluded from the return of work.

Nusrapoor.

6. In carrying out the work of demarcation, I have, as a rule, refrained from resuming cultivated lands; but in this talook (Nusrapoor), particularly in the villages surrounding *Matheran*, I have been compelled to resort to this practice. A numerous body of Thakoors have settled on the slopes of this range. They have established hamlets in each of the adjoining villages, and subsist almost entirely by raising crops of inferior grain, for the cultivation of which they have made extensive clearances of forest, and are yearly pushing up the slopes of Matheran, which at their present rate of progress would soon be denuded of trees. Very large tracts of forest had been burnt down, and were being burnt at the time of my visit this year. In some of the villages, as Botewlee, Palee, &c., the hill slopes have been completely cleared. It is of little use to include such places into a reserve forest, and as the different communities, whose operations I have interfered with in the adjoining villages, will require some place for carrying on cultivation, I have left these villages open to meet the necessity, and I would suggest that all Thakoors who may have lost their land should be directed to settle in them. There is no great hardship in this, as these Thakoors are a restless, wandering tribe, with no particular rights or associations connected with the land they cultivate. In the village of "Sonderwadee," which claims the valley to the east of the Spur known, I believe, as *Chouk Point*, there was originally a very fine forest, the present condition of which is lamentable. A body of Thakoors have settled in this valley, and are doing an infinity of mischief. As the authority to remove an entire hamlet has not been conferred on me, I have not interfered with these people, but have marked off the forest all round, and thus included them in the

Imperial reserve. It will be highly unadvisable, however, to allow them to remain there, as no amount of supervision will prevent their destroying the surrounding forest, and enlarging their circle of cultivation. As the place is so close to Matheran, it might, perhaps, receive the benefit of personal inspection from higher authority.

7. The demarcation of the Kolwun talook has been carried out to the number of twenty-three villages, containing Imperial reserve 41,909 acres. A large proportion of the forests of this talook remain to be demarcated next season.

Kolwun.

8. One village of the Salsette talook left over from last season has been demarcated this year, and contains Imperial reserve 2,287 acres.

Salsette.

9. The total return of work for the season shews that 87,942 acres of forest, contained in 122 villages, have been marked off as Imperial reserve. This amount does not equal the area which ought under more favourable circumstances to have been marked off; but many difficulties were experienced. The Carcoons appointed to the work were, when I first took charge of the establishment, scattered over the Deccan districts, and some delay occurred in getting them down to my camp. For the first fortnight I carried on the work with only one Carcoon. Again, in the month of April, one Carcoon was sent to the Assistant Conservator of Forests, another was sent to complete work in the Nassick districts, and a third took advantage of his services being urgently required to be laid up with guinea-worm; thus reducing my available establishment to two Carcoons. In addition to this the peculiar circumstances of the Nusrapoor talook added greatly to the amount of work, with a diminished result in the way of area.

Total area demarcated.

10. Two hundred and seventy-six forest boundary marks have been erected during the season, at a total cost of Rupees 285, or an average of Rupee 1-0-6 per mark.

Number and cost of boundary marks.

11. Owing to the manner in which cultivation had encroached on forest in the Nusrapoor talook, it became necessary in laying down the boundary to allow more bends and angles than were called for in other talooks. As the erection of an ordinary forest mark at each bend would very greatly have increased the expense, I adopted the plan of erecting a mark according to the sanctioned pattern wherever the boundary presented a decided bend, *i. e.*, of the nature of a right angle, but when the deflection from a straight line was only slight, a simple post with pointer was erected.

Description of marks in Nusrapoor.

12. In distributing the expense of demarcation over the total area marked off during the season, I have included into the calculation the cost of boundary marks, the pay of the Carcoons employed, the amount of travelling batta received by me, and one-fourth of my pay and that of my Hoozoor establishment. With reference to this last item, I must explain that I was in charge of a measuring establishment, the duties of which claimed my time and attention conjointly with the work of demarcation. I have, therefore, charged to the latter work such proportion of my pay as the number of my Forest Carcoons bore to the number of measuring Carcoons. The average expenditure

Cost of demarcation per acre.

worked out in this way comes to 5·6 Pies per acre; following Captain Hobson's plan, and leaving out the cost of supervision, it comes to 3·8 Pies per acre.

13. In Superintendent's letter of instructions No. 84 of 1865, suggestions are requested for the future management of village allotments, and I believe Captain Hobson in his report proposed that they should be marked off into four lots—one lot to be cut yearly. The only objection to such a course would be the amount of supervision required to carry it out. The Forest Department, as at present constituted, is only able to exercise a partial supervision over the forests, and I imagine that the work of demarcation is being carried out mainly with a view to allow of their concentrating their attention on the reserved tracts. To entertain an establishment expressly for the purpose of managing village allotments would be out of the question, and to throw the work on the shoulders of the local officials in addition to their present duties would be the same as not having it done at all. There seems to be an impression that when village allotments are made over to the people, a general rush will be made, and the trees standing in them cleared away. My experience does not support this conclusion. It is true that when the allotments have been marked off greatly in excess of the village requirements, something of the kind may be expected, and the probability will be greatly increased if the village happens to be near a line of railway or large town, but there are certain requirements—as rab and fuel—which are essentially necessary to the people, and they are fully alive to the wisdom of preserving the forests from which they obtain their supplies. I feel persuaded that when allotments have been fairly apportioned, and the villagers have realized the fact, that they will be unable, as heretofore, to fall back on the Government reserves—the allotments will be far more strictly conserved than the Imperial tracts situated in the same villages. Apart from villages situated where the demand for wood and the opportunities and temptation to sell are great, the only instances where the cutting of wood for other than local purposes may be anticipated, is, when several villages have the right of drawing their supplies from one particular jungle, and the allotment has consequently been marked off with a view to meet the whole demand. The inhabitants of the village in which it is situated, knowing that the supply exceeds their own wants, and having no interest in preserving a supply for their neighbours, may probably attempt to benefit by the sale of wood to outsiders; but even in such cases a little vigilance on the part of Tulatees and Patels would suffice to check irregularities. Village allotments do not extend into the unfrequented recesses of a forest. They are always situated within easy access of the village, and no timber can be abstracted without the knowledge of the village authorities. On the whole, I consider some plan should be adopted for watching villages situated near Railways, or within the influence of outside demand, but in other cases, I think, the care of the village allotments may be left to the sense entertained by the people of their own interests, supplemented by a charge of supervision conferred on the Patel. This latter point might be made more effective by allowing a per-centage of fines on conviction. A notice to the effect that these allotments are for the supply of local requirements, and that any attempt to dispose of the wood to other parties will be promptly punished, should be circulated to each village.

Management of village allotments.

14. The above remarks do not apply to the talook of Nusrapoor, which differs in its features from all other talooks. The Government forest reserves have now been demarcated, but the boundaries of the *rab* and *hill cultivation* and *grazing lands* have never been separately defined (*vide* paragraph 43 of the Forest Committee's Report), and as these lands were given over to the people at certain fixed rates included in their rice-assessment, it follows that they are the owners of all trees situated therein (excepting Government royalties), and may employ the land to the best advantage, even for clearing and cultivating it, without Government being able to interfere. As these lands have been taken into consideration by me in fixing a supply of forest for village requirements, it will be necessary both to define their boundaries and revise their tenures before any hope can be entertained of maintaining the forest situated in them. The power to cultivate is the dangerous element, for as the price of grain increases, a demand for land will spring up, and all other requirements will be made to give way to it.

15. In the Superintendent's letter above referred to, a list of the trees growing in Imperial reserves is stated to be a desideratum. I should have been happy to respond to the invitation here held out, but it occurs to me that the information I could supply, gained as it has been in a mere morning's walk through each forest, with many other questions claiming my attention, would be very meagre and incomplete compared to the information which must be already in the possession of the trained officers of the Forest Department, who have had charge of these forests for years, and are doubtless personally acquainted with almost every tree.

16. My report, in as far as it relates to the work delegated to me, should here close, but various questions have attracted my attention during the progress of demarcation, and as they have a general bearing on the welfare of the forests, and no one is likely to enjoy better opportunities of becoming acquainted with such matters, I beg that I may be excused for bringing them to your notice.

17. In order that you may have before you a general view of this question, I will briefly remind you that the cutting of *rab* was decided by Government to be a taxable privilege, and that rab numbers were, therefore, marked off and handed over to the people. Within the last few years the price of grain has greatly increased, and has led to a general demand for land, but the amount of unoccupied land in the district (excepting forest) is limited, and the attention of the people has turned to their rab numbers, which, if cleared, would supply what was required. As an additional impulse to this end the price of wood also increased, and Government at the same time decided that the ownership of trees standing in a number should be vested in the occupant, teak and blackwood being alone excepted. These causes, viz., the demand for cultivation, the value of wood in the market, added to the ownership of the trees being in the hands of the ryots, have combined to bring about the wholesale clearance of *rab* numbers, which is now being actively carried out all over the districts. Even the restriction in favour of Government royalties is no hindrance, as the fee demanded by the authorities is so small, compared to the value of the tree in the market, that the existence of a teak tree in a number is looked upon by the occupant as a special interposition of Providence in his favour. I believe if enquiry was made, it would

Rab.

be found that a large portion of the time of the Mamlutdars was taken up in going from village to village for the purpose of valuing teak trees standing in occupied numbers, or that the work has been delegated to Tulatees, in which case it will probably not bear much looking into. The result of all this clearance is that the area of cultivation, and consequent consumption, of *rab*, is greatly increased, whereas the supply no longer exists. A flood of petitions is now pouring in upon the authorities applying for fresh numbers, whilst, meanwhile, the Government forests are plundered. The facts here mentioned must be read in connection with the views expressed in paragraph 13, otherwise the two will present a discrepancy. For instance, in paragraph 13 I have mentioned *rab* as one of the requirements to be obtained by the cultivators from the village allotments, whereas it is shewn here that rab numbers were specially marked off for them at the time of survey, the truth being that owing to the causes already mentioned, a large proportion of rab numbers have been cleared, and the ryots have been allowed to fall back upon the Government forests, many of which, especially in Moorba, present a very sorry appearance. Half the ryots in these districts now look to getting their supply of rab from the village allotments. The question might perhaps be raised, if the ryots cut down their rab trees when given to them in separate numbers, why should they be expected to preserve them when situated in village allotments? But the reasons are plain. In the first case, after obtaining an immediate profit by the sale of the trees, the ryot has a permanent profit by his increased area of cultivation, whilst also he has been able to fall back upon the Government forests for his supply of rab, but in the case of village allotments the ryot has no interest beyond the trees; he cannot cultivate the soil if cleared; and by the new rules he could get no more rab. Thus in the former case all the circumstances were in favour of his clearing away the trees, but in the latter the immediate gain to be derived from the sale of the trees must be balanced against a permanent loss of rab without any advantage from increased cultivation,

18. In marking off land for cultivation on the application of individuals after a district has been surveyed, it would seem to have been the custom sometimes to be guided by the reports of Tulatees. I have remarked instances of land having been marked off in the midst of forests where the object was evidently to obtain possession of the trees. I might instance *Sidghur*, in Moorbar, where, on the application of the people, land was marked off, although several survey numbers were then unoccupied in the village. The land in question was held for one year and then relinquished, and has remained unoccupied ever since. The one year's nominal assessment received by Government in cases of this sort bears no proportion to the loss sustained by the destruction of the forests. Wood-dealers have agents all over the district buying up the trees standing in occupied numbers, and there can be no doubt that many applications for land are made at the instigation of these people, who, by paying the assessment and a trifle to the ryot lending his name, clear a handsome profit by the sale of the trees. It would be absurd to say no application for land should ever be entertained. I merely suggest the necessity of establishing: first, the *bonâ fide* nature of the application; and second, of not leaving the selection of the sites to Tulatees and subordinate Carcoons.

Lands marked off on application.

19. Of the various causes tending to the destruction of forests, none perhaps can equal in its results the practice annually resorted to of burning the forests. In pasture lands there is an object in view, viz., the nourishment of the roots of the grass, and consequent improvement of the pasturage; but on the slopes of the higher ranges, or where cattle do not go, and cultivation is not permitted, burning the jungle is the result simply of mischief. The damage done is very great. The seedlings of the year are destroyed, saplings are mutilated, and larger trees are scorched, and even killed; living trees may often be met with smouldering for days after the fire has passed, and dead trees are frequently seen with their trunks almost burnt through, and only waiting for a gust of wind, or push of the hand, to bring them to the ground. These last may be the natural results of the fire, but in several instances I came across teak trees, both fallen and standing, the trunks of which had been burnt three parts through close to the ground; as the surrounding forest bore no traces of fire, the circumstance appeared curious, and, after making enquiries, I found that it is the practice in some forests to put up to annual auction the right of collecting *fallen wood*. Perhaps the two facts may have some connection, and I beg to present them for the consideration of the Conservator of Forests.

Forest fires.

20. Communities of Gowlees are frequently met with in these districts, who possess large herds of cattle with which they wander during the fine weather in search of pasture and water. As they are rarely allowed by the villagers to make use of the Goorchurruns marked off by the survey, they have been in the habit of resorting to the Government forests. I do not know whether it is intended by the new rules to close all access to the Government reserves; but, if so, the measure will bear rather hardly on these Gowlees. Either their present privileges will have to be retained to them, or each community should be required to select a particular forest, and be afterwards restricted to it. In this latter case, however, the forest should not be set aside expressly as a pasturage for Gowlees, neither should they be allowed to consider that their presence is anything more than *tolerated* in them, as without constant supervision, rights are apt to be considered as existing, which were never intended.

Gowlees.

21. Another difficulty likely to be felt if access to the Imperial reserves be denied, rises from the scarcity of water in some of these jungly villages. In many cases the people obtained their supply of water from holes dug in the bed of a stream, or from a small spring; but, as the hot weather sets in, surface water is dried up, and the springs are so reduced that water may be said to cease running from them. The villagers can then only obtain a very limited supply for themselves, and the cattle have to be driven into the forests, in the shady and secluded recesses of which springs are found running all the year round. In cases of this nature the closing of the forests would be likely to occasion hardship.

Forest springs.

22. There are certain forest tribes, as Thakoors, Warlees, and, above all, Katkurrers, who gain a living by selling forest produce, taking service under the better class of cultivators during sowing and harvest time, and by cultivating small patches of Wurkus crops

Forest tribes.

on their own account. The condition of these people is a subject deserving of separate consideration. I refer to them here, because the success of the new rules (if these are to be acted up to) is to a great extent in their hands, whilst their probable action in the matter has received scant attention. "It is hoped that these people will find employment under contractors cutting for the department." But the employment which the department can furnish is limited to the forests, which can be worked with profit, whilst the aggregate number of these tribes scattered over the forests is considerable. Moreover, their employment appears after all to be at the option of contractors. Should these forest tribes take up the idea that they are harshly treated by the operations of the rules, they are not unlikely to retaliate by burning and destroying the forests, and I do not think they could easily be prevented. They have spent their lives in these forests, are intimately acquainted with them, and the whole of the Forest Department backed by the Collectors will not be able to keep them out of the reserved tracts, if they have a mind to go in. Were these people a more civilized and more influential class of society, they would speedily remonstrate against measures likely to interfere with their modes of life, or get friends to do so for them; but they are very needy and ignorant, and unable to comprehend the drift of measures until practically brought home to them, when their remonstrance is likely to assume a shape which will benefit neither party. A timely consideration of the claims of these people will do more for the success of the new rules than any number of repressive measures. I am aware that questions of this nature are altogether beyond my province, but in the interest of Government I have ventured to bring them forward.

23. The Talook Maps of Bhewndy, Moorbar, Nusrapoor, and Salsette, exhibiting the tracts of forests marked off as Imperial reserve, are herewith forwarded.

Talooks.	Number of villages demarcated.	Number of marks erected.	Total cost of marks.	Average rate per mark.	Total cost of demarcation, including marks and supervision.	Total area of forests demarcated.	Average cost per acre.	Number of villages possessing forests.	Total area of forests allotted to villages.	Remarks.
			Rs. A. P.	Rs. A. P.	Rs. A. P.					
Bhewndy ...	16	24	28 8 0	1 3 0	.....	...	...	112	18,120	* The acres of the Nusrapoor village allotments cannot be determined until the boundaries are defined. The demarcation of Kolwun has not been completed.
Moorbar ...	32	66	73 0 0	1 1 8	.....	...	...	190	71,423	
						Acres.	Pies.			
Nusrapoor .	50	114	107 1 0	0 15 0	2,575 4 0	87,942	5·6	...	... *	
Kolwun ...	23	66	66 15 0	1 0 3	.....	...	...	...	...	
Salsette ...	1	6	9 12 2	1 10 0	.....	...	...	4	5,308	
Total...	122	276	285 4 0	1 0 6	2,575 4 0	87,942	5·6	306	94,856	

Memorandum by Major J. T. FRANCIS, Survey and Settlement Commissioner, dated 1st October 1866, No. 800.

1. This correspondence contains a full account of the Forest demarcation operations of the year. It shews that an area of 87,942 acres, spread over the villages of five talooks, has been marked off into Imperial reserves at a total cost of Rupees 2,575-4-0, being at the rate of Annas 5-6 per acre.

2. The cost per acre is greatly reduced as compared with last season's work, and I fully concur with the Superintendent in attributing this satisfactory result to the judicious arrangements made by Captain Lloyd. There are several questions discussed in the correspondence upon which the instructions of Government are required.

3. Captain Lloyd notices in this paragraph the destruction to the forests around the south-east side of Matheran caused by a body of Thakoors located in the lands of the village of Soonderwarree, and suggests the entire removal of the hamlet where they are now residing, and prohibition in future to cultivate in this tract. The Superintendent supports this measure, and as I am able to speak from personal observation of the rapid disappearance of forest, which has been caused by the cultivation operations of this body of squatters, I coincide entirely with these officers in advocating their removal from their present locality.

Para. 6 of his Report. Para. 5 of Supt.'s letter.

4. Such of these Thakoors, as will remove to the adjoining villages of Betewla and Palee, where Captain Lloyd reports lands to be available for cultivation, should be provided *gratis*, with a site for their houses, and a tract should be marked off specially for their cultivation. They have no occupation rights, as they hold their land subject to an annual payment levied on actual cultivation. But still it is advisable that their removal, which cannot fail to be distasteful, should be attended with as little inconvenience as possible, and it would be well therefore, I think, to give them a small money payment sufficient to cover the expenses of erecting a chupper-shed, such as they now inhabit.

5. There appear to be other Thakoors cultivating some of the slopes of Matheran, whose removal to the villages of Palee and Betewla Captain Lloyd also recommends. This suggestion might also be carried out. The removal of these people might be carried out under Captain Lloyd's supervision during next season's operations.

6. Captain Lloyd has discussed at some length the question of the management of village reserves. He first notices a proposal made by Captain Hobson that they should be marked off into four divisions, one of which should be cut yearly in rotation. I agree entirely with him that this system of management would require an amount of supervision which could not be exercised, except by the entertainment of an establishment specially for the duty, and that is quite out of the question.

7. The Superintendent would appear to be of opinion that the Patels and Tullatees could exercise the requisite supervision. My experience leads me to think that it would not be either safe or expedient to rest the control of the village reserves entirely on their hands; and, moreover, I do not think their division into tracts is advisable.

Paragraph 4.

8. My opinion is that, as a general rule, we ought to leave the management and control of these reserves almost entirely to the village community. Self-interest is the best safeguard, and the preservation of supplies of wood for fuel and for the universal "rab," is of such vital importance to the great body of the cultivators of the village that we may leave them, in my opinion, to look after their own allotments. The profits to be realized from the sale of wood may outweigh the foregoing considerations as respects villages near the Railway, or a wood exporting Bunder. Some supervision is needed perhaps in such cases, and the Mamlutdar's Establishment, or the Forest Inspector, might annually visit such villages, and report upon the state of their reserves.

Proceedings of the Madras Government, Revenue Department,
11th May 1867.

9. Captain Lloyd proposes that a notice should be circulated in such village, to the effect that "these allotments are for the supply of local requirements, and that any attempt to dispose of the wood to other parties will be promptly punished." A clause providing for the punishment of cases of the kind here contemplated was inserted in the Draft Forest Act; but until we have a law making the disposal of wood in the manner referred to a punishable offence, it is no use circulating threats of punishment which we have not the means of enforcing.

Paragraph 13.

10. Captain Lloyd has explained the peculiar character of the village reserves in the Nusrapoor talook. They differ from the reserves in other districts, owing to their not being marked off into separate allotments, but mixed up with the "Gairan," the "rab," and the cultivated lands of the village. This combination of lands for different purposes under one allotment precludes the application of the rules which can be enforced in regard to village reserves generally. We cannot prescribe cultivation as in the latter case, and, as Captain Lloyd shrewedly observes in respect to the Nusrapoor allotments, "the power to cultivate is the dangerous "element; for as the price of grain increases, a demand for land willspring up, and "all other requirements will be made to give way to it."

Paragraph 14.

11. The only way of remedying this defect would be by a regular definement of the boundaries of the lands to be reserved for such purpose. This, however, would entail a regular re-survey of all the Wurkus lands of the talook, but as they have been given in lease with the rice-land for thirty years, we could not enforce any restrictions upon cultivation till the lease has run out. I see no objection to the sale of wood being prohibited as with village reserves in other districts, and would enforce that rule, leaving the management in other respects in the hands of the villagers.

12. Captain Lloyd recommends that tracts should be marked off for the Gowlees specially and solely as grazing lands. This has been done in one district (Penn talook), and there is no objection to the plan being carried out generally. The Forest Demarcation Officer should consider this as part of his duty, and do what is necessary. The same remark applies to the Forest tribes, Thakoors, Warlees, &c. It is a pity Captain Lloyd, who is so well able to settle the question of the cultivation requirements of this class of inhabitants, did not report the case in the course of his season's operations, as I could have given instructions upon the subject at once. For I consider the orders of Government not to be confined merely to the demarcation of forests, but to the settlement also of all collateral cases connected with the cultivation and use of jungle and forest lands.

Paragraph 23.

13. Captain Lloyd refers in the paragraph to the inconvenience villagers will be put to in case they are prohibited access to springs of water situated in Imperial reserves, that being the only source of supply in some cases. I think the course to be adopted in such cases is clear, for if the Forest Department wish to prohibit access to springs, they must furnish a water-supply elsewhere by sinking a well, or adopting such other measures as are necessary to provide it.

Paragraph 21 of Captain Lloyd's Report.

Endorsed by Survey and Settlement Commissioner.

Forwarded to the Collector of Poona, with a request that he will submit it to the Conservator of Forests for transmission to Government.

Memorandum by W. H. HAVELOCK, Esq., Collector of Poona, dated 16th October 1866, No. 2,233.

1. Submitted, as requested, to Government, through the Conservator of Forests.

2. The undersigned suggests that, as early as practicable, the cutting of the cleared path of desired width from mark to mark in those villages of the talookas which have been demarcated should be carried out. This will be a gradual process, but the sale of the timber felled will probably more than pay the cost of the clearing, and the demarcation cannot be considered complete without it.

3. The undersigned fully concurs with the recommendations contained in the Survey Commissioner's paragraphs 3 to 5, regarding the allowances and concessions to be made to the Thakoors if they are to be removed under Captain Lloyd's supervision from the slopes of Matheran to the villages of Palee and Betewla. Though these people may be regarded in the Revenue Department as squatters, they probably have as sensitive regard to their own rights as an Irish tenant, and Captain Lloyd's 22nd paragraph lays stress on the mischief which might result from too repressive a treatment of Thakoors, Warlees, and Katkurrees.

4. The undersigned fears that the difficult question of limited conservancy in village reserves admits of no better solution than that supplied by Major Francis. The subject appeared of such importance that, before submitting these papers, the undersigned referred them to his First Assistant, Mr. Pritchard, who is still engaged in an enquiry into robbery of timber on a large scale. Extracts from Mr. Pritchard's forcible remarks are appended in the margin, and the undersigned thinks that the most effectual mode of meeting the difficulty is that suggested by the Survey Commissioner in his 9th paragraph, and which appears quite in harmony with the revised

"I presume that the village reserves are intended to supply the villagers with fuel, rab material for making agricultural implements, and small poles and rafters for building huts, but not with what is technically called "Imartee," or building timber. Should such be the case, I would strongly recommend that when the reserves are made over to the villagers, all Teak, Black-wood, Ain, and other kinds of trees, they are now forbidden to cut for the purposes above-mentioned, be still reserved to Government. Otherwise the establishment of village reserves, instead of tending to the conservation of Imperial forests, will form a loop-hole through which any amount of stolen timber may be run with perfect security to the thieves. I mean that villagers will steal wood from the Imperial reserves, and if caught transporting it will at once be able to say that they cut it in the village reserves without fear of being gainsayed, so that it will be impossible to punish timber-stealing as a criminal offence, unless the thieves are caught in the very act of cutting it.

It, therefore, seems to me highly desirable that the difficulties that even now exist in the detection and prosecution of cases relating to stolen timber seized in transit should not be increased. Even now, owing to the number of Inam villages in these districts, and the extent of forest land that has been given out *ostensibly* for cultivation, but which has really never yet felt the plough, it is very difficult, after stolen wood has been seized, to prove that it has been stolen from Government forests. If, in addition to all this, large tracts of forests are alienated to the villagers *in toto*, it would, in my humble opinion, be next to impossible to obtain a conviction in any but the most stupid case of timber-stealing, or to arrange any efficient system of conservancy, except by drawing a cordon of watchers round each Imperial reserve, which is out of the question on the score of expense.

"I would respectfully suggest, for consideration, whether it would not be the better policy to withhold the village reserves altogether until the villagers' rights therein have been defined and restricted by law."

terms of Section 5 of the Bombay Forest Draft Act as entered in paragraphs 21, 22, and 23 of Government Resolution No. 1,106, dated 26th March 1864. The conservancy in the village reserves of the seven (paragraph 33 of Committee's Report, No. 2,216, dated 24th December 1863) superior kinds of wood, namely, 1, Teak; 2, Blackwood; 3, Tiwus; 4, Kheir; 5, Ain; 6, Asanee; 7, Nanee; would appear to remove almost entirely the danger apprehended of the villagers making their village reserves the loop-hole for removal of timber from the Imperial reserves. If, as the undersigned understands to be the case, this has been the principle followed by the Conservator's and Survey Departments in the recent demarcations, it would remain only to impose a legal penalty for cutting the preserved kinds of timber in village reserves, leaving the remainder entirely to the discretion of the villagers, which would, however, it is feared, tend little towards conservancy in any mode whatever.

5. The Nusrapoor talooka, discussed in the Commissioner's 10th and 11th paragraphs, would appear to be an exceptional case, and the undersigned has no remarks to make on the subject.

6. The marking off tracts for the Gowlees to graze will, it is presumed, be carried out by the Survey Officer employed in demarcation.

7. The undersigned entirely agrees with Major Francis that no one should be prohibited from drawing water in the forest reserves, wherever they may be situated.

Memorandum by N. A. DALZELL, Esq., Conservator of Forests, Bombay, dated 29th October 1866, No. 1,020.

1. Forwarded, as requested, to Government, with the following observations.

2. The Conservator of Forests has read Captain Lloyd's report with great interest.

3. In paragraph 13, Captain Lloyd states that, in his opinion, the people are fully alive to the wisdom of preserving the forests from which they get their supplies of rab and fuel. It is difficult to reconcile this opinion with the facts mentioned by that Officer in paragraph 17, where he states that at a wholesale clearance of rab numbers is being actively carried out all over the districts.

4. The Conservator is of opinion that all the trees that are saleable on the village allotments will certainly be disposed of to the wood-dealers if a law is not passed to prohibit and punish such sales. There is a clause to this effect in the Forest Rules drawn up by the Committee.

5. Captain Lloyd in paragraph 17 alludes to the fee demanded by the authorities for teak and black-wood on occupied numbers being so small compared with the value in the market

The orders of Government are that a fair valuation should be placed on such trees, but this has not in one instance, as far as the Conservator is aware, been done. The villagers have been left to put their own value on such trees.

6. It is advisable that Government appoint some particular person to carry out the order alluded to. Neither the Mamlutdars nor Tulatees have done this work, nor are they capable of doing it properly.

7. All that the Tulatees did, was to make false reports of the number of trees.

8. The evil results pointed out in Captain Lloyd's 18th paragraph might easily be avoided if the Survey rules, formerly in force in the Deccan, were to be made applicable to other parts of the country, viz., that a cultivator must be in possession twenty years before he be considered proprietor of the trees.

9. The new rule now in force has enabled the wood-dealers to be quite independent of the Forest Department, and to obtain supplies almost gratis; one year's assessment being the amount of fee, and representing probably the $\frac{1}{300}$th part of the value of the trees.

10. Captain Lloyd suggests the establishment of the *bona fide* nature of the application for land. This appears to the Conservator impossible until after the clearance of the trees, when it would be useless. The only plan of proving the *bona fide* nature of the application is to make a valuation of the trees, and include it in the first year's assessment.

11. The late Revenue Commissioner, Northern Division, pointed out to the Conservator, in his letter No. 35, of 9th January 1865, that after the year of settlement, the Survey Superintendent had nothing whatever to do with the giving out of lands, but it would appear from Major Waddington's 7th paragraph that the wooded lands here referred to by Captain Lloyd were given away by that officer when he had no authority to do so.

12. Gowlees with herds of buffaloes should pay fees to be allowed entry into the Government reserves, if it is absolutely necessary. These people do a great deal of mischief, cutting down branches of Dharum, Sala, and other trees for their buffaloes to feed on, and cutting trees for their huts, cow-sheds, &c.

13. With regard to the wild tribes, the Forest Department has always endeavoured to enlist them in the service, and they are now usefully employed in the Sub-Collectorate in cutting for Government. At present, in other parts of the Collectorate, it is now clearly seen that the Forest Department cannot go on cutting timber at a loss in opposition to the wood-dealers, who obtain what they want from the ryots' lands.

14. The division of the village allotments into parts to be cut by rotation is, in the opinion of the Conservator, impracticable, unless an establishment was appointed in each village to carry it out, which is out of the question, while the forest would not recover itself in four or even eight years.

15. Referring to the Collector's remarks in his fourth paragraph, the Conservator would observe that Ain, Asanee, and Nanah, are the chief woods employed for rab purposes.

16. The reserved kinds of trees must either remain Government property, or a law must be passed to punish the sale of timber to dealers cut from the village reserves.

RESOLUTION—by the Government of Bombay, Revenue Department, dated 23rd November 1866, No. 4,345.

1. RESOLUTION.—The progress made in the demarcation of the Imperial Forest reserves in Tanna may, under the circumstances explained by Captain Lloyd, be viewed as satisfactory. Eighty-seven thousand nine hundred and forty-two acres of forests spread through five talooks in the proportion shewn in the margin, have been marked off at an expense of Rupees 2,575, from

	Acres.
Bhewandy	4,818
Moorbar	17,597
Nusrapoor	21,331
Kolwun	41,909
Salsette	2,287

which it appears that the average cost of demarcation per acre, including the cost of supervision, is 5·6 Pies only. For the economy of this result Government are indebted to the judicious arrangements of Captain Lloyd.

2. All cultivation in Sonderwadee and on the slopes of Matheran should be prohibited. Captain Lloyd should arrange for the removal of the Thakoors now cultivating on these spots to the villages he indicates, or to other convenient localities. Their claims should be treated with the greatest consideration; and, if necessary, sufficient sums of money should be given to them to enable them to build new huts. All expenditure under this head should be defrayed by the Forest Department. Captain Lloyd, whose interesting report shews he possesses remarkable aptitude for the duty, should be requested to personally superintend it next season.

3. The management of village reserves presents many difficulties. To leave them unprotected would, in the opinion of most authorities, be equivalent to abandoning them to speedy destruction. To keep them under regular surveillance is impossible, owing to the expense.

4. To ensure that the village reserves shall not be speedily denuded of all valuable timber, it would appear that one of two courses must be adopted. Either certain kinds of superior timber must remain the property of Government, or the law must prohibit, under penalties, the exportation for sale of timber grown in these reserves. Until the introduction of a Forest Act into this Presidency, the latter alternative is practically denied to Government. In the meantime the former may be experimentally adopted for one season in all the talookas.

5. Major Francis's proposal to set apart tracts for Gowlees, in which they should be permitted to graze their cattle unmolested, is sanctioned; and the officers engaged on demarcation should be desired to select the tracts.

6. The Warlees, Katkurees, and other hill tribes, are more difficult to deal with. Major Francis is in a position to offer much valuable information regarding them, and Government would wish to be favoured with any definite proposals he may wish to bring forward before passing orders on this point.

7. The difficulty anticipated by Captain Lloyd regarding the access to forest springs, which will be hindered by the closing of the Imperial reserves, will best be met, as it arises, in each case. It is impossible to lay down a rule which shall be universally applicable; but it must be understood that no one should be prohibited from drawing water obtainable in a forest reserve in cases where it is not procurable elsewhere within a reasonable distance.

8. The Collector of Tanna has suggested that a broad path should be cleared between the marks which define the boundaries of the reserves, and considers that the sale of the wood would more than pay the expense of clearing every year. The Survey Commissioner and the Conservator of Forests should give a practical effect to the suggestion.

From the Secretary of State for India, to the Government of Bombay, dated 7th February 1867, No. 1.

1. I have considered in Council the Proceedings of your Excellency in Council on Captain Lloyd's report of the progress made in the demarcation of forests in five talookas of the Tanna Collectorate, which were transmitted in the letter from your Secretary, dated the 13th December (No. 81) 1866.

2. I agree with your Excellency in Council in considering the progress made in marking out these forest reserves to be satisfactory; and the reduction in the cost of the operations, and especially in that of the erection of the boundary marks in the present season, which seems due to the arrangements of Captain Lloyd, is very gratifying.

3. I am glad to find that Captain Lloyd shews such proper consideration for the Thakoors, Gowlees, and hill tribes whom it is found necessary to remove from the Government reserves. I am pleased also to read in the Conservator's Memorandum that the Forest Department has been successful in its endeavours to employ the wild tribes in the Sub-Collectorates.

4. The Resolution of your Government deals properly with all the points brought to your notice in these papers.

* * * * *

6. The rule laid down by your Government for securing a sufficient inspection of the boundaries of forest tracts, before they are finally made over to the department, seems to be judicious.

Madras.	Central Provinces.
Bengal.	Hyderabad.
N. W. P.	Mysore.
Punjab.	Coorg.
Oudh.	Central India.
Burmah.	Rajpootana.

ORDER.—Ordered that the foregoing papers be circulated, for information, to the several Local Governments and Administrations marginally noted.

(Signed) C. H. DICKENS, Colonel, R. A.,
Secretary to the Government of India.

No. 174. ORDER THEREON, 11th May 1867, No. 1,068.

Forests, No. 6.

Communicated to the Board of Revenue and Conservator of Forests.

(True Extract.)

(Signed) W. HUDLESTON,
Secretary to Government.

To the Board of Revenue.
,, the Conservator of Forests.

Exd. S. T. Augustin.

9

No. 1068.

Communicated to the Board of Revenue and Conservator of Forests.

11th May 67.

14 To the Board of Rev dated 15th May
14 " Conservator of Forests S