WORKING PLAN

FOR THE

MOUNT STUART FORESTS

SOUTH COIMBATORE DIVISION

[B.P. LAND REVENUE (FOREST) No. 10, DATED 10TH MARCH 1919]

PREPARED BY

H. F. A. WOOD, Esq.,

Working Plans Officer, Western Circle

MADRAS:

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1919

16746

MEMORANDUM ON MOUNT STUART WORKING PLAN BY THE CHIEF CONSERVATOR OF FORESTS.

Mr. Wood's working-plan for the Mount Stuart forests sanctioned by the Board of Revenue in its Resolution Forest No. 10, dated 10th March 1919, is issued with the following note for the guidance of the officers in charge of the forests.

2. The problem of the best method of regenerating the mixed deciduous forest of the type dealt with in this working-plan has not yet been solved : for the first few years therefore the work to be done in this respect must be regarded as experimental.

3. During this experimental period constant supervision is essential and for this reason it is desirable to concentrate the work of regeneration and tending on a single compact area in preference to treating a number of small areas in each compartment.

4. A further reason for concentration is the serious difficulty of labour. The carrying out of the provisions of the working-plan involves the importation of a considerable labour force and to obtain labour in the face of the competition by the planting industry special measures must be taken to provide the conveniences which are common on planters' estates. Substantial lines must be built and a permanent water-supply obtained ; and an attempt should be made to introduce such anti-malarial measures as prove feasible.

5. For these reasons the Conservator, Western Circle, is requested to concentrate the area on which regeneration work has to be carried out by confining the latter to a single compact block.

6. To specify the exact area to be regenerated each year is undesirable. As large an area must be taken in hand as can be managed with the funds and labour available, after making due provision for weeding and tending the areas previously regenerated. It cannot be too strongly emphasized that work of this nature must be continued in the young woods just so long as the latter require it and that no artificial limit of time can be fixed in advance. Species other than teak must be introduced in the manner prescribed for that species.

Mixture by individuals should not be attempted but each species should be raised in pure groups of as large extent as convenient.

7. Subject to the proviso that the species to be introduced in any given area must be that best suited to the soil, the percentage to be aimed at in the composition of the crop should be 40 per cent of teak, 40 per cent of rosewood, and 20 per cent of one or more of the following species : Pterocarpus, Xylia, Lagerstrœmia, Terminalia paniculata and tomentosa.

8. The Chief Conservator considers that the felling cycle of 50 years adopted is too long in view of the deterioration which is bound to take place in the older trees, many of which would disappear before the year of felling, and it is accordingly reduced to 25 years.

9. It will be a simple matter to follow the order of allotment laid down in the working-plan by felling two compartments each year instead of one. This arrangement has the advantage of increasing the annual output and thereby reducing the cost per unit of transport by the proposed tramway.

10. The comparatively high exploitable girth limit of 7 feet will probably ensure that the yield is not seriously reduced in the second rotation ; should however this not prove to be the case, the area of annual felling can then be increased without danger of over-exploitation owing to the increased yield from the young woods during the second felling period.

11. Pending the construction of the tramway it will of course be impossible to fell two compartments or even the whole of one compartment in any one year, owing to the absence of means of extraction and it is on the capacity for timber extraction that the quantity of timber annually felled must be fixed.

5. In February 1917 Mr. Wood brought to notice that the system of enumerations carried on up to then would give a very false idea of the *serviceable* growing stock; and upon investigation by me it was found that this was unfortunately the case. As, in the meantime, most of the area had already been enumerated on those lines, it was hoped at first that a few re-enumerations, on an improved classification, of some of the old lines would yield constant or fairly constant reducing factors by which the work already done could be utilized. Unfortunately this was not found to be the case, and the whole of the enumeration work had to be done over again. The high cost of the Working Plan is due to this and to the fact that such a large proportion as almost 50 per cent of the area was enumerated.

6. Mr. Wilson's proposals were shortly as follows:—

He divided the area into four Working Circles, viz., (1) *the Karianshola Working Circle*, which, as an ever green forest and the source of nearly all the streams in the forest, was not to be touched.

(2) *The Bamboo Working Circle.*—Bamboo is a nuisance in these forests and the proposals contemplated leasing the area out for clear felling to bamboo contractors and replacing that growth by concentrated regeneration of teak or other timber species.

(3) *The Ulandi Timber Working Circle.*—There is no transport route from this forest at present; but two such proposals had been under consideration. Mr. Wilson's suggestions did not go beyond an enumeration survey of the forest after which, in view of the value of the timber that might be found in it, the most paying means of transport was to be investigated.

(4) *The Mount Stuart Timber Working Circle.*—This is the main block. Its area is about 15,000 acres. It was to be worked for selected felling of teak and the other saleable species and under a scheme of natural regeneration after clear fellings by which the whole forest was to be re-stocked with teak at the rate of 100 acres per annum in the course of 150 years, which was taken as the probable rotation for teak in this locality. Under Mr. Wilson's Working Plan the forest was divided into three Periodic Blocks of 5,000 acres each; and working was prescribed for the first period of 50 years as follows:—

Block No. I.—Reserved for regeneration at the rate of 100 acres per annum.

Block No. II.—Was to be given complete rest, the reason for this presumably being that it would consist of the portion of the forest most recently worked for.

Block No. III.—To be worked for selection fellings at 100 acres per annum.

Mr. Wilson also prescribed fire protection and an annual scheme of lantana eradication, as this pest has entered and covered about 5,000 acres of the forest. Of course it must be remembered that his Preliminary Report was only intended to be the skeleton of a Working Plan. Mr. Wilson does not mention improvement fellings.

7. The criticisms I should offer to these proposals are—

(1) Natural regeneration is too uncertain for the purpose of establishing an area under teak. It would take several years for the purpose and the repeated cleanings and weedings would make it more expensive in the end than artificial dibblings and sowings.

(2) The enumerations have shown that a considerable quantity of matured timber is standing in Periodic Block II. Consequently, the absence of all felling in Block II during the first 50 years entails unnecessary loss of revenue.

8. The District Forest Officer who afterwards succeeded Mr. Wilson as Working Plans Officer, to whom Mr. Wilson's proposals were sent for remarks, agreed generally with the division into three Periodic Blocks but considered that selection fellings should not be confined to Block III alone. He also advocated the substitution of concentrated artificial regeneration of teak at 25 acres per annum for Mr. Wilson's natural regeneration of 100 acres annually. The 25-acre limit is prescribed simply on account of the lack of labour to accomplish more and would have been extended if possible.

9. This brings me to a consideration of the present Working Plan prepared by Mr. Wood after he took it over from Mr. Wilson. I have nothing to remark on Part I of the plan except as regards a very important fact of which mention has been omitted, which involves the postponement of the principal provisions of the plan, viz., the Selection and Regeneration fellings. This is the stock that has accumulated in the forest for want of facility for removal up to the year 1914, when the fellings under Mr. Porter's scheme were put a stop to for this reason. At the end of the 1914 fellings the stock lying in the later annual coupes, in the Tramway depots in the forests and in the main depot above ghaut at Top Slip, amounted to 311,402 cubic feet, according to a note supplied to me by the District Forest Officer after the receipt of this plan. Much of this timber had been lying about for many years; and, except the teak, had cracked and deteriorated very considerably in value. Accordingly no further felling was permitted after 1914 pending the removal and disposal of the large stock in hand. Mr. Wood, the writer of the present report, assumed charge of the division in September 1915 and including the writing off of the good deal of the material, it is due to his energetic action that the present stock of the old fellings still lying within the forest has been reduced to the following dimensions on the 31st May 1918:—

	C. FT.
In Forest Coupes	31,635
In Tramway depots	101,149
At Top Slip	15,858
Total	148,642

At least such are the book balances shown in form No. 10 as the stocks in hand at this date. The District Forest Officer, however, explains that these balances are still incorrect and that a considerable quantity of the nominal stock in the depots is non-existent and will have to be written off. There is no suspicion that the differences between the book and the actual balances are due to theft or fraud as in this forest it would be impossible to remove timber without the help of elephants of which there are none in the neighbourhood except our own, nor to bring it out except along the Government Tramline there being no other exit from the forest. The missing material is entirely attributed to the confusion in depot accounts, frequent changes of the officers in the range due to unhealthiness of the locality and to the consequent fact that for a number of years no proper stock-taking in the various depots which are very numerous has been carried out. This is now being done and the material to be written off will shortly be reported to the Board. The District Forest Officer has just supplied me with an estimate of the actual balances lying in the three classes of depots on 30th June 1918 in the forests as under:—

	C. FT.
In Forest Coupes and in Tramline depots	114,200
At Top Slip	15,800
Total	130,000

Assuming that the total quantity to be removed is about 130,000 cubic feet as above, it will be a considerable time before the old stock is cleared out and until then it is not desirable to commence any new fellings under the present Working Plan for the reason that a considerable portion of these fellings will consist of species such as *Terminalia tomentosa, Terminalia paniculata* and *Lagerstroemia microcarpa*, the timbers of which crack and split very soon and should be placed on the market within 12 months at least after felling in order to avoid unnecessary depreciation in the sale depot. During the last two years, which mark the greatest activity in removals to sale depots from these forests, the quantity annually handled are—

	1916–17.	1917–18.
Dragging	51,491	68,973
Tramming	49,459	47,050
Carting down ghaut	59,246	52,819

Note.—Dragging means haulage by elephants from felling coupes to tram heads. Tramming is removal by bullock tram from forest coupes to main depot on ghautage. Cartage is removal by carts from the tram terminus to sale depot below ghauts.

Allowance must be made for the fact that some more of the timber in these depots will have to be written off as now not worth removal. But even then the average annual extraction being about 55,000 cubic feet it will be seen that at this rate it must be more than two years before we can clear our depots. The District Forest Officer has just sent an estimate to the Board for the purchase of Rs. 4,750 worth of additional bullocks and buffaloes to expedite this work and to keep pace with the 100,000 cubic feet per annum of extraction provided in the Working Plan. But even then it seems to me that we cannot clear our old stock until December 1919 at the earliest, and that the new fellings should not commence until the beginning of the official year 1919-20, viz., from 1st April 1919. Even then it is by no means certain that the arrival of the new fellings at sale depots below ghauts will not be blocked by the old stock now in hand for perhaps a year.

10. Coming to Chapter II of the Working Plan the District Forest Officer remarks, under the sub-head " I (*i*) attainment of the normal forests and the establishment of the normal regeneration " on the scarcity, he might almost have said, the absence of sapling and pole growth of teak in these forests. My own observation is that almost sufficient seedlings and young plants are to be seen to secure a normal proportion of teak, but it is an undoubted fact that there is practically no development to be seen of the young growth on the ground into the sapling and pole stages. At the same time we do not find any gradual dying back of the young plants in the forests which could be attributed to natural causes such as want of light, drought, suppression and so forth. Fires, of course, there are but we know that they tend rather to increase the mixture of this species in natural forests than otherwise. To my thinking the main cause of the absence of teak development in these natural forests is destruction by wild elephants. These animals are particularly fond of the young wood and bark of teak plants after they attained a growth of 10 feet or so and I think that one of the principal problems in establishing artificial regeneration under this plan will be the protection of the numerous and scattered young plantations from the ravages of these animals. Unfortunately the lease deed of the Tekadi portion of the forest which comprises 12,620 acres of the Mount Stuart Timber Working Circle prohibits the capture of elephants within the area and in my opinion one of the first things to be done is to come to some arrangements with the landlord—Raja of Kollengode—for the abrogation of this clause. Otherwise it is difficult to see how we can keep out the large herds that frequent the area.

11. *Exploitable age.*—The age of maturity of teak in this Working Plan is taken at 130 years, at which age it is estimated that trees attain 7 feet girth. It is probable that at the next renewal of this plan the exploitable age will be very considerably reduced. At the present time this question is not involved because it is shown that the exploitation of timber over 7 feet, together with the whole stock which will increase to that size as the plan goes on, will take up the full capacity of our transport facilities. The question of the exploitable age need not therefore be further discussed. It need only be added that the present revision of the Nilambur Working Plan shows that the financial rotation is attained there at about the 70th year.

12. *Regeneration.*—This plan only provides treatment for the next 50 years. There is no division of the rotation into Periodic Blocks for purposes of regeneration. Owing to the labour shortage regeneration of only one and the principal species i.e., teak is taken in hand. Even so, for the same reason, a commencement is provided for only one-half of the amount of regeneration considered to be desirable. The aim of treatment is the preservation of the mixed character of the forest but owing to the absence in it of natural regeneration of teak it is proposed to reinforce this species by establishing, when possible, plantations of 50 acres in extent in every coupe. The average coupe is 304 acres in extent and the effect of this measure will be to increase the proportion of this species by establishing during the next 50 years artificial plantations throughout the forests to the extent of one-sixth of its area. This is the proportion that the plan considers desirable to work up to, but owing to shortage of labour it is said that present facilities will only permit of regeneration to the extent of 25 acres per annum which is to be increased to 50 acres as quickly as possible. Whilst the plan would favour the improvement and increase of the other superior timber species which are to be exploited, there is no provision whatever for artificial assistance as regards their regeneration. I think this is a pity especially as the plan covers a very long period and we with ordinary energy ought

not to suffer very long under the present labour shortage. In the same hill block, and far more remotely situated, are the Anamalai coffee and tea plantations which are able to secure a much larger labour supply than we shall require and with proper management including housing and provisioning arrangements the labour problem, which, it will be seen, is constantly cropping up and checking necessary developments in this plan, should disappear in the course of a few years utmost. In that case I should like to see some provision for artificial regeneration by dibbling and sowing of the other superior species.

13. As regards the annual distribution of the teak regeneration provided I think the plan will certainly require modification. Under it, regeneration of 25 to 50 acres will hop from one 300-acre Compartment to another, year by year, until at the close of the period there will be 50 little plantations scattered at more or less regular intervals all over the forest. The objections to this result are the following :—

(*i*) Unnecessary difficulties in the way of supervision and inspection of the sowings and thinnings owing to the distances at which the plantations will be scattered about.

(*ii*) Considerable and unnecessary difficulties in the protection of the plantation from wild elephants which are sure to threaten considerable damage.

(*iii*) The extraction and disposal of the thinnings which are to take place in each plantation at the 6th, 10th, 15th, 25th and 40th year will be unnecessarily expensive and difficult to arrange for.

It would be preferable to set apart at convenient places, for the first four-year period of bullock traction and for the period of steam traction afterwards, two Periodic Blocks within which the work of regeneration should be concentrated. The regeneration block for the period of bullock traction might be located as conveniently as possible so that the fellings in it during the first four years might be moved along the present tramline and, subsequently, the thinnings *via* the forest terminus of the new tramway. The Periodic Block for the remaining 46 years may be located along the permanent line south of Ayyaswami-mudi.

14. There is one other modification I should suggest under this head. The plan allots one plot per annum for regeneration and contains no provision in case of accidental or natural causes which may result in more or less failure in establishing the regeneration. These may be drought, excessive rainfall, unsuccessful sowings, fire and so forth. I should prefer to keep the area for regeneration under three-year periods, which will permit of regeneration in each plot being attended to for that period. The three year period should be progressive and continue in the following manner :—

Plots I to III will be allotted to the first three years, in the fourth year plots II to IV will be under regeneration, in the fifth year it will be plots III to V and so on.

15. *Cultural operations.*—As soon as the labour difficulty is overcome the Working Plan mentions the desirability of carrying out weedings, cleanings and improvement fellings in favour of the other superior species in each of the felling blocks annually. That is to say, it is proposed to carry out these operations every year in the 250 to 275 acres of the felling blocks that remain over from the area of concentrated regeneration. I think myself that such an area is too large to be effectively dealt with in one year and that this difficulty combined with diffusion of the work all over the forest making inspection and supervision difficult is likely to mar the success of the operation. In the last paragraph I dealt with the desirability of concentrating the regeneration work in definite localities. I did not mean to set apart one block equal to the area of annual regeneration multiplied by the number of years of working. That would give us in one place a solid area of pure teak plantation of say 50 × 46 = 2,300 acres in extent in the case of the larger regenerated block and would be contrary to the policy of maintaining the mixed character of the forests. It would be better to arrange the regenerated periodic block in such a manner as to combine and concentrate all the work of regeneration and cultural improvement in it. I should prefer accordingly to lay out both the Periodic Blocks,

yiz., that to be worked for the four years of bullock traction and the other for the 46 year of steam traction to the extent of 100 acres per annum. Twenty-five to 50 acres of this area would be taken up with teak plantation and the remaining 50 to 75 acres would be subjected to concentrated cultural operations including dibbling and reinforcement of the other superior species. In this manner at the end of the 50 years of working we should get 5,000 acres or one-third of the area which has been thoroughly treated for regeneration and improvement and we should have the advantage of having this area located in one block along the main line of communication and consequently available for thorough supervision and inspection. My only experience of the so-called cultural operations prescribed in Working Plans for similar high forests in Coorg, North Malabar and South Kanara where large compartments are supposed to be operated every year is that for lack of the only supervision and inspection which is of any use, viz., that of the District Forest Officer the operation deteriorates into mere climber cutting and the girdling of a few trees.

16. This proposal would divide the annual felled area into two separate coupes viz., a 100-acre coupe in the regeneration block and a 200-acre coupe of selection fellings outside in the manner provided in the Working Plan. As, however, the former will be situated along the main line of communication, no difficulty as regards the extra transport lines will arise.

17. To summarise my proposals, as regards regeneration and cultural work, there would be for the first four years of bullock tramming, regeneration block of 400 acres, somewhere adjacent to the present line of export; and for the following 46 years a regeneration block of 4,600 acres somewhere along the permanent line of the steam tramway between Ayyaswami-mudi and the forest terminus of the tramway. There will be no difficulty in laying out these blocks to include sufficient and suitable land for the concentrated regeneration of teak.

18. *Lantana.*—This pest has appeared in the forest at a comparatively recent date, has spread already over thousands of acres and constitutes, owing to its propensity for suppressing natural regeneration and causing disastrous fires, a very serious danger to any forest. Mr. P. M. Lushington in his report No. 1188, dated 6th August 1916, states that as late as 1899 the amount of lantana in these forests was negligible. At the present time according to Mr. C. C. Wilson's Reconnaissance Report it is spread over 5,265 acres or more than one-third of the forest. In 1914 under the writer's directions Mr. C. E. C. Fischer prepared a scheme for the eradication of 3,178 acres of the denser lantana by annual compartments of about 250 acres in 13 years. But this plan was not properly carried out. Mr. C. C. Wilson computes the area covered by more or less heavy lantana at 3,148 acres and that of the more scattered growth at 2,117 acres; and in view of the rapid rate at which it is extending recommended the extermination of the pest at whatever sacrifice within ten years.

19. The present Working Plan Report mentions the area covered as roughly 5,000 acres. It does not promulgate any detailed scheme for attacking it but prescribes that until the labour shortage problem is solved the clearance of a 100-acre per annum which will cover the present infected area in the 50 years of the Working Plan. As the present extent of lantana is the result of about only 20 years of spread from insignificant beginnings it will be readily apparent that another 50 years of expansion with the present extent of infection as a nucleus is not likely to be much affected by an annual extraction of a 100-acre per annum. On the other hand, it is certain that under limited action of this extent lantana would continue to make rapid progress. The present labour shortage is of course the reason for the very modest programme contained in the Working Plan. It is quite clear that the first and most important measure required for the management of these forests is the organization of a sufficient labour supply. The Anamalais Estates which are remotely situated at the back of the same block of hills extend to over fifteen thousand acres and the local Planters' Labour Commissioner informs me that the labour employed on these hills averages to one man per acre in full employment during the twelve months of the year. Provided we immediately proceed to make suitable housing and provisioning arrangements for the labour required there is no reason

why we should not be able to satisfy our requirements within the space of two or three years, especially as the headquarters of this forest is only 22 miles from the railway terminus at Pollachi, and only half a dozen miles from the thickly-populated plain country.

20. Without at this stage insisting upon a definite scheme of extraction I think the Working Plan should lay down that subject to complete extermination within 15 years a detailed scheme of annual compartments of extraction should be prepared as soon as possible for the treatment of all lantana, and that such scheme should start operations from the edge of the present infected area and work inwards towards its centre. The best period for work is the commencement of the dry weather, say, beginning of December and operations should be discontinued with the arrival of the South-West monsoon. If eradication continues in the wet season the broken shoots left lying on the ground strike roots from the nodes and produce new bushes.

21. *Fellings.*—This Working Plan does not purport to present or suggest a complete scheme for the regeneration or the felling of the exploitable stock for one complete rotation. In fact, no rotation either financial or other is fixed or foreshadowed. The 130-year rotation mentioned in the plan is merely the age at which teak, the most valuable as well as the predominent timber species in the forest, is said to attain the 7 feet—8 feet girth class. The choice of this as the limit size class in the plan is mentioned as depending upon its convenience for exploitation; but 6 feet could have been the minimum under such a standard. It is the size which has been hitherto worked down to under Mr. Porter's Working Plan and more than one-half of the forests have already been exploited under this regulation. It is also the size which is accepted throughout the market in Southern India as the limit of first-class timber; and, as the Working Plan Report mentions, no preferential rates as yet are paid for anything larger. The fact is that the 7 feet girth limit may be chosen because the standing stock in the forests of and above that size is as much as our transport facilities can deal with within the already rather prolonged period of 50 years adopted for working out this plan.

22. Both the rotation mentioned in the plan and the minimum girth class for exploitation that is adopted are therefore arbitrary quantities fixed with a view to the exploitation of as much of the overmature stock as the transport can deal with within a reasonable period of working. In this respect the plan is consequently more of a provisional and preliminary character and the question of fixing a proper rotation and the normal yield under it is left for the next renewal.

23. The first 22 compartments with the exception of compartment X of Mr. Porter's Working Plan comprising an area of about 7,942 acres of the forests have already been worked out, rather irregularly, under his felling scheme. From year to year the fellings seem to have been controlled by the saleability of species, limitation of transport, labour and perhaps other considerations. The intensity of the fellings under Mr. Porter's Plan is shown in the following statement:—

Species.	Area felled in acres.	Yield in cubic feet per acre.
Teak	7,942	77·33
Rosewood	7,942	1·81
Pterocarpus marsupium	6,436	0·87
Lagerstroemia microcarpa	2,714	10·13
Terminalia tomentosa	4,120	44·23
Terminalia paniculata	2,714	16·15
Xylia dolabriformis	7,942	2·56

How imperfectly these fellings represent the removal of the mature stock in the forests under Mr. Porter's felling prescriptions may be judged by the fact that Mr. Wood's division of the whole area of the forests into 50 coupes, each estimated to contain at the present moment 90,000 cubic feet of timber of the 8 saleable species (consisting of the seven above and *Adina cordifolia*) gives an average coupe of 328 acres in the area already felled over against a reduction to only 282 acres in the rest of the forests which he says contains some of the naturally richest blocks.

24. Mr. Wood, as already stated, has divided the whole forest into 50 coupes of equal present productivity. An oversight in the Working Plan Report and its appendices is the omission of any statement showing the areas of the annual coupes. The omission has been supplied under the heading "Parts II and III (*e*) Tabular statement of fellings to be made."

The size of these annual coupes varies very considerably from 125 acres (Coupe Nos. XXXVI and XXVII) to 782 acres (Coupe No. V) as computed in my office. The dragging and collecting at Tramside of the felled material in coupes so large as the latter will entail a considerable effort on the elephant establishments and an unusual extension of temporary tramlines. As a matter of fact, however, if the establishment of regeneration blocks of a 100-acre per annum suggested by me in paragraph 14 supra, is carried out there must be a re-division and diminution of the area of these coupes. The *average* annual fellings instead of consisting of a clear felling of 25 to 50 acres plus selection fellings in 250 to 275 acres all in one coupe will consist of a clear felling of 25 to 50 acres plus the selection fellings of 50 to 75 acres—both in the regeneration block and a selection felling of 200 acres in the area under selection fellings outside.

25. *Establishments.*—I beg to support the rather large addition to the establishment applied for the purpose of carrying out this plan with the exception that a Special Deputy Ranger is hardly required for the maintenance of the ghaut road below Top Slip to Sethumadai on which the estimate for repairs is only Rs. 1,000 per annum. The Deputy Ranger for supervising the carting from Top Slip to Sethumadai, a distance of five miles, is already in the list and this officer could easily and suitably look after the repair of the road as well.

26. *Steam Tramway.*—The Forest Engineer has not yet submited his final plans and estimates for the construction and running expenses of the Steam Tramway that is to serve the forest. His provisional estimates were discussed some months ago at a Conference at which the Forest Commissioner was present. Under those calculations after allowing for interest and depreciation the transport charge for a hundred thousand cubic feet per annum of timber from coupe to the coming railway line at Anamalai road station was As. 10 a cubic foot and the Working Plan has adopted this rate in its financial statement of expenditure. The Engineer informs me that he has completed his work and that it is only the fair copying and fair drawing remains to be done, and that the provisional estimate will be raised by not more than some fraction of an anna. I do not think that it is necessary to delay this review any longer for the arrival of the estimate.

27. *Concluding remarks.*—Owing to the block of old stock of timber still awaiting removal I would recommend that the commencement of the selection fellings and of the regeneration fellings should be provisionally delayed to the beginning of the official year 1919-20. It is fairly evident that the removal of the fellings under this plan and the extraction of the resulting 100,000 cubic feet per annum is, at any rate until the arrival of the Steam Tramway, going to tax our resources and energies to the utmost; and it would be most inadvisable and prejudicial to start the new felling and regeneration schemes whilst a heavy block in the way of unremoved old stock stands in the way. There need be no hesitation to sanction forthwith the commencement of all the other operations in the plan. Full work for the present labour supply will be found in the clearing of the depots, lantana work, fire protection and so on.

28. Mr. H. F. A. Wood has taken great interest in working out this plan and spent most of the time since he took it in hand in the forest itself. I am confident that enumeration surveys and stock mapping connected with the preparation have been thoroughly supervised and the information supplied thereby is more than usually dependable. The fire protection provisions are likely to be effective if properly carried out. Mr. Wood's knowledge of these forests and his special experience in that line of work are equally extensive. Although I am obliged to recommend the postponement for a time of the principal provisions of the Working Plan I should like to record that the carrying out of these provisions woud hardly have been in sight but for the ability and energy displayed during Mr. Wood's tenure of charge of this division in working away the enormous stocks of unremoved timber that had accumulated up to the commencement of the year 1915.

INTRODUCTION

PART I.

SUMMARY OF FACTS ON WHICH THE PROPOSALS ARE BASED.

(i) DESCRIPTION OF THE TRACT DEALT WITH.

	PAGE
(a) Name and situation	10–11
(b) Configuration of the ground	11
(c) Underlying rock and soil	11
(d) Climate	11
(e) Agricultural customs and wants of the neighbouring population	11–12

(ii) THE COMPOSITION AND CONDITION OF THE FORESTS.

(a) Distribution and area	12
(b) State of the boundaries	12
(c) Legal position	12
(d) Rights and concessions	12–13
(e) Composition and condition of the crops	13–14
(f) Injuries to which the crops are liable	14–15

(iii) SYSTEM OF MANAGEMENT.

(a) Past and present system of management	15–26
(b) Special works of improvement undertaken	26
(c) Past revenue and expenditure	27

(iv) UTILIZATION OF THE PRODUCE.

(a) Marketable products: requirements to be met (quantities produced in past years)	27
(b) Lines of export	27–28
(c) Centres of consumption: markets	28
(d) Mode of extraction and cost	28–29
(e) Net value of each class of produce	29–31
(f) The forest staff	32
(g) Labour supply	32

PART II.

FUTURE MANAGEMENT DISCUSSED AND PRESCRIBED.

(i) BASIS OF PROPOSALS.

(a) Working circles and felling series: how composed: reasson for their formation	33
(b) Compartments	33
(c) Analysis of the crop and method of valuation employed ...	33-38

(ii) METHOD OF TREATMENT.

(a) *Objects in view.*

(A) Mount Stuart working circle—	
(1) As regards the attainment of the normal forest and the establishment of normal regeneration	38–39
(2) As regards the sylvicultural requirements of the species dealt with	39
(3) As regards the yield of timber and other forest produce	39
(4) As regards the improvement and regulation of the water supply	39
(B) Bamboo working circle	39–40

(b) *Method of treatment adopted to attain the above objects.*

Mount stuart working circle—	
(1) Removal of overmature timber	40
(2) To secure the regeneration of desirable species	40–42
(3) Tending the rest of the forest	42
(4) Lantana eradication and bamboos	42–43

(*c*) *The exploitable age.*

(iii) THE FELLINGS MOUNT STUART WORKING CIRCLE.

	PAGE
(*a*) The general working scheme; calculation of the possibility.	43–44
(*b*) Period for which the fellings are prescribed	44
(*c*) Areas to be felled annually or periodically; order of their allotment	44–45
(*d*) Nature and mode of executing the fellings	45
(*e*) Tabular statement of fellings to be made	45–46
(*f*) Forecast of condition of crops at the expiry of the felling period	46

(iv) SUPPLEMENTARY REGULATIONS.

(*a*) Concentrated regeneration and tending—	
(1) Sowings	46
(2) Cleaning, weeding, and tending of the crop and undersowing	46–47
(*b*) Fire protection	47–49
(*c*) Lantana eradication	49–50
(*d*) Roads and buildings	50–51

(v) MISCELLANEOUS.

(*a*) Collection of data and upkeep of record and control forms ...	51–53
(*b*) Markets for timbers at present not in demand	53–54
(*c*) The forest staff; changes (if any proposed)	54
(*d*) Forecast of financial results of the proposed working	54–57
(*e*) Tabular statement of operations to be carried out	58
(*f*) Note	58

(vi) APPENDICES.

(*a*) Maps—	
(1) Map showing the old compartments and the portion on which enumeration has been now carried out and the new working circle.	
(2) Maps showing stock of marketable timber in Mount Stuart and Ulandi working circles.	
(3) Map showing the lantana area and coupes in which it is to be eradicated under the new scheme and fire lines.	
(4) Map showing the proposed tramway line routes and the new exploitation coupes.	
(5) Diameter curve for teak.	
(*b*) Valuation surveys written records of results—	
(1) Showing number of trees up to and including trees of 6 feet girth according to species and girth classes	59–82
(2) Showing number of trees up to and including trees of over 6 feet girth, including volumes of marketable timber	83–175
(3) Miscellaneous statements—	
(*a*) Control book forms	176
(*b*) Statement on which the stock map is based ...	177–78
(*c*) List of agricultural timbers	179
(*d*) Statement of expenditure incurred on Mount Stuart working-plan, South Coimbatore division	180

WORKING PLAN FOR THE TIMBER FORESTS OF THE TUNACADAVU RANGE, SOUTH COIMBATORE DISTRICT.

INTRODUCTION.

PART I.

SUMMARY OF FACTS ON WHICH THE PROPOSALS ARE BASED.

(*i*).—DESCRIPTION OF THE TRACT DEALT WITH.

(*a*) *Name and situation.*—The tract dealt with consists of most of the Tunacadavu Reserved Forest as shown in the map. It is made up of portion of the Tunacadavu Reserve, which lies in Coimbatore district, together with a very small portion of the Ānamalai Reserve, and of the Tekadi Leased Forest, with certain areas excluded, which lies in Malabar district, but which, for the purpose of convenience of administration is under the District Forest Officer, Coimbatore South, and is included in the Tunacadavu Reserved Forest. The Tekadi Leased Forest is bounded on the east by the Malabar-Coimbatore boundary: on the south by the

Cochin State : on the west by the Cochin State to the junction of the Itti ar and Tekadi rivers, then by the latter river to the Tekadi village : on the north by a demarcated boundary line as far as the Malabar-Coimbatore boundary.

The balance of the area dealt with consists of the rest of the Tunacadavu Reserved Forest, lying in the Coimbatore district, except the portions excluded, as shown in the map together with a very small portion of the Anamalai Reserve.

(*b*) *Configuration of the ground—Tekadi Leased Forest.*—This forest is bounded on the south by a steep ridge, the highest point of which is Vengolimalai, 3,697 feet at the south-east corner of the forest. The northern side of the ridge is, in parts, very precipitous, so that the steepest parts have been excluded from all working. In the north-east of the forest there is a large area of precipitous hills and shola forest which are excluded from the area to be worked. For the rest the forest consists of low undulating hills, much broken up by ravines and nallas, while from a ridge which runs for several miles southwards from the Tekadi bungalow, steep slopes run down to the Tekadi river. The general slope of the country is down from the north-east to the south-west

Coimbatore District Forest.—To the south of Mount Stuart runs the Tunacadavu Ar valley, beyond which lies the Mount Stuart ridge. Beyond this latter ridge runs the high ridge from Vengolimalai to Umayamalai, which divides the forest into two portions. The forest beyond this high ridge, and known as the Ulandi Forest, slopes straight away down to the Chinnar, beyond which is the Nadumalai ridge and hills which slope down to the Periyar river. Much of this part of the forest, specially at the northern limits, is extremely rocky, but it contains much good soil in parts, capable of producing fine timber. It is difficult country, however, for transport, as all timber has to be brought up hill, until the ridge is crossed. The portion beyond the Nadumalai ridge has been excluded owing to difficulty of transport, although parts of it will grow magnificent teak.

(*c*) *Underlying rock and soil.*—The underlying rock is gneiss which, on disintegrating, forms a deep rich loam. It is deep over large areas but shallow in parts. The fact that a teak tree was felled two years ago which yielded 800 cubic feet of logs shows what the forest will produce. It would be interesting to know how this giant compared with the large trees felled in the fifties. Trees of over 500 cubic feet are more common in the felling register. I recently measured a teak tree to yield 772 cubic feet of marketable timber, although in 1866 Captain Beddome recorded that there was hardly a tree in the forest fit to yield a log.

(*d*) *Climate.*—The rainfall to the south and north of the Vengolimalai-Umayamalai ridge differs somewhat. In the forests to the north it is about 67 inches per annum, wheras that in the forest to the south it is said to be considerably more, but, as this has never been tested with a rain-gauge, the difference cannot be given. The main feature of the rainfall as regards the reproduction of teak and other forest trees is its favourable distribution. In May, there are thunder-storms, which enable dibbled teak seeds to germinate, so that they receive the full benefit of the south-west monsoon, which arrives in the first week in June. Its rainfall provides the seedlings with ample water until the arrival of the north-east monsoon, which in its turn keeps the ground sufficiently moist to restrict the rigours of the hot weather to a very short period. There are, at times, as in the present year 1917, rains in February, over 2 inches. In April also there are usually showers; so young teak get help on and off all the year round, except for short intervals, which are not sufficiently long to jeopardise their welfare. This is a great asset, which assists the natural regeneration of teak, and those plants raised by concentrated regeneration. The hot weather is short, and not severe as compared with other districts less favourably situated. The hot weather is feverish, and in the past work has been for the most part stopped from March to June, the establishment emigrating to Sethumadai on the plains. This is hardly conducive to efficient fire protection, and now that we are going to deal with regeneration this cannot be permitted in future, or there will be no efficiency. Proper wells, with anti-mosquito measures, should help to diminish the amount of fever.

(*e*) *Agricultural customs and wants of the neighbouring population.*—The ordinary wants in regard to fuel, small timber and grazing are met from the forests in the Pollachi Range, which intervene between the Tunacadavu Range and the plains.

The forests under consideration have hitherto supplied nothing but large timber, and spokes and felloes, made from the branches of teak. Of late years some bamboo coupes have been opened and sold standing, but absence of roads has restricted the demand. With better transport facilities the trade in bamboos (Bambusa arundinacea) could doubtless be extended. The proposal for a steam tramway has received the approval of the Forest Commissioner, and estimates are being prepared for the same for submission to the Government for sanction. If this form of transport is approved it will provide transport facilities for large numbers of bamboos, which should convert a dangerous weed into a valuable asset. Parts of the forest can be worked primarily for bamboos. Such areas will supply the demand for short lengths of bamboos whereas the steam-tramway will deal with longer lengths. Research and inquiry may show us a profitable use for some of the hitherto unfashionable timbers. The position of the forest, and the cost of transport, have so far prevented their exploitation, but the advent of the steam-tramway, and the proposed extension of railways on the plains, may enable us to find a market for some of them.

There is the usual difficulty on the plains, generally, over getting a sufficiency of agricultural implements. The ryots, as elsewhere, refuse to pay more than a very small amount for ploughs, and so on, which amount does not pay for the cost of conversion, and transport to the market, so they continue to pilfer from the forests adjacent to the villages. The subject should be kept in view, as it might be possible to supply ploughs from branches of felled trees, and it also might be possible to arrange for the making of many sorts of agricultural implements from trees that are useless to us for timber, and which will be felled as weeds in the improvement fellings. There is a large demand for good teak timber, and all such that we are likely to be able to supply, can be easily sold. Sales of other species at the Pollachi timber depot are given elsewhere. There is no grazing allowed in the forest and none will be permitted. This has the approval of the Collectors of Coimbatore and Malabar.

(*ii*).—THE COMPOSITION AND CONDITION OF THE FORESTS.

(*a*) *Distribution and area.*—Under (1) (*a*), some details of the area to be dealt with have been given. The Tekadi Leased Forest contains 17,414 acres, and the balance of the Tunacadavu Reserve in the Coimbatore district contains 31,598 acres. Of these 25,518 acres will be dealt with in this plan.

(*b*) *State of the boundaries.*—The boundary between British Territory and the Cochin State is marked by marks cut, either on slab rock, or on stones let into the ground. A map of boundary has lately been made for the purpose of checking these marks: every mark is entered on these maps, which have been made from the original field traverse books. These marks are checked periodically. On the west the boundaries are streams. The other boundaries are shown on the map.

(*c*) *Legal position.*—The whole area under consideration is included in the Tunacadavu Reserved Forest notified as such in G.O. No. 1472, Revenue, dated 27th November 1883. In paragraph (*iii*) (14) below details are given as regards the tenure of the Tekadi Leased Forest, which forms part of the above mentioned reserved forest.

(*d*) *Rights and concessions.*—The following are the rights of way in Tunacadavu Reserve:—

(1) Right of way from Tellikal to Tekadi, and thence to Gudaravalli forest in Coimbatore district.

This route consists of four sections, viz.—(*a*) Route from Tellikal to Kachithod in the Kollengode Raja's forests which is only a foot-path. Distance of that portion of this section lying within the Tekadi Leased Forest is about 2 miles.

(*b*) In continuation of the above path, the route from Kachithod to Pazhayamudi is a cart-track. It runs in a north-easterly direction along Kaliyanakodal, Puvanakadavu, Mangajam and Puliandamparai as shown in the map. Distance of the portion of the cart-track lying within the Tekadi Leased Forest is about 4 miles.

(*c*) The route from Pazhyamudi to Adivaram is a timber slide as shown in the map. Distance of the silde is about 2 furlongs.

(*d*) From the bottom of the slip a cart-track runs to Adivaram in a south-easterly direction for about 2 miles and leaving the Tekadi Leased Forest it runs through Gudaravalli forest in British territory in an easterly direction as far as the reserve boundary at about cairn No. 80. Distance of the cart-track from the district boundary to the reserve boundary is about 3 miles. Width of the whole right of way is 30 feet.

(2) *Right of way from Tellikal to Pillakalaparai in Tekadi Leased Forest.*—The path runs from Tellikal in a south-easterly direction as far as Pillakalaparai, crossing the Tunacadavu river *en route*. Distance of the path is about $2\frac{1}{2}$ miles and width 30 feet.

Note.—Nambidis and Government Kadirs have the sole right of way over the path (B.P. No. 543, dated 22nd April 1880).

(3) *Right of way from Tunacadavu (Mount Stuart) to the Cochin Territory via the Anagoondy pass.*—The path runs from Mount Stuart in a southerly direction via the Anagoondy pass, and leaves the Coimbatore-Cochin boundary at about $1\frac{1}{2}$ miles south-east of Vengoli peak, the distance of the path up to the district boundary being about 4 miles and width 30 feet.

Note.—The Nambidis and Government Kadirs have the sole right of way over the path (B.P. No. 543, dated 22nd April 1880).

(4) *Right to collect minor produce in the British portion of Tunacadavu Reserve.*—No claims to collect or share in the value of the minor forest produce from the Government reserve have been advanced, except by the Kadirs whose privileges in this respect are not gain-said, and are fully recognized by the Government.

(5) For further rights please vide the conditions of the lease deed entered into on 2nd May 1887 between the Nambidis of Kollengode and the Government.

(*e*) *Composition and condition of the crops.*—Full details of the composition of the crops are given in the analysis of the crops in Part II and shown in the stock maps. A little to the north of Mount Stuart, the head quarters of the Tunacadavu Range, and extending over an area of 3,652 acres is a tract of shola (evergreen) forest. To the east of Mount Stuart and extending over an area of 1,720 acres, as shown on the map, lies a tract containing such dense bamboos that it will be treated as a bamboo working circle. Excluding the rocky and precipitous portions which are shown as excluded on the map, the rest of the forest on the north of the Vengolimalai ridge consists of a mixed deciduous high forest, much invaded by bamboo (Bambusa arundinacea). This bamboo is plentiful throughout the forest, but is specially dense in the rich-moist soil along the banks of the Tunacadavu Ar, at the foot of the central ridge. It is less dense in the south-west portion of the forest. To the east of the Vengoli ridge is a fine piece of shola shown on the map. The rest of the forest which is very rocky in parts is deciduous forest mixed with bamboos. The rainfall is heavier on this side of the ridge, so that a denser crop of weeds is produced than on the north side with the result that one sees much less young teak regeneration.

The forests are well-suited for the production of fine teak timber, and in spite of all removal of teak, without anything being done to assist regeneration, it is still the predominant species. With it are associated Karumarudu (Terminalia tomentosa); Rosewood (Dalbergia latifolia); Vengai (Pterocarpus marsupium); Pillamarudu (Terminalia paniculata); Venteak (Lagerstroemia lanceolata); Irul (Xylia dolabriformis); Manjakadambai (Adina cordifolia). The foregoing comprise all the timbers for which there is any demand at present. Other species which occur commonly are Nir Kadambai (Stephegyne parvifolia); Vagai (Albizzia odorattissima); Anogeissus latifolia; Grewia tiliaefolia; Phyllanthus emblica; Acacia leucophloea; Terminalia belerica; Dillenia pentagyna; Careya arborea; Stereospermum xylocarpum; Terminalia chebula; Bridelia retusa; Cassia fistula, etc. For reasons given later, the history of the forest to the north of the Vengoli ridge is a long story of the extraction of timber, principally teak, without anything being done in a systematic and sustained manner to assist regeneration, or tend the forest. The quantity of teak still existing shows how well the locality suits it. Fires and weeds have had their effect on the regeneration so that there is a marked absence of teak in the pole stage. A little help, such as this plan aims at giving, will immensely improve

the forest, and in time, if the work is maintained, will make the forest worthy of this fine locality. A considerable portion of the forest as shown in the map is overrun with lantana. Mr. P. M. Lushington in 1916 has put it on record that in 1899 lantana was apparently a negligible quantity, and that the very fact of its being apparently negligible has caused its spread. Ten years later, he says, it was rapidly spreading and that in the last five years its spread has been enormous.

The past history of the forest shows how teak was removed in the middle part of the last century without regulation as regards the possibility of the forest; it also shows how, during the last thirty years, teak and other timbers have been removed under regulation. The enumeration lists, the volume statements and the stock map show the present condition of the forest.

(*f*) *Injuries to which the crops are liable.*—The chief of these are fire, lantana, bamboos and elephants. Fire protection will be dealt with later. There should be no very special difficulties about it Lantana requires particular attention, and a hard and prolonged fight against it must be undertaken. A scheme for its eradication has already been put in force, under which it is pulled up, and dug out over areas for three years in succession. This scheme has suffered for lack of sufficient labour, as the Working Plan Party has required a considerable amount of labour, as has the Forest Engineer. Work is, however, proceeding, although the full areas allotted under the scheme are not being worked up to. Special efforts will have to be made to procure labour for the purpose from the villages on the plains, in much the same way as the planters in the planting district in the higher Anamalais do. One thing is certain, and that is, that it will not be sufficient merely to eradicate the lantana for three years in succession. A special lantana gang will have to be appointed to go over the areas which have previously been attended to, and extract any new lantana that may have come up from seeds. Unless this is done things will be as bad again in a few years, such is the great rate that this scourge grows and increases. Lantana according to local jungle tradition sprang from a plant grown in at a rest-house near waterfall years ago. In the country east of Attakatti the local jungle folk maintain that a few years ago there was no lantana in those parts, whereas now it extends for miles.

Mr. P. M. Lushington's remarks on its rapid spread here have been already quoted. It must be got rid of if we are to do justice to these forests, whose possibilities, if properly treated, are so great. A revised scheme for dealing with lantana will be included in this plan.

Another pest Caesalpinia mimosoides is trying to imitate lantana, and this will be dealt with along with the lantana. Some years ago someone planted some Ceara rubber trees at Mount Stuart. The locality suited them, they produced large crops of seeds, and the plants began to become a nuisance. They have now nearly all been exterminated. A look-out must be kept for stray seedlings or a new pest will arise. Creepers occur to some extent. Mr. Popert, in his note on these forests, remarked to what a small extent they occur as compared with the Burma forests I can say the same thing as compared to the Kurnool-Nallamais forests. The Working Plan Party, who are enumerating 50 per cent of the forests are cutting many of them as they enumerate. There is little defoliation amongst the teak here, at present compared with some teak forests in the Presidency, but the defoliators are present, and they will doubtless increase with the cultivation of teak. A minor pest is arising but which will also prove itself a nuisance if it is not at once suppressed, viz., guavas. A few plants were planted in the Mount Stuart bungalow garden and now young plants are appearing profusely. The parent trees are being cut down, and it is hoped that the young plants will never be allowed to reach the fruiting stage. Bamboos (Bambusa arundinacea) appear all over the teak area, in parts somewhat less densely than in others, but it everywhere greatly interferes with teak regeneration. Immense areas that would grow very fine teak are occupied by this bamboo, to the exclusion of the teak. With the steam tramway we shall be able to deal with some of them with profit. It seeds in patches at times, and during 1916-17, it has seeded over considerable areas, which may facilitate the introduction of teak more cheaply than could otherwise be effected.

There is no doubt that elephants are in these forests very destructive to young teak, and the damage they do has a good deal to do with the absence of young teak. When saplings get a few feet high one finds them broken down by elephants trampling on them, and, when they get larger, are frequently broken or otherwise damaged.

Compared with a hundred years ago the forest area has diminished, and with the opening up of tea and coffee estates, of which nearly 40,000 acres have been granted in the higher forest of these hills, the area over which elephants roamed has been further curtailed. Some damage to the areas of concentrated teak regeneration must be anticipated. This might be prevented if some supplies of barbed wire could be cheaply obtained from the large stocks that will be available after the war. If triple strands of such wire were to be fixed to standing trees around such areas elephants would learn to avoid them, and when the trees are large enough to be past the danger stage the wire could be moved and used for new plots. It is worth considering.

A further source of danger to young Vengai (Pterocarpus marsupium) are the Sambhur. When the grass dries up Sambhur feed on young rose-wood and Vengai, and this fact probably accounts for the scarcity of these species in the mature crop. Very fine rose-wood are to be found here and there, but the proportion of these two species amongst the mature trees is very small, in spite of the fact that rose-wood is a shade bearer. The absence of Vengai I can only attribute to this cause, and possibly also to monkeys, as I have seen the young Vengai saplings with their leading shoots broken off by langurs in the Kurnool plantations for the sake of the young leaves. Here and there good Vengai trees are found which shows that the absence is not due to an unsuitable locality.

(*iii*).—SYSTEM OF MANAGEMENT.

(*a*) *Past and present system of management and works of improvement.*—(1) In early years, certainly earlier than 1839, considerable quantities of teak timber were extracted from the forests of Malabar, Travancore, Cochin and Kanara for the use of the Bombay dock-yard, where men-of-war were constructed for the Indian Navy. Of the forests indented on it is certain that the Tekadi Leased Forest, then called Kollengode, Agomalay or Anamalay forest, was one. The timber was brought to the coast by contractors, who obtained leases from the Nambidi of Kollengode, and was taken over there by an officer of the Indian Navy, known as "Timber Agent."

(2) Government being of opinion that better arrangements could be made and better results obtained, Major F. C. Cotton, R.E., Civil Engineer, Coimbatore, was called upon to investigate and report. That officer reported in his letter No. 234, dated 9th July 1849, that "the Kollengode and Anamalai forests are one and the same" and that "it is from this forest that contractors had been supplying timber in the past." "The only difference is" he reported, "that the Raja's finest trees have all been cut, while a great extent of the forest belonging to the British Government is still untouched."

(3) This statement was based on the belief that the Tekadi forest belonged to the British Government, and lay in the Coimbatore district, and that the Tekadi river was the eastern limit of the Nambidi of Kollengode's territory. After an inquiry, the Government recognized the ownership of the Nambidi in their order No. 883 of 1st September 1850.

(4) Meanwhile, in 1848, owing to Major Cotton's recommendations Captain J. Michael of the Madras Native Infantry was deputed for eight months to investigate the teak forests. Eventually he was appointed a "Superintendent of the Anamalai forests" to supervise the working of the forests, mainly with a view to meeting the demand for the Bombay dock-yard. Captain Michael was placed under the orders of the Civil Engineer, an arrangement which continued up to 1853 when the control passed to the Collector of Coimbatore.

(5) At the close of 1856 a separate Forest Department was created with the appointment of Dr. H. F. Cleghorn M.D., Assistant Surgeon, as the first Conservator of Forests in the Madras Presidency.

(6) In 1848 the Bombay Government proposed that the Anamalai and Walayar forests, together with others in Malabar and Kanara, should be managed by Dr. A. Gibson, who had been appointed Conservator in that Presidency in 1846. This proposal found no favour with the Government of Madras, and was also vetoed by the Government of India—Vide Order No. 1016, Home Department, dated 18th November 1848.

(7) The ownership of the Nambidi having been admitted, Captain Michael, supported by Major Cotton, proposed that the Tekadi forests should be leased from the owner. This proposal having met with approval, a lease for a term of sixteen years from 1st January 1851 was entered upon.

(8) The lease was saddled with the balance of current contracts with four private contractors, which did not expire until the middle of 1852. The total quantity remaining to be removed under these four contracts was 2,646 teak planks. Any other claimants were to be satisfied by the Nambidi from other portions of his forest, and no fresh contracts of teak were to be granted in the leased area.

(9) Payments of stump fees at the rate of Rs. 5 per teak tree felled were to be made by the Government. The Nambidi was given an advance of Rs. 7,500 for 1,500 trees, and no further payments were to be made until this advance had been cleared off, by adjustment of stump fees. The lease was for teak only, all other timber and produce remaining at the disposal of the Nambidi.

(10) Captain Michael had started work in the Sichally valley, where 1,500 trees were girdled in 1848, and felled in 1850. This valley lies partly in British territory and partly in the leased forest, and it is uncertain whether any of these trees fell in the latter or not.

(11) On the expiry of the first lease, a second lease for a period of 99 years was entered into, dating from 1st January 1857. There were considerable changes in the new lease, the most important being (*a*) the British Government was to have complete control of the timber, and could lay down such rules for conservancy and management as to them shall seem fit. The "customary rights" of hill tribes to cut jungle-wood for their own proper use was not to be interfered with, and the Jenmi reserved to himself the usual rights to ivory, honey, cardamoms and such like hill produce.

(*b*) Stump fees at the following rates were to be paid for all natural trees felled :—

Teak	6	0	0
Black wood	6	0	0
Vengai	3	8	0
Karumarudu	3	8	0
Arjuni, Agil, Irul	3	0	0
Venteak, Pillamaradu	2	8	0

No stump fees were leviable on planted trees cut as saplings, or on any felled in thinnings, clearing roads, bridging, hutting, or other conservancy purposes, or on any kind of trees not included in the above list. Saplings were defined as young trees less than 30 inches in circumference at a height of 6 feet above the ground.

(*c*) The Jenmi was not to be called upon to pay any share of the cost of management, nor could he claim any share, or fee, other than specified above.

(*d*) The account of trees felled and the stump fees thereon was to be made up annually, and an authenticated statement presented to the lessor.

(*e*) An advance, on account of stump fees, of Rs. 30,000 free of interest was made to the Jenmi, and no money payments were to be made until this advance had been wiped off.

(*f*) *Five outstanding contracts* .—One for $156\frac{1}{2}$ cart loads of teak wood, three for an aggregate of $491\frac{3}{8}$ cart loads of black wood, and one for 400 cart loads of jungle wood were recognized, and had to be satisfied under the supervision of the Forest Department. All five had expired by the 12th October 1868. The recognition of the contract for teakwood is curious in view of the clause in the original lease, which precluded new contracts for that timber being granted.

(12) This new lease was preferable to the old one but that it was unsatisfactory was soon apparent. It is obvious that with a limited lease, and in a timber forest of this kind 99 years is not a generation, no improvement of the forest could be undertaken. Moreover the system of payment by stump fees was clumsy, and irksome.

Nevertheless the lease remained in force unaltered for nineteen years and it was not until 1887 that a revised lease was brought about. This third lease which is the one still in force today was the result mainly of the representations and energy of Mr. H. J. Porter, the then District Forest Officer.

(13) The unexpired balance of 80 years of the existing lease was reaffirmed, but the lessor now agreed to the " perpetual renewal or extension of the same for like periods.". This clause at once changed the whole aspect, and for the first time the Forest Department was in a position to contemplate the introduction of conservancy on proper sylvicultural lines. (Unfortunately advantage was not taken of it for thirty years, and it is only now that a working plan has been made having such objects in view.)

(14) The important clauses of the new lease are given below :—

(*i*) All rights were extinguished in the land except the following :—

(*a*) Right of way for the Jenmi's timber and produce along the cart-track from Tellikal through the leased forest to the Gudaravalli forest and the branch track which crosses the Tekadi river, and the right to use the timber slip down Aiyasamimalai ridge.

(*b*) Right to store timber at the top and bottom of the said slip.

(*c*) Right to all elephants captured accidentally, or otherwise, and to all ivory found, subject to payments by the lessor of the usual finder's reward.

(*ii*) The British Government is debarred from taking any steps to capture elephants, and to quarry, or mine for precious metals or stones.

(*iii*) The payment of stump fees was abolished in favour of a fixed rental.

(*iv*) Of the advance of Rs. 30,000 made in 1867 only Rs. 13,661 had been recovered by adjustment of stump fees when the revised lease was executed. A further advance of Rs. 75,000 was now made, bringing up the total to Rs. 91,339. This debt was to be liquidated by the adjustment of part of the annual rental during the first thirty-seven years.

(*v*) The rental of the first eighty years was fixed at Rs. 5,000 per annum; the actual payments for the first thirty-six years being Rs. 2,500 and for the thirty-seventh Rs. 1,339 and thereafter the full rent of Rs. 5,000, the payment to be made in equal half-yearly instalments. The whole debt will have been paid off therefore by April 1924.

(*vi*) Should the British Government desire to renew the lease, a renewal fee of Rs. 5,000 for the first term, Rs. 6,000 for the second and Rs. 7,000 for the third and every subsequent term will be payable.

(*vii*) The annual rental during the first extension is fixed at Rs. 5,000; Rs. 7,500 for the second, and Rs. 10,000 for the third and all subsequent ones.

(*viii*) Interest at the rate of 1 per cent per mensem will be paid after the expiry of one month from due dates of payment, 1st April and 1st October of every year. If payment falls in arrears for over three calendar months the lessor shall be at liberty to absolutely determine the lease.

(15) During the first years after the forest was taken over by Government it was worked almost entirely to satisfy the demands of the Bombay dockyard, and nothing was done in the direction of conservancy and improvement beyond the prevention of theft.

(16) In 1850, Captain Michael constructed a cart road $6\frac{1}{2}$ miles long from Top Slip to Sichally (Michael's trace) at a cost of Rs. 4,139 to facilitate timber extraction. Only the last mile of this lies in the leased forest. Timber was carted along this road to Top Slip, hence it was skidded down the ghat to Adivaram. Thence the timber for the Bombay dockyard was carted for about 37 miles to the Palghat river, at a point a little above the town of that name, whence it was floated for 70 miles to the coast at Ponnani. At the Ponnani Depot it was taken over by the Government timber agent.

(17) Considerable quantities of timber were also sent to the Madras Arsenal. This latter timber was carted from Adivaram via Pollachi, Dharapuram, Udiyar and Kangayam to Vangal, a village on the right bank of the Cauvery a little above Karur; a distance of 120 miles. Thence it was floated down the Cauveri to the mouth of the Coleroon, where it was loaded on coasting vessels for delivery at Madras.

(18) In 1862-63 the Indian Navy ceased to construct vessels in Bombay and the demand for Anamalai teak for that port practically ceased. Timber was still floated to Ponnani, however, until 1870 after which rail transport superseded water carriage.

(19) Captain Beddome, then Conservator of Forests, proposed to reserve the Anamalai teak for the English Navy on the grounds of its superiority to Burma teak. Nothing appears to have come of this suggestion, though it was submitted to the Admiralty.

(20) In 1856 Captain Michael traced a ghat road to replace the slip, which was very difficult to maintain in efficient order. He claimed that he had obtained a trace with a moderate gradient down which the largest logs could safely be taken on wheels at a very moderate expenditure. Though he thought the road could be constructed at a low cost, this was not the opinion of the Engineers and the proposal was shelved. In 1868, however, the officer then in charge, Captain Gosling, actually constructed the road in less than five months at a cost of Rs. 4,009; the Engineer's rough estimate had been Rs. 25,000. Apparently Captain Michael's trace was slightly modified by Captain Gosling. This is the existing Mount Stuart Ghat road.

(21) It was proposed to summarise the quantities of timber extracted from the forests from the date of the lease, but the intention had to be abandoned as the records are either very incomplete, or so obscure that it is impossible to discriminate between timber removed from the leased forest and from the adjoining forests in British territory (the upper valleys of the Tunacadavu and Sichally streams), or to ascertain with accuracy whether the timber referred to as received at the cost was felled in the previous year or earlier still. Even the accounts rendered to the Nambidi in support of the stump fees are not forthcoming. It could serve no useful purpose here to tabulate such figures as are available.

(22) That very large quantities were extracted, however, will be gathered from the following statements :—

In 1861 above 1,677 teak trees were girdled.

In 1849 Major Cotton and Captain Michael estimated that the Government and the leased forests contained 18,350 teak trees containing not less than 3,670,000 cubic feet in condition to be felled.

In 1866 Captain Beddome reported " I have no hesitation in saying that the forest requires complete rest for 15 or 20 years. With the exception of a few knotted and twisted trees, there is not a teak of any size left, and very few trees that would yield one log. It must be remembered that the few square miles alluded to have been worked incessantly for sixteen years, also all the Vengai (Pterocarpus marsupium) and black wood too has been taken out during the last three years by the Nambidi's native contractors." The Collector remarked that the value of the timber felled during the years, 1855-56 and 1856-57 was Rs. 6,05,171-13-0. This represents at least 284,790 cubic feet as the average sale price had been reported as Rs. 2-2-0 per cubic foot. This is probably the total quantity of timber felled, but not of timber extracted, as the Collector goes on to remark that the actual receipts were only Rs. 2,04,070-6-6. This presumption is supported by the statements of Major Cotton and Captain Michael that the wastage in conversion was from 300 to 400 per cent [*sic*]. This enormous wastage is explained by the fact that the supplies to the Bombay dockyards were in planks of 3 inches to 8 inches thick which had to be hewn out with the axe since sawyers could not be induced to work in these tracts.

(23) The history of the administration of the Tekadi Leased Forest falls naturally into two well-defined periods prior to, and subsequent to, the introduction of Mr. H. J. A. Porter's scheme for its working.

Mr. J. S. Gamble, Conservator of Forests, after visiting the forest in 1885, made certain suggestions, and laid stress on the necessity for some regular plan of working. As a result Mr. Porter undertook the preparation of a scheme in 1885-86 which appears to have been put in operation at once.

(24) It has already been shown that very large quantities of timber were felled in the early years of the lease. Though extraction probably decreased in 1862-63, when the construction of vessels of war in Bombay was given up, considerable quantities of planks were sent to Bombay as late as 1867. It is certain that large quantities still left these forests up to the year 1879-80, when felling was stopped in order to give the forest a rest until 1885, when extraction was resumed.

(25) The South and North Coimbatore Divisions were then amalgamated into a single Deputy Conservator's charge (Now four divisions, 1917), the Anamalai forests being reduced to a Range in charge of a Sub-Assistant Conservator. In the same year the Tunacadavu Reserve was demarcated, but it was not finally notified as a reserved forest until 1883, the Tekadi Leased Forest being included within the boundaries described. The South Coimbatore Division again became a separate division in 1885, and included the Mettupalaiyam and Bolampatti (with Walayar and Chenath Nayar forests) ranges until 1909, when the two latter ranges were separated off to form the new Central Coimbatore Division.

(26) Though the forests were worked primarily for the supply of timber, the question of conservancy and improvement was not altogether overlooked. If little was actually achieved in that direction the insecurity of the tenure is a sufficient explanation.

(27) Major Cotton had already remarked on the necessity for providing for the future in the first year of working by Government. Referring to the marked absence of regeneration he wrote :—" I did not see in any of these jungles young teak rising where old teak is dying out." Inspired, no doubt, by the example of Mr. Conolly, he and his immediate successors, did not look beyond planting for the maintenance of future supplies. In 1871, Captain Beddome recommended :—" Cutting out bamboo clumps and planting with teak."

(28) During 1856 Captain Hamilton obtained sanction for a sum of Rs. 96 for planting, watering and pruning. He appears to have made a small plantation of two acres, but there is nothing to indicate its location. No further reference to this plantation is found until 1869-70 when Captain Beddome reported that two acres of teak plantation had been formed but had been allowed to deteriorate through weeds and fires.

(29) In 1871 Mr. Douglas made a plantation at Top Slip of eight acres known as the " Mudi " plantation and in 1872-73 a further eight acres were planted up at water-fall. Three acres more were planted in 1874 but whether this is the area now known as " Karianshola," or some other, is not evident. These plantations were not actually in the leased forest, but in British territory near the boundary.

(30) The old teak trees themselves bear eloquent witness to the frequency and severity of fires, but we also have the written words of Captain Beddome and others. In 1866 the first named reported on a fire that lasted four days, in spite of all efforts, and that reduced to ashes 773 teak logs and planks valued at Rs. 19,370. In 1880 the same officer (then Colonel and Conservator) wrote of this same tract :—" The fire generally last some eight or ten days and when they have once swept through the forests there is no further danger. The establishment huts and all forest bridges should be thoroughly cleared around."

(31) In his inspection note of 1885 Mr. Gamble comments on the fact that the forests have never been protected from fire, though they had been in possession of the Government for over forty years (not quite correct, as it was then only thirty-five years from the date of the first lease). This however was not to be wondered at. There was no guarantee that Government would be able to renew the lease on its expiry, and until the agreement was on a more satisfactory basis, no officer could well propose heavy expenditure that would be unremunerative during the period of the lease.

(32) The terms of the new lease entered into in 1887 gave an entirely new complexion on the situation. It was now possible to suggest working on

conservative basis with due regard to the future. Mr. Porter had been engaged on the preparation of a working scheme during 1885 and working under its provisions seemed to have commenced in that year. The details will be found in a subsequent section. (The scheme ought, after the new lease had been obtained, to at least have been supplemented by one to deal with regeneration and improvement).

(33) In 1888-89 Mr. Porter laid the first three miles of the Tramline and completed seven miles in the following year. The cost of the plant alone was Rupees 51,000. Great as its defects were the major portion of this line has been working ever since and has proved of immense value to the forests.

(34) In 1898 a saw mill was constructed just below the falls of the Tunacadavu Ar, whence power was obtained for its working. It proved expensive and after a few years was condemned and dismantled. A timber slip and a wire rope-way were operated for some years for the transport of timber and scantlings from Top Slip, where the tram line terminates, to the road at the foot of the Ghat road at Adivaram. Neither of these methods having entirely proved satisfactory, carting down the Ghat road, with all its draw-backs, was resorted to, and has been the sole means of transport to the plains since.

(35) It does not appear that any serious steps against fire were taken until 1892 when it is reported that the whole area was placed under rigid protection. Details are not available until 1895 and even then are incomplete up to 1901. It is stated that special fire maps were started in 1895, but these are not forthcoming and the earliest dates from 1901.

(36) That efforts at fire protection have not been entirely successful the following figures extracted from the fire registers will show—

Year.	Number of fires.	Area burnt in acres.	Year.	Number of fires.	Area burnt in acres.
1895	4	480	1905	2	1,500
1896	?	?	1906	4	1,900
1897	3	800	1907	1	300
1898	2	12,980	1908, 1909	Nil.	Nil.
1899	1	400	1910	3	161
1900	8	9,980	1911	Nil.	Nil.
1901, 1902, 1903	Nil.	Nil.	1912	4	131
1904	6	125	1913	2	570
			1914	7	2,375

(37) The origin of fires in the early years is not recorded. In recent years the most serious conflagrations have been due to fire crossing from the forests outside the area, either before the lines have been properly traced, or owing to incomplete burning. Some fires starting within the boundaries are caused by way-farers, or by the jungle folk when collecting minor produce, specially honey.

(38) A good inspection bungalow was built in 1885-86 at Mount Stuart, where are also the Range Officer's quarters and other range buildings. Quarters for a forester were built at Anaipadi in 1897-98, and close to it lines for elephant establishment were constructed in 1901-02. A rest-house and other buildings were constructed close to the Tekadi river in 1909-12.

(39) We now come to Mr. Porter's scheme. As already stated the scheme was prepared in 1885-86, and the scheme appears to have been introduced in that year. Mr. Porter stated that " the present scheme has been drawn up with a view to ascertaining the probable outturn of the forest, and its value, so as to obtain a rough basis for changing the terms of the lease." He pointed out the uselessness of an elaborate working plan until there was security of tenure, and certainty of continuity :—" If the powers of renewing the lease cannot be obtained for Government, it would be hardly wise to draw up an elaborate scheme for improving the forests as in eighty-years time, it will be handed back to the lessor in a better condition than it is at present. For this reason the present scheme does not contain the elaborate details of a working plan."

(40) The whole area was divided into thirty-nine compartments, the object of this division being merely to take stock. The compartment lines were straight ones, the valuation surveys being carried out along them,—$2\frac{1}{2}$ per cent of the area

being valued. Of the thirty-nine compartments three (Nos. 37, 38 and 39), with an area of 3,626 acres, consist entirely of evergreen forest and grass lands which are shown as unworkable. The remaining thirty-six compartments of deciduous forest aggregate 13,514 acres on an average area of 375 acres.

(41) Mr. Porter adopted the Selection System for working the forest, and fixed the rotation at 120 years, which is the age ring-counting shows to be necessary for the production of the most useful size of teak, viz., 2 feet to 2½ feet in diameter.

The rotation was divided into four periods of thirty years each during which the whole forest was to be worked over. The yield was fixed by numbers of trees to be felled based on the valuation survey. The thirty-six compartments were divided into five blocks in such a manner as to equalize the total number of first class trees in each. Each block was to be worked over in six years. The following statement shows the number of first class trees (2 feet in diameter and above) to be removed yearly.

Species.	Number of first-class trees to be felled in the first period 1886—1915.	Average per annum.	Average volume per tree in cubic feet.	Average volume yield per annum in cubic feet.
Teak	15,548	518	90	46,620
Rosewood	1,163	38	90	3,420
Vengai	504	16	90	1,440
Superior miscellaneous	37,367	1,245	40	49,800
Inferior miscellaneous	3,629	120	40	4,800
Total ..	58,211	1,937	..	106,080

(42) Mr. Porter also calculated the number of first-class trees that would be available in the second, third and fourth periods by presuming that four-fifths of the existing second-class trees, three-fifths of the third class, and two-fifths of the fourth class, would become first-class trees during the successive periods. The figures showed that for teak and rosewood the numbers in the lower classes were actually on a diminishing scale!

(43) The actual sequence of the compartments appears to have been departed from from the very first. The scheme prescribed fellings to commence in compartment IV, whereas that compartment was not worked until 1892.

(44) It was very soon recognized that the system proposed was not suitable and that natural regeneration and the improvement of the forest would not be secured. Mr. Porter himself was the first to arrive at this conclusion and wrote in the administration report of 1888-89 :—" One important fact, however, is proved, viz., that plenty of light and air are required to secure a seedling regrowth of teak, rosewood and vengai . . . . . that teak, rosewood and vengai seedlings will spring up when plenty of light is let in, is no mere supposition, the Sholakarai block (Bolampatti range, now in Central Coimbatore) is an example; that the same result is obtained on the Anamalais is proved by the regrowth in open spots, round camps and on fire lines. There is little doubt, therefore, that in these forests, jardinage should be discarded for the 'mode des eclaircies' . . . . . In plain forests and in those of moderate altitude where there is no danger to be apprehended from wind and no fear of the soil being washed away, where the forests are mixed, where the seedlings of the more valuable trees require plenty of light and air, an attempt should be made to introduce the 'mode des eclaircies' by a system of transformation fellings."

(45) From time to time Conservators inspected the forests and wrote notes in all of which the absence of proper regeneration was remarked on.

In 1894 Mr. E. P. Popert, Conservator of Forests, Central Circle, in view of his experience of teak forests in Burma was specially deputed to inspect and advise on these forests. His report is published in B.P. Forest No. 174, dated 4th April 1895, and the following extracts are particularly interesting :—

" Although fire protection must have acted beneficially on the existing stock and improved the soil it has not had a similar effect upon teak reproduction. This must be the case wherever the canopy has been broken in a moist mixed forest with teak. Exemption from fire with plenty of light has produced a thick crop of coarse grasses and has favoured the less valuable quick growing plants, such as bamboo, grewia, etc. I do not take the pessimistic view regarding existing natural

reproduction expressed in some of the Inspection Memoranda, and believe that it will be found that over the greater part of the teak producing area there exist sufficient young growth of teak to form the chief 'peuplement' of these parts. Doubtless for the first few years the seedlings die down annually, but throw out a more vigorous stem each following year and with a little artificial aid in the way of clearing will eventually over-lap the grass, etc. . . . The system of Jardinage under which the forests have been worked should be given up, and for it improvement fellings with cultural operations substituted. . . . Teak trees over two feet in diameter to be only felled where there is already a sufficiency of young teak, or where attacked by ficus; all trees of the less valuable sands dominating teak, black wood, or vengai to be felled or girdled. Simultaneously, i.e., in the same year with the felling operations, dibbling of teak, black wood, and vengai seed in blank areas to be undertaken. Patches or strips should be cleared of grass and under-growth, the soil loosened and the seed dibbled or sown broadcast. These patches should be of considerable size and will require weeding or clearing for certainly one or two years after sowing. It will probably be found that even without sowing if patches are cleared in the vicinity of teak, natural seedlings will spring up. Existing young growth of the valuable kinds should be cleared and all creepers should be cut. Compared with Burma teak forests the absence of large climbers is remarkable. Lantana is spreading rapidly." Mr. Popert also advocated planting up by the "Taungya system."

(46) I am greatly indebted to Mr. C. E. C. Fischer, late District Forest Officer, South Coimbatore district, for his report on the Tekadi Leased Forest for the foregoing information on its past history.

(47) Since Mr. Popert's visit, several officers have given opinions, or made experiments with teak reproduction, without any very definite results. The work of some officers has been lost owing to the non-maintenance of their efforts by their successors. In a note written on these forests in 1916, Mr. P. M. Lushington states:—"It is not, however, surprising that there has been an almost universal call from all officers in charge of this division to try and improve the regeneration. The earliest efforts that were made in this direction were the attempts made between 1897-99, to improve regeneration in the area between the workshop and Anaipadi. I saw these areas in 1899 and can vouch for it that the work was well done, though according to the more modern ideas there was too much overhead shade. . . . The prospect of these experiments was distinctly promising, but the whole experiment was vitiated by the fact that it was not recognized that regular weeding had to be carried out for some years until the young plants were established. Apparently from 1900 onwards these plots were entirely neglected and when I returned to the division in 1909 I found these areas smothered in lantana. In spite, however, of being covered with weed for so long there were many struggling teak plants in the area under the lantana. This neglect, however, rendered the experiment useless."

(48) In 1906 Mr. J. S. Scot made other experiments, no so much to obtain natural regeneration, as to foster regeneration already on the ground, and at the same time to secure some regeneration by opening the canopy by girdling useless trees. This is a useful operation for assisting established plants, and possibly for obtaining some regeneration, and as will be seen later it will be applied to most of the forest when there is sufficient labour, although we shall depend on more up-to-date methods for our main regeneration.

(49) In the report on the Tekadi forests Mr. Fischer mentions an experiment made by himself in 1914. An area of 10.9 acres was selected just below the Mount Stuart bungalow and he writes (paragraph 93 of his report):—"The area was well-stocked with bamboos and covers 10.9 acres. Over 6½ acres the bamboos were merely cut and were burnt in the hot weather of 1915. Over the remaining 4.4 acres after felling the bamboos were cut up and removed off the area. The cost was as follows:—

Operation.	Total cost.	Cost per acre.
Felling bamboos	131 4 0	12 0 8
Cutting up and removing over 4.4 acres	20 0 0	4 8 8
	151 4 0	16 9 4

The burning is not likely to exceed Re. 1 per acre and probably will be less. The cost may be put down therefore, at Rs. 13 per acre for felling and burning and Rs. 16-8-0 for felling, cutting up and clearing. If burning gives good results it may be adopted as over large areas when the bamboo has to be transported for some distance; complete clearing is likely to cost at least Rs. 20 or probably Rs. 25 per acre.'' Fortunately the burning was not carried out as it resulted in a further experiment being made later. The monsoon then came down on the area containing the felled and unburnt bamboos which speedily became a mass of weeds, creepers, lantana, and bamboo regrowth; so the experiment was spoilt as regards the relative cost of the two operations and as regards the results. Mr. Fischer in September 1915 took over the post of Principal of the Forest College, Coimbatore, so it fell to the compiler of this working plan to deal with these plots.

It cost a great deal more than rupee 1 per acre to get rid of the tangled mass after the monsoon, but the cost was no test of the original experiment. When all the area had been burnt except the trees standing on the area nothing was left except a very few seedlings that had found themselves situated on the outskirts of the area. The area was therefore dibbled with teak 6 feet × 6 feet. These seeds were dibbled in 3 at one spot, and a bamboo stick, a yard high, was placed to mark the place of the seeds, so that their germination could easily be spotted, and the weeding made efficient. The treatment on these plots is given in detail as it will have considerable bearing on the regeneration of these forests. On the plot on which the bamboos were merely cut and removed there were a considerable number of trees more per acre than on the plot where the bamboos were burnt. The lantana immediately took possession of the plot and although there are seedlings of teak, rosewood. Terminalia tomentosa, they are not in satisfactory numbers. The lantana has been removed in January 1917 and the area was found to be so blank that where there was sufficient light, teak seeds have been dibbled in 3 feet × 3 feet to protect the slopes, and to replace the weeds and lantana. These seeds germinated excellently in June 1917 in spite of the abnormally short rainfall, and have given a complete crop with a very small percentage of casualties.

On the plot on which the bamboos were eventually burnt there were fewer trees than on the other plots, so that considerable areas had abundant light for teak and other desirable species. The dibbled seed and natural seed came up excellently in such open portions of the plots. Where the trees had been left the effects of drip, and shade, were very evident. The seeds were dibbled before the end of March, and the ground was then perfectly clean. By the middle of October 1916 the leading seedling from the dibbled seed was 6 feet high, and by the middle of January 1917 it was 8 feet high. Particular attention was paid to weeding, and Rs. 12 were spent per acre on it. Besides the seedlings from dibbled seers and seeds which were in the ground before the burning, a number of fine shoots from old stocks came up which attained to a maximum height of 12 feet in January 1917. The height of the seedlings in January 1917 varied from a few inches to 8 feet. Many rosewood, Terminalia tomentosa, and Pterocarpus marsupium seedlings also made their appearance.

(50) At the same time that the seeds on these plots were being dibbled an experiment was made at Ulandi on the other side of the Vengoli-Umayamalai ridge. The rainfall to the south of the ridge is heavier than on the Mount Stuart side, and in consequence the weeds are much denser, and larger, and natural teak seedlings scarce. A working plan for this portion of the forest had been made some years previously, but owing to delay in road construction the working was in abeyance at the end of 1915. The working plan prescribed certain operations to procure reproduction of teak and rosewood, and laid down that, if necessary, artificial reproduction should be resorted to. As none of these operations had been carried out an attempt was made early in 1916 to make up for lost time. The attempt took the form of an experiment in concentrated regeneration for teak. The compartment I, in which it was made, was rocky in parts with patches of deep soil. Plots on such deep soil were selected 2 × 2 chains square, so as not to fell teak and rosewood for which timber there was no export road; the plots were chosen in amongst the teak and rosewood, but with none of the trees of those species actually on them. The plots contained a great deal of young bamboo growth. Now in these forests

the full-grown Bambusa arundinacea gives little trouble when the clump is fully felled. But the writer had had so much trouble with the regrowth of Dendrocalamus strictus in the Kurnool forests, in building up teak plantations there, that great care was taken to grub out all this young Bambusa arundinacea by the roots The plot was clear-felled and all the felled material removed off the plot. The main idea was to prove that in these forests with the rainfall so favourably distributed teak reproduction could be satisfactorily obtained by dibbling, if sufficient trouble was taken with weeding. As already mentioned above Mr. Popert so far back as 1894 had recommended dibbling and weeding, and up to 1916 it had not been put on a proved basis. Accordingly every effort was made in this experiment to prove that the system could be made successful. The results proved eminently successful. Teak seeds, three at a time, were dibbled in 3 feet × 3 feet over five plots before the end of March 1916. The early rains of May brought up the seedlings, and with careful weeding the plants progressed so well that Mr. P. M. Lushington, Conservator of Forests, Southern Circle, who had been specially requested to visit the forest with reference to new working plan, gave it as his opinion that the seedling growth was as far advanced on 3rd July 1916, the date of his inspection, as the Nilambur plantation planted out plants usually are a month later. The cost of the plots was high on account of the grubbing out of the young bamboos. It amounted to Rs. 63 per acre exclusive of weeding. But the first object aimed at was the proving that dibbled seeds would prove successful. The total cost of weeding per acre was Rs. 12-8-0 in the first year. The plants were beyond the danger from weeds at the end of the first year. Nothing was actually spent on weeding during the second year, but the local forest guards kept the plots clean. A further experiment made especially to show the minimum cost per acre than this operation was made later and the results are given in a later paragraph.

Besides the fact that success could be obtained by clearing, dibbling, and proper weeding, the experiment showed the plots of 2 × 2 chains gave an undue proportion of the area which received the drip of the adjacent trees. Plots of larger acreage will prove more satisfactory, and all growth regardless of species should be cut on them.

(51) To end up the past history of the Tekadi forest it will be of interest here to show the amount of timber felled under Mr. Porter's scheme from the commencement up-to-date, the details are taken from Mr. Fischer's report.

Compartment number.	Years of working.	Kind of trees.	Number of trees.	Number of logs.	Scantlings.	Cubic feet.	Number of holi-trees.
I to XXII excluding No. X.	1885–1914 and 1915.	Teak	The number is only given for some years and not for others.	12,403	3,023	558,526	11
Do.	Do.	Rosewood	Do.	323	..	14,370	2
Do.	Do.	Vengai (Pterocarpus marsupium).	Do.	118	..	6,060	..
Do.	Do.	Venteak (Lagerstroemia lanceolata).	Do.	933	..	23,501	39
Do.	Do.	Karumarudu (Terminalia tomentosa).	Do.	4,775	..	182,251	114
Do.	Do.	Pillamaradu (Terminalia paniculata).	Do.	1,142	..	43,333	167
Do.	Do.	Irul (Xylia dolabriformis).	Do.	718	..	20,362	148
Do.	Do.	Miscellaneous ..	Do.	8,704	..	314,593	147
Do.	Do.	Spokes and felloes not differentiated.	Do.	..	..	1162,216	..

Total number without spokes and felloes—1,162,996 cubic feet.

These figures show that Mr. Porter's totals have not nearly been worked up to, as for this period of 30 years according to his scheme the following should have been extracted from 36 compartments :—

	C. FT.
Teak	1,398,600
Rosewood	132,600
Vengai	43,200
Other species	1,638,000

Only 21 compartments were worked in the 30 years. Unfortunately the number of trees felled is not given for each year, but it is given for some, including the years from 1909-15 when felling was stopped owing to the large stocks unremoved in the coupes.

These figures show that from 1909-1914-15 inclusive, 1,367 teak trees were felled which yielded 4,051 logs containing 164,677 cubic feet, that is, 120 cubic feet per tree. Again in the years 1903-06, 629 teak trees were felled which yielded 1,504 logs containing 63,659 cubic feet or 101 cubic feet per tree. In 1894-95, 303 teak trees yielded 420 logs containing 14,977 cubic feet or 49 cubic feet per tree. These latter, however, were from Mr. Porter's compartment VI, which is rocky, and poorer forest than the others. As regards rosewood, the record shows that 83 trees were felled which yielded 9,694 cubic feet, i.e., 116 per tree; 53 vengai (Pterocarpus marsupium) yielded 4,643 cubic feet or 85 cubic feet per tree; 308 venteak (Lagerstroemia lanceolata) yielded 18,071 cubic feet or 58 cubic feet per tree; 1,509 Karumarudu (Terminalia tomentosa) yielded 1,40,494 cubic feet or 93 cubic feet per tree; 434 Pillamaradu yielded 38,730 cubic feet or 89 cubic feet per tree; 277 Irul (Xylia dolabriformis) yielded 15,516 cubic feet or 43 cubic feet per tree; and 1.416 miscellaneous trees yielded 51,572 cubic feet or 36 cubic feet per tree.

(52) We must next record the recent past history of the other portions of the forest under consideration, and the first of these is the Mount Stuart forest, which lies between the Tekadi leased forest and the Vengolimalai-Umayamalai ridge. For this a working plan was made by the late Mr. Arbuthnot in the year 1909 sanctioned in B P. Forest No. 125, dated 5th May 1911.

Under this working plan no fellings were prescribed. The area was divided into three parts. In one, girdling of inferior species interfering with the growth of superior species was prescribed. In the second it was prescribed that 30 acres should be cleared and planted each year, while the third portion including Karianshola was to be given rest. In the years 1911 and 1913 on 179.40 and 138 acres respectively inferior trees were girdled. This operation let in a good deal of light which greatly helped a number of young teak rosewood, and other species to make head-way. It also helped weeds and lantana to do the same, so in order to assist the former a cleaning and weeding, which included the cutting of bamboos and the useless species which were obstructing the light from and the progress above the teak and rosewood, was sanctioned in 1916 over an area of 100 acres. This has been carried over, over an area of 22 acres at a cost of Rs. 165-5-0, much to the advantage of these young plants. The full acreage could not be worked owing to the demands on the labour available by the Working Plan Party and the Forest Engineer.

In the years 1912-15, 111$\frac{3}{4}$ acres were planted with teak and rosewood. The area selected was to the south of Top Slip and to the east of Karianshola. This planting has not been a success, and the reason in my opinion, does not require much searching for. In order to keep down weeds, the area planted was densely stocked with guinea grass. The plantations did so badly under these conditions that planting was given up on the plea that it was unsuitable. Now just to the north of this area is the Mudi plantation, already mentioned, and immediately to the south is another small plantation which have succeeded. The strongest reason, perhaps, that it is the guinea grass that has spoiled the success of this planting is the fact that the old nursery site from which the plantation was supplied with plants, and on which no guinea grass was planted is now a dense mass of young teak 12 feet high Looking at the area which was last stocked from this nursery from the tramline one can see no plants, whereas the nursery site stands out by itself, a flourishing patch of well-grown teak.

(53) The forest beyond the Vengoli-Umayamalai ridge. In the year 1906 a working plan was made for the upper half of this area as the construction of a road was contemplated, which would run over the ridge and down into the valley beyond. The Working Plan was known as the Varagalli valley Working Plan. The area was divided into 10 coupes of about 250 acres each; 439 trees were to be felled annually. The first coupe which yielded 47,034 cubic feet was felled from November 1911 to March 1913. Unfortunately the construction of the road by which this timber was to have been exported was only commenced in the year 1912, and then construction was abandoned on the ground that the trace was a bad one. The

timber in coupe I was however felled and sold but the purchaser only recently paid for it and he now is about to commence removing it by dragging it to the Cochin Tramway at Parambakulam. It was in Coupe I of this Working Plan that the experiment on concentrated regeneration for teak mentioned in paragraph 47 above was conducted.

Nothing has ever been done with the forest to the south of the area included in the Varagalli valley working plan. This area includes some areas of very fine soil along the Periyar river, where assisted by 120 inches of rain the finest teak can be grown. The dense growth of weeds prevents much natural reproduction, although the fine old trees show what the soil will produce. This far end of the forest beyond the Nadumalai ridge has had to be excluded from the Working Plan on account of the difficulty of transporting timber from it.

(54) It was in 1885 that Mr. Porter made his working scheme based on the fact that our tenure of the forest at the time was only temporary. In 1887, as already recorded, our tenure was made permanent, yet until 1915, the same scheme, which only provided for extraction of the best species in the Tekadi forest has continued, and no regulated scheme to assist regeneration has been added. It was not that the necessity for such operation was not recognized, for, commencing it with Mr. Porter himself every officer who has had to inspect, or manage the forest, has fully recognized it. Lack of sufficient establishment was doubtless the cause for the delay in the provision of a new Working Plan. In 1913, however, one Working Plan Party was organized for the Presidency. At the end of 1915 a plea was put in for its service on behalf of these forests. The party was then working in the southern circle, and on the completion of the Salem Sandalwood Working Plan, and the Madura Fuel Working Plan, the party was deputed to draw up a new Working Plan for these forests.

In July 1916, the Working Plan Party consisting of Mr. C. C. Wilson, Deputy Conservator of Forests, in charge, Mr. M. R. Sundaram Ayyar, Extra Assistant Conservator of Forests, Ranger Raman Pillai, Deputy Rangers N. Ahmad Ibrahim Sahib, T. D. Rajabahadur Mudaliyar, A. Narayanaswami Ayyangar (since transferred to South Vellore), V. Narayanaswami Ayyar together with three enumerators, came and commenced work.

On 12th October 1916 Mr. Wilson completed his reconnaissance report and was allowed to go on military duty to the Central India Horse.

From 19th October 1916 until 28th January 1917 Mr. Sundaram Ayyar was in charge of the work and on 29th January 1917, the writer who had been District Forest Officer, South Coimbatore, since September 1915 took over the work, and on 2nd August 1917 Mr. R. Mitchell, Extra Assistant Conservator of Forests, was appointed as Working Plans Assistant in Mr. Sundaram Ayyar's place.

(*b*) *Special works of improvement undertaken.*—The construction of some miles of tramline, and various experiments, a little planting, and fire protection, etc., which have been mentioned under the past history. Nothing has been done towards the improvement of the forest. Various schemes for the improvement of lines of export have been considered in recent years. One of these has been commenced and then abandoned, viz., a road from Top Slip to the Ulandi Working Circle. Four miles of earth-work had been completed and a considerable quantity of metal had been collected on the road when the work was stopped as the trace was considered defective.

Another scheme was for constructing a tramline from compartment XVIII of Mr. Porter's plan, via the Punna Mudi saddle, along the Tekadi river to Aiyasawmi Mudi, where timber was to be sent down the hill side by means of double set of trucks, and thence trammed to Sethumadai. The question whether this system should be adopted, or whether a steam tramline should be made to run from a point where the Palghat-Dindigul Railway will pass Anamalai village, through the Gudaravalli valley, up the slopes of Aiyasawmi Mudi, and thence through the forest to Ulandi has been decided by the Forest Commissioner, as explained later in favour of the steam tramway and a scheme is being prepared for sanction.

The third scheme was to have a well gradiental road from Adivaram to Top Slip. This has been estimated for, but as the tramway scheme is to be sent up to Government for sanction, it is considered that this road will not be required.

(*c*) *Past revenue and expenditure.*—As no proper control book has been maintained in which this is clearly shown from year to year no statement is given. The revenue used to be realized in two ranges other than the range in which the timber was produced and the credit has been divided amongst them, expenditure incurred such as transport and some road repairs has also been spent in these other ranges and debited to their accounts. The actual revenue for two years for timber has been given in a subsequent statement and the future revenue and expenditure will be discussed in the proper place.

(*iv*).—UTILIZATION OF PRODUCE.

(*a*) *Marketable products requirements to be met, quantities produced in past years.*—

In the past the only major products sent to market were large timber, and spokes and felloes, made from the tops and branches of felled teak trees. The timber in demand is teak, rosewood (blackwood) Vengai (Pterocarpus marsupium), Karumarudu (Terminalia tomentosa), Pillamarudu (Terminalia paniculata), Venteak (Lagerstroemia lanceolata), Irul (Xylia dolabriformis), and Manjakadambai (Adina cordifolia). Experiments are being made to determine the suitability of Adina cordifolia for pencils, and, if successful, should enable us to dispose of this timber which is at present not much in demand. Inquiries have been made for Grewia for tents, and a supply is being sent to the Coimbatore Jail for trial. There are other useful timbers in the forests, but they are locally unfashionable, and cannot be put on the market at a sufficiently low cost to make them saleable. With the advent of a steam tramway, which will be able to transport all the fashionable timber and a considerable deal over, advantage may be taken of it to place on the market good logs of the less valuable species to be sold at a cheap rate. Not only will a considerable quantity of such timbers be able to be dealt with but the balance of the carrying capacity of the tramway will be utilized for the transport of bamboos, for which there should be a good demand.

In future we shall have a supply of teak poles from the thinnings in the concentrated regeneration areas.

In the past a certain amount of minor produce has been collected by the Kadirs, a jungle tribe, but this has now been abandoned to avoid fires, and the Kadirs will be employed on the forest works.

The quantities of timber felled are given in paragraph (*iii*) (*a*). The sales of timber at the Pollachi Depot for the last two years are given in paragraph (*iv*) (*e*). When the proposed steam tramway has been constructed, as well as the new Palghat-Dindigul Railway, we shall get access to new sources of demand, and sales of timber and bamboos should expand.

(*b*) *Lines of export.*—There has only been one line of export for the last thirty years, viz., the steep Mount Stuart Ghat road, except that a wire rope-way for sawn scantlings was tried for a short time and abandoned as unsuccessful. Timber is carted down the ghat road in carts which obtain the logs from the Top Slip Depot at the head of the ghat. This depot is fed by a tramline, the original portion of which, as has elsewhere been stated, was laid by Mr. Porter. It was then, no doubt, a great advance to have the tramline, which has been an immense advantage to the forests, but steps ought to have been taken since to have alignment improved, and a better track for the buffaloes which pull the trucks to walk on. At present from Anaipadi to Top Slip the buffaloes have to drag timber up a steep gradient along in the rains—a slippery track. The question of improving the transport has been under consideration for many years. A good gradient road from Adivaram at the foot of the ghat has been designed, but will not be necessary if the steam tramway is constructed. A road to open up the Ulandi forest was designed and the work started but after four miles of the track was cut, the work was abandoned on account of alleged faulty design. A scheme for a tramline from Sethumadai up through the Gudaravalli forest, has been considered. It was at first proposed to work this line by cattle haulage and to have an inclined plane to let down the logs at the head of the Gudaravalli valley. The present Conservator of Forests, Mr. C. D. McCarthy, proposed to have mechanical traction, and under his direction a project for steam tramway, with reversing stations, instead of the inclined plane has been worked out by the Forest Engineer Mr. F. J. Marshall. A conference to decide the question

of animal versus mechanical traction was held in October 1917 at which the Forest Commissioner, the Hon'ble Mr. M. E. Couchman, presided and at which the Conservator, the Forest Engineer and the compiler of this plan attended. After going into the figures the Commissioner ordered in Reference No. 2654, dated 31st October 1917, that the steam tramway project should be sent up for sanction, and that for the present we should devote our attention to the Leased Forests, and the Old Mount Stuart Working Circle, leaving the Ulandi forests to be dealt with later. If these latter forests were taken in hand with the others we could work over a larger area of country, but we could not do justice to the forests as regards regeneration. There is a difficult ridge to get over the Ulandi forests, and our labour is scarce. So it is sounder to leave the Ulandi forests for the present. The steam tramway should be a great improvement on the system of cattle haulage, which becomes more difficult the further one goes into the forests, and should put the transport of timber and bamboos on a business basis, which is what is required.

(*c*) *Centres of consumption, market.*—The present sale market for the timber from these forests is Pollachi. A district branch line from Podanur was opened in October 1915 and Pollachi depot was then made the sale depot. Pollachi is full of timber merchants, who often act as agents to buyers at a distance. Pollachi is 15 miles from Sethumadai, and connected with it by road. There is a project for constructing a railway from Palghat to Dindigul which would cross the Sethumadai-Pollachi road some where near Anamalai, and thus bring the railway 7 miles nearer the forest. When this line is constructed and connected with the forests by the proposed steam tramway, and to Pollachi by the extension of the Podanur branch line, the sale depot will be changed to the new rail site, and a wider market will be made available for our timber, as the large towns of Trichinopoly and Madura will be brought into direct railway communication with the sale depot, as will Palghat and the West Coast.

The Industrial school at Coimbatore is a considerable and regular purchaser of our timber. Purchasers have come from Palghat, Coonoor, Coimbatore, Katpadi, Karur, Tanjore, Udamalpet, etc., and more will doubtless come from the other places when the depot gets better known.

(*d*) *Mode of extraction and cost.*—The present and past mode of extraction is to fell and log the tree, and to drag the logs by elephants to the nearest convenient point on the tramline, where there is a depot called a "tramline depot." Logs too large to be dragged have to be sawn up at stump side, and when it is found that logs dragged to the tramline depots are too large to go in a tram truck they have also to be sawn. In such cases a longitudinal cut through the centre is usually sufficient, but some logs are so large that they require to be sawn into four. The logs are hoisted on to the trucks by a man-worked crane, and taken to the head of the ghat which is called Top Slip, owing to the fact that in the days of the wire ropeway, scantlings were started on their way down from this place. From Top Slip depot the logs are carted down the steep old ghat road, which has been the sole means of exit for the timber of these forests for the last 30 years. The ghat road is three miles long and descends 1,235 feet. The carts from Top Slip take the timber as far as Sethumadai depot, five miles from Top Slip. This work is now done by Government carts and bulls, as the work on this steep ghat is not popular amongst private cartmen, who however, compete for the transporting of the logs from Sethumadai to their final destination, Pollachi, where the forest sale depot is, close to the recently opened Pollachi-Podanur metre gauge line. The cost of these transactions has been gone into in considerable detail in order to compare the cost of the current method with that of steam traction.

The total cost of delivering a cubic foot of timber at Pollachi from No. 4 depot is As. 9-4½ as detailed below :—

	AS.	P.
Felling, logging, barking and sawing where necessary	1	0
Dragging	1	6
Tramming	3	8
Carting from Top Slip to Sethumadai ...	2	2
Carting from Sethumadai to Pollachi	1	6½
	9	10½

This is without establishment charges but it includes mahouts, cavadis and cattle-driver's pay and commission.

(*e*) *Net value of each class of produce—Timber.*—In October 1915 the Pollachi Depot situated 17 miles from the foot of the ghat, was re-opened as the main sale depot for the timber of these forests. The following details show the quantities of timber sold from the opening of the depot until the end of September 1917. These details will throw a good deal of light on the prices of the various species of timber sold, but it must be remembered that the period is all war time, when business and demand have been slack. The railway from Pollachi to Podanur was opened in October 1915.

Abstract of sales at Pollachi timber depot between the time of the opening of the depot in October 1915 and the end of September 1917—

Month.		Quantity. C. FT.	Value to nearest rupee. RS.
Teak.			
October 1915 November „		2,953	7,096
December	„	246	532
January	1916	4,105	8,470
February	„	5,140	8,888
March	„	2,138	3,374
April	„	637	827
May	„	2,898	5,829
June	„	1,525	2,718
July	„	1,796	3,220
August	„	3,014	5,179
September	„	2,033	3,591
October	„	2,170	4,148
November	„	4,896	8,608
December	„	3,992	6,121
January	1917	6,859	11,838
February	„	4,827 1,576	8,233 3,152
March	„	6,108	12,318
	Total ...	56,913	1,04,142
April	1917	2,255	4,132
May	„	1,437	1,894
June	„	775	1,197
July	„	691	896
August	„	579	812
September	„	6,739	15,412
	Total ...	69,389	1,28,485

or Rs. 1–13–7 per cubic foot.

Karamarudu (*Terminalia tomentosa*).

October 1915 November „		1,493	1,117
December	„	688	918
January	1916	785	601
February	„	2,023	1,200
March	„	...	...
April	„	...	...
May	„	439	374
June	„	80	70
July	„	2,052	1,582
August	„	1,895	1,427
September	„	1,112	851
October	„	1,131	867
November	„	1,915	1,467
December	„	590	434
January	1917	...	...
February	„	1,711	1,481
March	„	664	586
	Total ...	16,578	11,175

Month.		Quantity.	Value to nearest rupee.
		C.FT.	RS.
April	1917	...	...
May	,, ...	1,221	937
June	,, ...	843	892
July	,, ...	2,453	2,068
August	,, ...	1,887	1,636
September	,, ...	1,406	915
	Total ...	24,388	17,623

or As. 11–6 per cubic feet.

Pillamarudu (*Terminalia paniculata*).

October 1915 November ,,	... ...	35	72
December 1916	... ...	96	65
January 1917	... ...	230	200
February ,,	... ...	1,202	950
March ,,	... ...	...	...
	Total ...	1,563	1,230
April 1917	... ...	...	...
May ,,	... ...	...	685
June ,,	... ...	1,455	1,093
July ,,	... ...	224	147
August ,,	... ...	511	413
September ,,	... ...	893	605
	Total ...	5,469	4,173

or As. 12–0 per cubic feet.

Rosewood (*Dalbergia latifolia*).

February 1916	... ...	121	151
March ,,	... ...	113	226
February 1917	... ...	393	721
March ,,	... ...	...	...
April ,,	... ...	83	146
May ,,	... ...	...	...
June ,,	... ...	27	40
July ,,	... ...	...	...
August ,,	... ...	...	...
September ,,	... ...	...	...
	Total ...	737	1,284

or Rs. 1–11–10 per cubic feet.

Venteak (*Lagerstroemia lanceolata*).

December 1916	... ...	374	277
January 1917	... ...	263	235
February ,,	... ...	...	...
March ,,	... ...	...	...
April, May and June 1917	... ...	58	29
July 1917	... ...	230	230
August ,,	... ...	...	...
September ,,	... ...	416	315
	Total ...	1,341	1,086

or As. 12–11 per cubic feet.

Month.		Quantity.	Value to nearest rupee.
		C. FT.	RS.
	Irul (Xylia dolabriformis).		
December	1916	108	65
February	1917	800	1,131
May	,,	33	33
June	,,	69	43
July	,,	106	89
August	,,	503	364
September	,,	95	57
	Total ...	1,714	1,462
	or As. 13–7 per cubic feet.		
	Manjakadambai (Adina cardifolia).		
December	1916	47	23
May	,,	65	45
July	,,	279	228
September	,,	64	56
October	,,	70	61
May	1917	381	331
June	,,	362	272
July	,,	28	28
August	,,	629	461
September	,,	135	76
	Total ...	1,605	829
	or As. 8–3 per cubic feet.		
	Thadashi (Grewia tiliaefolia).		
December	1916	22	11

This was a sample log sent to see if it could be found suitable for making barrels. It was found to be unsuitable.

Totals of sales in 23 months.

	C.FT.		RS. A. P.	
Teak	69,389	at	1 13 7	1,28,485
Karumarudu	24,388	,,	0 11 6	17,623
Pillamaradu	5,469	,,	0 12 0	4,173
Rosewood	737	,,	1 11 10	1,284
Venteak	1,341	,,	0 12 11	1,086
Irul	1,714	,,	0 13 7	1,462
Manjakadambai	1,605	,,	0 8 3	829
Vengai	47	,,	1 5 9	64
Total ..	1,04,690		...	1,55,006

If we take As. 10 as the cost of extraction by the present methods we see that teak and rosewood pay well; that Karumarudu, Pillamaradu, Venteak and Irul just pay. There is, however, this to be said for these four species, viz., that the timber had been lying for a considerable time in the forest and had it been removed sooner a larger proportion would have fetched higher prices, and the average price on each case would have been higher.

Vengai will pay but there is little of it

Since August 1917 the price of teak has risen. Two auctions at the Pollachi depot have been held one in September, and one in November. The results of the former have been already noted but the feature of these sales is that the price of the best teak logs rose to Rs. 3-6-0 per cubic foot. All the good teak promptly finds a sale, and with extended railway communication and prompt removal of felled timber, will doubtless result in largely increased sales—

Teak poles—Pollachi.—Teak posts, 8–9 feet long, 12–25 inches girth, As. 8 each.

Teak posts, 13–14 feet long, 12–25 inches girth, 8 for Rs. 10.
Miscellaneous posts, 13–14 feet long, 12–25 inches girth, 12 for Rs. 6.
Small posts less than 1 foot girth, 100 for Rs. 9.

(*f*) *The Forest staff*—The forest staff at present consists of —

Range officer—Probationary Extra Assistant Conservator—	1	
Deputy rangers	3	
Foresters	4	
Forest guards	8	
Range clerks	2	
Depot-keepers	3	(including Sethumadai and Pollachi).
Mahouts and cavadis	16	of each.
Permanent-way inspector	1	
Fitter	1	

It is inadequate for the work that has to be done as it leaves no margin for sickness. The requirements to carry out the works prescribed in this plan will be entered in their proper places.

(*g*) *Labour supply*.—This subject must receive a deal of attention in the future if we are to really progress. All unskilled forest work is done by jungle tribes, except for some chucklers who are obtainable from the plains. The jungle tribes consist of Mulcers, Hill Mulcers and Kadirs. The Mulcers consider themselves superior to the Hill Mulcers; both eat flesh including bison, Kadirs eat flesh but not bison or bull.

There are about 60 to 70 families of Mulcers living around Mount Stuart. All except about 20 are employed as Foresters, Forest Guards and Mahouts, Cavadis and tram bull-drivers. The rest do forest work. There are about 21 families of Hill Mulcers, and they mainly live at Topslip. They do Forest work, such as lantana pulling, fire protection, and so on. There are about 20 families of Kadirs and they live near the old workshops. They do ordinary forest works.

At the foot of the ghat, there are about 40 families of Mulcers, to secure whose services land at the edge of the reserved forests has been given. These people do the coupe felling in the Pollachi range besides other forest work.

There are about 30 families of Mulcers who lived at Thammampathy, two miles west of Sethumadai.

There are about 20 families of chucklers who live at Vettaikaranpudur, who occasionally come for forest work.

There are some more Mulcers at Uppar who expressed their willingness to come to work if granted land at Uppar; this is under consideration.

There are some Mulcers in Kollengode who could be obtained for works here, if secured, by giving them advances before they go off up to the higher Anamalais, after their January harvest.

Felling is done by Mulcer coolies, and by Malabar coolies from Palghat and Cochin (Vellangi and Nemmara).

Sawyers are obtained, but only with very great difficulty, from Chalakkudi in Cochin and from Palghat. Some one has to be sent with advances to persuade these men to come. There are a few at Anamalai who come at times to Top Slip. Recently four Mulcers were persuaded to learn sawing, and it is hoped that they will continue to do the work and will induce others of their brethren to do the same. Coolies for converting tops and branches of teak trees come from Tekadi and Mondipathi villages. Carpenters especially for elephant Kraal construction are obtained from Malabar.

If we are to deal properly with lantana and regeneration work, it will be necessary to keep some one specially to search for coolies. Notices may be put up in all villages from which coolies may be obtained, giving details of the work to be done and the pay obtainable. Proper huts and sheds must be put up for the proper accommodation of labourers.

Efforts have been made to get some of the hill tribes in the east of the hills to come and work in these forests. They have land in the forest but complain bitterly of the ravages of elephants, and the danger of the latter to themselves. On being told that permanent work at As. 6 a day, good quarters, bazaar, and water would be given to them at Mount Stuart if they would come and settle there, they refused to come, and even say that they prefer to be destroyed by wild elephants where they are.

PART II.

FUTURE MANAGEMENT DISCUSSED AND PRESCRIBED.

(1) BASIS OF PROPOSALS.

(*a*) *Working Circle*—(1) *Mount Stuart Working Circle.*—This consists of the workable area of the Tekadi Leased Forests, and of the Mount Stuart forests, exclusive of Karianshola, the bamboo working circle and such portions of the forests as are too steep and rocky to be worked. Under the latter, are included the old compartments XXXV and XXXVI of the leased forest. Area = 15,208 acres.

(2) The Bamboo Working Circle—area = 1,720 acres.

(3) The Karianshola Working Circle—area = 3,652 acres.

(4) The Ulandi Working Circle as shown on the map, 4,940 acres.

Mount Stuart Working Circle.—This working circle is a compact area of deciduous forest containing teak as the principal species. It will be subject to one general system of treatment.

Bamboo Working Circle.—This area contains so much bamboo (Bambusa arundinacea) that it should be worked for meeting some of the demand for bamboos.

Karianshola Working Circle.—This area is evergreen shola forest. It will not be worked at present, but kept to maintain the water-supply, as it is the source of many streams. There is no reason why it should not be dealt with actively, except that, owing to deficient labour supply, we have our hands full at present in dealing with the teak forests. When the labour difficulty can be overcome, the question of increasing the stock of valuable timber species in the shola forest should be taken up, as this part of the forest is most favourably situated for exploitation, and contains first-class soil.

Ulandi Working Circle.—This working circle consists of deciduous forest like the Mount Stuart Working Circle, but it is unfortunately situated for exploitation, being placed on the south of the high ridge which separates it from the Mount Stuart forests. At a recent conference held to consider the question of the proposed tramway it was agreed to postpone the working of this portion of the forest for the present, owing to the shortage of labour. Considering the absence of regeneration operations in the past, it is better to make a start by taking a smaller area, viz., the Mount Stuart Working Circle, and doing as much as possible for that area in the way of regeneration, and organizing transport, than to take a larger area, where the transport will be more difficult, and the proportion of regeneration operations smaller. We have to deal with lantana, and we cannot see our way at present to deal with more than 50 per cent of the area of concentrated regeneration that should be taken up, so it has been agreed to postpone dealing with the Ulandi Working Circle for the next twenty-five years.

Mount Stuart Working Circle—(*b*) *Compartments.*—There is no special necessity, for making any compartments. The stock map shows the distribution of the stock. The area will be divided into 50 annual coupes in the Mount Stuart Working Circle.

(*c*) *Analysis of the crop, method of valuation employed.*—For the purpose of enumeration of the stock the old compartments of Mr. Porter's scheme were made use of, in the Tekadi Leased Forest. An extra portion was added to compartment XXXIII, and a new compartment A has been taken up. About half the area of each compartment was demarcated, as shown on map No. 1, and the trees on the area coloured buff on the map were enumerated. In the old Mount Stuart Forest the area was divided into five blocks, for the purposes of enumeration, and the areas over which enumeration was carried out, are marked in the same way as for the leased forest. Similarly in the Ulandi Working Circle the area was divided into seven blocks, and the areas over which enumerations were carried out, are coloured buff.

The subjoined statement shows the area of each compartment, and the areas over which enumerations were carried out. It shows that in the Tekadi Leased Forests trees have been enumerated on nearly 50 per cent of the area, in the Mount Stuart forests on more than 30 per cent and in the Ulandi Forest on 33 per cent.

Tekadi leased forest.

Compartment number.	Area of the compartment in acres.	Area of sample plot in acres.
I	306	164
II	419	169
III	380	182
IV	302	302
V	255	156
VI	321	176
VII	394	225
VIII	288	162
IX	290	146
X	437	190
XI	540	188
XII	338	188
XIII	251	145
XIV	300	166
XV	298	137
XVI	277	171
XVII	298	144
XVIII	376	376
XIX	462	195
XX	312	150
XXI	380	170
XXII	350	153
XXIII	302	169
XXIV	575	241
XXV	316	169
XXVI	354	242
XXVII	603	236
XXVIII	386	170
XXIX	396	234
XXX	280	140
XXXI	323	167
XXXII	288	170
XXXIII	525	177
XXXIV	334	167
A	362	197
Total	12,618	6,534

Mount Stuart forest (Tunacadavu reserved forest).

I	440	172
II	828	276
III	382	113
IV	330	164
V	610	135
Total	2,590	860

Ulandi.

1	1,175	410
II	859	205
III	490	205
IV	583	205
V	750	205
VI	764	205
VII	319	205
Total	4,940	1,640

The following species were included in the enumeration :—

1. Teak ... ... Tectona grandis.
2. Rosewood ... ... Dalbergia latifolia.
3. Karumarudu ... ... Terminalia tomentosa.
4. Pillamarudu .. .. Terminalia paniculata.
5. Venteak ... ... Lagerstroemia lanceolata.
6. Vengai ... . Pterocarpus marsupium.
7. Irul ... ... Xylia dolabriformis.
8. Manjakadambai ... ... Adina cordifolia.
9. Nirkadambai ... ... Stephegyne parvifolia.
10. Poovathi ... ... Schleichera trijuga.
11. Vagai ... ... Albizzia odoratissima.
12. Tadachi ... ... Grewia tiliaefolia.

Only the first eight are ordinarily saleable, but it is hoped, if pencil making becomes a success in the Presidency that Nirkadambai will become saleable. The enumeration was carried out strip by strip, in each compartment. Girth classes of one foot and under, 1 foot—2 feet and so on were taken. The measurements were made by local junglemen trained to the work, who were provided with leather measuring pieces, divided into the different girth classses, by colours. Each party was in charge of a Deputy Ranger or Enumerator, supervised as frequently as possible by the Ranger, the Working Plan Extra Assistant Conservator and the Working Plans Officer.

When work was first commenced trees were divided in the enumeration register into " Healthy and dead," which latter included hollow trees. This was not found to be entirely satisfactory, as a tree might be classed as healthy, although it might have no chance of growing into a tree that would produce good timber. The trees were then divided into serviceable and unserviceable. Those compartments, twenty-three in number, in the leased forests, which had been enumerated under the faulty system, had to be re-enumerated, and this has been the cause in considerable delay in the completion of the plan, and of increase in the cost.

The abstract below shows the results of the enumerations which are given in full in Appendices.

A.—Tekadi leased forest and Old Mount Stuart forest—all of which are now included in the Mount Stuart Working Circle.

Girth class.	Teak.	Rosewood.	Terminalia tomentosa.	Terminalia paniculata.	Lagerstroemia lanceolata.	Pterocarpus marsupium.	Xylia dolabriformis.	Adina cordifolia.	Stephegyne parvifolia.	Albizzia odoratissima.	Grewia tiliaefolia.	Schleichera trijuga.
6—12 inches	9,529	16,484	7,383	14,768	33,231	1,753	40,547	340	2,158	2,077	5,796	2,129
1—2 feet	11,710	15,116	12,443	13,130	33,658	2,605	44,198	609	2,672	2,310	31,439	1,537
2—3 ,, ...	9,894	5,969	9,287	8,809	13,611	2,074	22,404	539	2,163	2,008	44,317	1,083
3—4 ,, ...	10,918	3,558	9,773	9,661	10,518	1,909	13,512	450	1,498	2,252	34,895	919
4—5 ,, ...	12,156	2,359	7,720	8,827	8,865	1,126	7,904	292	993	1,987	13,577	834
5—6 ,, ...	11,487	1,452	6,557	6,924	7,000	666	3,941	248	669	1,327	5,631	547
6—7 ,, ...	9,816	821	5,200	4,921	4,257	312	1,979	189	516	756	1,938	475
7—8 ,, ...	9,205	598	4,635	4,299	2,168	261	1,193	252	432	535	887	515
8—9 ,, ...	3,960	205	2,563	2,041	731	105	422	150	303	199	150	396
9-10 ,, ...	2,577	112	1,791	1,374	295	66	156	134	165	50	53	356
10-11 ,, ...	1,370	70	1,051	780	118	41	47	150	105	17	4	190
11-12 ,, ...	1,135	67	867	574	68	56	26	129	98	12	4	187
12-13 ,, ...	547	35	336	304	7	31	6	86	34	2	1	96
13-14 ,, ...	341	14	258	311	6	34	..	97	17	..	..	77
14-15 ,, ...	201	15	104	135	1	9	1	67	10	3	..	44
15-16 ,, ...	236	8	137	132	5	17	..	115	14	..	..	47
16-17 ,, ...	94	1	42	42	..	3	..	54	2	..	..	17
17-18 ,, ...	68	7	22	28	..	..	..	41	7	..	..	6
18-19 ,, ...	43	3	6	11	2	7	..	39	3	.	..	
19-20 ,, ...	85	4	12	22	..	..	..	54	..	..	..	
20-21 ,, ...	4	..	..	..	..	..	..	..	..	..	..	..
21-22 ,, ...	..	..	..	..	..	..	..	..	..	..	..	..
22-23 ,, ...	..	..	..	..	..	..	..	..	..	..	..	..
23-24 ,, ...	..	..	..	..	..	..	..	..	..	..	..	..
24-25 ,, ...	..	..	..	..	..	..	..	..	..	..	..	..
25-26 ,, ...	1	..	..	..	..	..	..	..	..	..	..	..
Total ..	95,377	46,898	70,187	77,093	114,541	11,075	136,336	4,035	11,859	13,535	138,692	9,467

B.—Ulandi Working Circle.

Girth class.	Teak.	Dalbergia latifolia.	Terminalia tomentosa.	Terminalia paniculata.	Lagerstroemia lanceolata.	Pterocarpus marsupium.	Xylia dolabriformis.	Adina cordifolia.	Stephegyne parvifolia.	Albizzia odoratissima.	Grewia tiliaefolia.	Schleichera trijuga.
6—12 inches	712	2,729	2,217	3,561	3,652	527	..	266	482	989	3,463	1,437
1—2 feet	793	1,891	2,662	3,085	2,797	546	..	163	434	1,089	22,194	1,377
2—3 ,, ...	764	887	1,765	2,120	1,016	305	..	84	283	805	27,582	809
3—4 ,, ...	1,384	587	1,854	3,036	1,045	383	..	99	166	1,115	21,038	905
4—5 ,, ...	1,716	452	1,618	3,431	1,443	260	..	70	124	1,011	6,136	592
5—6 ,, ...	1,405	273	1,253	2,787	1,325	191	..	99	63	613	1,913	416
6—7 ,, ...	1,110	192	1,045	2,123	1,201	112	..	43	57	309	619	322
7—8 ,, ...	1,637	219	1,173	2,721	1,505	139	..	60	43	255	299	598
8—9 ,, ...	634	117	558	1,418	646	52	..	27	9	68	19	289
9—10 ,, ...	476	131	472	1,097	392	42	..	20	14	25	13	215
10—11 ,, ...	477	129	277	635	219	29	..	7	5	7	2	142
11—12 ,, ...	433	60	306	309	129	27	..	20	4	17	..	147
12—13 ,, ...	187	19	109	204	34	8	..	31	1	2	..	46
13—14 ,, ...	128	41	62	199	22	7		11	..	..	..	30
14—15 ,, ...	98	30	32	107	21	..	..	7	..	..	..	
15—16 ,, ...	155	54	49	100	20	..	..	11	..	..	..	14
16—17 ,, ...	59	20	9	12	6	..	..	2	..	..	..	..
17—18 ,, ...	58	16	19	8	..	..	..	5	..	..	..	2
18—19 ,, ...	21	4	3	14	..	..	..	3	..	..	..	2
19—20 ,, ...	64	17	2	7	..	..	..	..	..	..	..	..
Total ..	12,311	7,868	15,485	26,974	15,473	2,628	..	1,028	1,685	6,305	83,278	7,343

The following statement shows the percentage of each species as regards number of trees amongst the twelve species enumerated :—

Tekadi leased forests and the Old Mount Stuart Working Circle which form the New Mount Stuart Working Circle in this plan—15,208 acres.

Species.	Total number of trees excluding seedlings.	Percentage.	Number per acre.
			TREES.
Teak (Tectona grandis)	95,377	13·7	6·2
Rosewood (Dalbergia latifolia)	46,898	6·4	3·0
Venteak (Lagerstroemia lanceolata)	114,541	15·7	7·5
Karumarudu (Terminalia tomentosa)	70,187	9·6	4·5
Pillamarudu (Terminalia paniculata)	77,093	10·5	5·0
Vengai (Pterocarpus marsupium)	11,075	1·5	0·7
Irul (Xylia dolabriformis)	136,336	18·6	8·9
Manjakadambai (Adina cordifolia)	4,035	0·5	0·2
Nirkadambai (Stephegyne parvifolia)	11,859	1·6	0·7
Vagai (Albizzia odoratissima)	13,535	1·8	0·8
Thadashi (Grewia tiliaefolia)	138,692	19·0	9·1
Poovathi (Schleichera trijuga)	9,467	1·1	0·6
Total ..	729,095	..	47·2

Ulandi Working Circle —4,940 *acres.*

Teak (Tectona grandis)	12,311	6·8	2·4
Rosewood (Dalbergia latifolia)	7,868	4·3	1·5
Venteak (Lagerstroemia lanceolata)	15,473	8·5	3·1
Karumarudu (Terminalia tomentosa)	15,485	8·5	3·1
Pillamarudu (Terminalia paniculata)	26,974	14·9	5·4
Vengai (Pterocarpus marsupium)	2,628	1·4	0·5
Irul (Xylia dolabriformis)	..	..	..
Manjakadambai (Adina cordifolia)	1,028	0·5	0·2
Nirkadambai (Stephegyne parvifolia)	1,685	0·9	0·3
Vagai (Albizzia odoratissima)	6,305	3·4	1·2
Thadashi (Grewia tiliaefolia)	83,278	46·4	16·8
Poovathi (Schleichera trijuga)	7,343	4·7	1·4
Total ..	180,378	..	35·9

As regards the valuation of sample trees for volume measurements, the position was somewhat peculiar. In 1866 Captain Beddome wrote to say that the forest

required complete rest for 15 or 20 years, as except for a few knotted, and twisted trees, there was not a teak tree of any size left, and very few trees that would yield one log. They must have been very particular as to what they considered "log worth removing." There are 800 cubic feet of logs now lying in the forest, which were obtained from one teak tree. I measured a fine straight teak tree at Tellikal lately which contains 772 cubic feet of timber. However there is Captain Beddome's opinion of 1866, that the forest had then been skinned of all the teak that was considered worth removing. We had therefore to be careful in making volume valuations. The system adopted was to try and get as accurate results as possible of the marketable timber in a number of standing trees, and apply the results to the trees of each girth class. The volumes of trees of the same girth are very irregular. A perusal of the volume figures will show that, at times, the actual average volumes of higher girth classes are less than lower ones. Where there has been heavy exploitation, and no tending, such as has happened here, such results are likely to occur. One of the local tribes, the Kadirs, are honey collectors, and therefore adopts at tree climbing. Advantage has been taken of this in getting trees measured. With the help of a tall bamboo, they could take girth measurements at a height of 30 feet. Where they could not do so, sufficiently accurate results have been obtained by fixing a two feet, three feet, or four feet bamboo cross piece on the top of the bamboo, so that, placed against the tree, the diameter could be judged. Heights were taken with a Christen's dendrometer, and checked with the help of a long bamboo. Altogether between 2,000 and 3,000 trees were measured for volume The measurements made in compartment XXIV of the leased forests were applied to the similar neighbouring compartments XXV, XXVI, XXVII, XI, XXIII, XXII and XIV, with the help of additional local measurements for very large trees, where found necessary.

The measurements taken in compartment III were applied to the similar compartments I, II, IV, VIII, IX, X, XII, XIII and VII.

The measurements taken in compartment V were applied to the similar compartments VI and XXX as these are rocky compartments.

The measurements taken in compartment XVIII were applied to compartments XV, XVI, XIX, XX, XXI, XVII and A.

The measurements taken in compartment XXIX were applied to compartments XXVIII, XXXI, XXXII, XXXIII and XXXIV.

In the Mount Stuart forest measurements taken for block I were applied to blocks I, II, III and those in blocks V to block IV and V. In the Ulandi Working Circle measurements taken in block III were applied to blocks I, II, III and VII and measurements taken in block V were applied to blocks IV, V and VI.

The following abstract shows the volume of each species of timber in trees over 6 feet girth; the figures for girth class 6-7 feet being given separately, as trees over that size will be reckoned as mature and overmature.

New Mount Stuart Working Circle (which includes the Old Mount Stuart Working Circle and the leased forests).

Species.	Over 7 feet girth.	Number of cubic feet per acre.	6–7 feet girth class.	Number of cubic feet per acre.
	C.FT.		C. FT.	
Teak	18,48,114	121·0	4,10,359	27·0
Rosewood	88,721	5·8	27,247	1·7
Karumarudu (Terminalia tomentosa)	10,47,386	68·0	1,91,269	12·5
Pillamarudu (Terminalia paniculata)	8,38,702	55·0	1,90,602	12·5
Venteak (Lagerstroemia lanceolata)	2,43,026	15·9	1,99,779	13·1
Vengai (Pterocarpus marsupium)	37,380	2·4	8,781	0·5
Irul (Xylia dolabriformis)	1,15,465	7·5	78,175	5·1
Manjakadambai (Adina cordifolia)	2,28,473	15·0	6,828	0·4
Total ..	44,47,267	290·6	11,13,040	72·8
Poovathi (Schleichera trijuga)	1,29,875	8·5	14,612	0·9
Vagai (Albizzia odoratissima)	53,404	3·5	31,212	2·0
Thadashi (Grewia tiliaefolia)	65,303	4·3	81,724	5·3
Nirkadambai (Stephegyne parvifolia)	1,27,114	8·3	26,476	1·7
Total ..	3,75,696	24·6	1,54,024	9·9

Teak and rosewood being so much more valuable than other species are given separately in the appendix totals. The six superior and saleable species are put together, while the figures for the four latter species, which are not usually saleable in the Pollachi market are separated by themselves.

The stock map is based on the above figures.

Ulandi working circle.

Species.	Over 7 feet girth.	Number of cubic feet per acre.	7 feet girth class.	Number of cubic feet per acre.
	C.FT.		C.FT.	
Teak	4,44,780	90·0	39,629	8 0
Rosewood	77,534	15·0	5,791	1·1
Karumarudu	2,36,302	47·0	31,682	6·4
Pillamarudu	4,92,419	99·0	68,447	13 8
Venteak	2,14,990	43·0	42,332	8·5
Vengai	14,845	3·0	3,218	0·6
Irul	..	..	..	..
Manjakadambai	21,291	4 0	1,292	0·2
Total ..	15,02,161	212·0	1,92,391	38·6
Poovathi	86,150	17·0	7,554	1·5
Vagai	22,629	4·5	12,052	2·4
Thadashi	13,267	2·6	21,922	4·4
Nirkadambai	5,502	1·0	2,451	0·4
Total ..	1,27,548	25·1	43,989	8 7

(*ii*).—METHOD OF TREATMENT.

(*a*) *Objects in view.*

(*A*) *Mount Stuart Working Circle* (1) *As regards the attainment of the normal forest and the establishment of normal regeneration.* The question first to be considered is what the normal forest should be. We have a forest in which teak is the more desirable species, and the one which it is easiest to regenerate. Associated with it is rosewood, which realized, until lately, per cubic foot, as high a price as teak, but which is used for special purposes. These two species stand out, as regards value, by themselves; and in fact considering the difficulties of transport, are the only ones that pay really well. We have no difficulty in disposing of all the good teak which we can put on the market. With the prospect of increased railway facilities in the near future, in the shape of the Palghat-Dindigul Railway line, our teak will be placed in a specially favourable position, and the demand for it will, no doubt, considerably increase. This railway will also help us to dispose of other classes of timber, but there is not the same demand for them as for teak.

The past history of these forests shows a long story of extraction of, firstly, little but teak, to which latterly has been added other species, while little beyond experiments by individual officers in regeneration, and a little planting, have been done to secure regeneration. Mr. Porter's scheme of 1885, drawn up when we had only a limited tenure of the leased forests, should have been supplemented by prescriptions for regeneration operations when a fixed tenure was secured in 1887. This was not done, and thirty years have been lost, during which time extraction of the best trees has continued, the inferior stock has been allowed to flourish unimpeded, bamboos have increased, and the lantana pest allowed to overrun a considerable portion of the forest. It only shows, how well-suited to the production of teak, these forests are, that there should be so much teak now existing. The forest is, therefore, so abnormal that it will take a long time to bring it to a normal state. All we can do at present is to take steps towards getting it into a normal state. As will be seen further on, the most suitable size for extracting timber in these forests is the 7 feet-8 feet girth class. We have, however, teak trees of 23 feet girth. All trees now existing of girth classes exceeding 7 feet must be removed before an approximately normal condition, as regards size, can be arrived at, and at the same time special operations must be undertaken to place regeneration on a proper footing, as the forest is sadly deficient in the seedling, sapling and pole classes. It is not altogether easy to define the "normal forest" in this case. Teak and rosewood

stand out by themselves as regards value per cubic foot, and are the only species that really pay well. Teak is universally used, and all good teak timber can easily be sold. It is considered, however, undesirable to convert the forest into one of pure teak, even if the teak is given an underwood of a different species. As there is no special urgency to define the normal forest, no further attempt will be made to do so, but the immediate aims, had we sufficient labour, would be (1) to remove the timber of such excess size as it is undesirable to retain in the forest, in a suitable period; (2) to secure proper regeneration of suitable species to as large an extent as possible by up-to-date methods; (3) if possible to tend the rest of the forest, so as to get the best results for the most desirable species, and to get rid of useless species; (4) to get rid of lantana and bamboos where the latter can be replaced by valuable tree growth.

(2) *As regards the sylvicultural requirements of the species dealt with.*—The chief of these is teak, which requires a good rainfall and a deep well-drained soil, of which there is plenty in the working circle. It must have abundance of light, and seedlings will not stand drip. For its proper regeneration, a perfectly clear area is required. It is useless retaining seed bearers to assist regeneration, as it merely results in a space under each being left practically devoid of seedlings, owing to drip, and later in a considerable amount of damage being done to the young crop when such seed bearers are being removed. Teak is much given to forking, so the denser the seedling crop the less chance there is of forking taking place. As pointed out later, for the proper development of teak, early and repeated thinnings are required; while in order to make full use of the locality, an underwood of shade bearers should be introduced as early as practicable. The urgent necessity for sufficient weeding of seedlings derived from dibbled seeds has been insisted on elsewhere.

Rosewood (Dalbergia latifolia), and Vengai (Pterocarpus marsupium) will both stand a good deal of shade to begin with, and are therefore suitable for an underwood for teak as is Xylia dolabriformis in parts of the forest. The first two do well in this locality, if protected, but all deer are fond of the young leaves of both species, specially of the latter, which accounts for its scarcity amongst the timber trees, although it reproduces itself abundantly. In view of the form that the regeneration operations prescribed in this plan will take, there does not seem to be any necessity for further discussion of sylvicultural requirements of other species.

(3) *As regards the yield of timber and other forest produce.*—The object in view, as regards the yield of timber during the next fifty years, is to remove the exploitable timber by means of a series of annual coupes, laid out in the forest in a manner that the transport of timber to the market shall be as easy as possible, and the annual outturn of timber of approximately the same volume. As regards bamboos in these coupes, as many will be removed as there is demand for, subject to the spare carrying capacity of the tram trucks. As regards bamboos in the Special Working Circle, coupes will be sold standing. It is also proposed to continue the making of teak spokes and felloes from tops and branches of felled trees, and to add to it if possible the preparation of agricultural implements.

(4) *As regards improvement and regulation of water-supply.*—The only thing that can be done in this respect, and it is a pity that it has not been done before, is the provision of wells. The stream water mostly dries up after December, and dragging work has to stop for lack of water. From the configuration of the ground, there is no reason to suppose that water could not be obtained by constructing wells. With good wells the stagnant pools, which form the breeding places of the malarial mosquitoes, which make the hot weather a period in which a bad type of fever prevails, could be dealt with where work is going on. With the systematic treatment of such pools a great deal of the fever might be got rid of. At present it is difficult to get sawyers, who are required to saw the large logs, to make them transportable, to come and work in the forests. If they come in the dry weather they get fever, while in the wet weather they cannot work for days together consequently they give the forest a wide berth. A commencement is about to be made with the construction of a well at Anaipadi and the Forest Engineer will construct a series of them.

(*B*) *The Bamboo Working Circle.*—When this working plan was first taken in hand, the form of transport had not been decided. The introduction of a steam

tramway, with spare cheap transport will affect the bamboo working circle. When the tramway comes, we shall have spare transport, at first, for 1,00,000 large bamboos a year. The bamboos will be cut daily, and, subject to the above transport figure, the number will only be limited by the labour available to cut them, and the demand. No one will be able to compete with our facilities to put them on the market. The area set aside as the bamboo working circle, when this plan was commenced, is seen on the map to be difficult of access. The earth work of a road, shown on the map from Topslip through the new coupes Nos. 49, 48, 41 and 50 has been done, and a good deal of metal has been stored on it, but it is only in contact with the special bamboo working circle in coupes 48 and 50. Any coolies that can be obtained for bamboo cutting would best be employed in cutting in the coupes served by the steam tramway, when it comes. At present we spend Rs. 1,000 a year on maintaining the ghat road. When the steam tramway comes we shall, unless bamboo working circle in this part of the forest is shown to pay, only need to maintain this road as a bridle-path. There would be, if there was bamboo working, the new road to be completed and maintained. If, therefore, we let out bamboo coupes in this part of the forest we should have to clear over a thousand rupees a year on the coupe before we should get any profit, for at least that amount would be required for road repairs which would not be required otherwise. It is doubtful whether any contractor would come forward, in the face of our competition, and offer sufficient to make it pay. We are, however, going to maintain the road for the next four years, and what might be done, as a trial, is to sell the right to cut bamboos in coupes along the road from Top Slip through coupes 49, 48, 41 and 50. The right to cut and bring bamboos to the section of the road in coupe 49 from any part of the surrounding forest might be sold in the first year, and, if successful, the same might be done for coupe 48 and so on. A series of coupes would be formed for which there would be export facilities. There is no objection to making the local coupes form part of the area in which bamboos are to be cut. This would test the demand prior to the coming of the steam tramway, and after. If, in spite of the advent of that system, contractors still offer remunerative rates for bamboo coupes, then the extraction may continue, but it is so doubtful that they will find to pay to do so that no scheme will be elaborated at present beyond the trial suggested above.

(*b*) *Method of treatment adopted to attain the above objects.*

Mount Stuart Working Circle (1) *Removal of the over-mature timber.*—In the paragraph below it is seen that all trees over 7 feet girth at a height of 4 feet-6 inches from the ground are considered to be of exploitable size. It has already been shown that the forest has been abnormally treated in the past, i.e., how little has been done to assist regeneration, while a great deal of timber has been exploited. The enumeration tables show, how girth classes rise to 23 feet and over, and the large quantity of timber contained in the classes over 7 feet girth. It is advisable to take a somewhat long period for removing the over-mature trees. If a very short period is taken, then there will be a correspondingly long period of poor yield afterwards, and a small area of regeneration will be dealt with, besides involving special difficulties in the way of transport, already difficult enough. The Ulandi Working Circle, as already mentioned, has been set aside for the present. The Mount Stuart Working Circle will be taken in hand, and trees over 7 feet girth, of the superior species, will be removed in a period of fifty years by coupes containing approximately equal quantities of timber. Parts of the forests have not yet been worked over under Mr. Porter's scheme, while the areas which have been worked over recently still contain many exploitable trees. The eight superior species will be worked, but if demand arises for other species, at present unfashionable, at rates that pay extraction, they also will be put on the market.

(2) *To secure regeneration of desirable species.*—The most desirable species is teak, after which comes rosewood and Pterocarpus marsupium. We must confine our efforts for the present to securing the regeneration of a proper stock of teak. If the labour supply were not limited, we might hope to do cleanings, weedings, and improvement fellings in the open forest, but as we have the eradication of lantana to attend to, we shall have to limit ourselves to efficiently securing as much regeneration of teak as possible. It is considered best to devote all the labour

possible to concentrated regeneration of teak, until we can work up to the acreage that we ought to, rather than divide up the labour between concentrated regeneration and general tending. In the Working Circle there are 15,208 acres which will be worked over for mature timber in fifty years. This will give coupes averaging three hundred acres each. We ought to establish if possible fifty acres of teak annually, but, to start with, only 25 acres will be attempted. If while steadily dealing with the lantana and efficiently establishing the 25 acres of teak a year, it is found that a larger area can be taken in hand, then the area may be increased up to 50 acres, but this is not likely to be the case at present.

The concentrated regeneration areas will be dealt with as follows :—

In the first place an area of deep soil, the best in the coupe, must be selected in a locality that obtains the maximum of sunlight. Swamps must, of course, be avoided, sloping ground with good drainage should be chosen. It is best to have the 25 acres in one plot, as better timber can be grown in such a plot, and the loss from drip and shade from the bordering forest is reduced to a minimum. In most of the coupes there should be no difficulty in obtaining such plots, but in case that is not always possible, and it should be found necessary to divide the area to be regenerated, the plots shall be as large as possible. The marketable timber will first be felled and dragged to the tramline, after which all the rest of the growth will be felled. Arrangements to be mentioned later, will be made to make agricultural implements from the unremoved timber. Spokes and felloes will be made from the tops and branches of teak. Bamboos will, as far as the transport allows, be exported. The rest of the unutilizable growth will be thoroughly burnt, so that the ground is left perfectly clean. One general burning will not effect this. The remnants from the first burning must be heaped together and burnt until they are all disposed of. A line must be cleared at the outside of the area to serve as a fire line, from which to commence the burning, and every precaution must be taken to prevent fire escaping into the surrounding forest. The usual time for felling in these forests is June, July, and August. The burning must be completed by the end of February. Teak seeds fall in December, January, and February, when sufficient should be collected for dibbling the whole 25 acres, 3 feet × 3 feet with three seeds at each point. The seeds will be dibbled in March, and the operation must be carried out as economically as possible by trained junglemen. The seeds must not be put in too deep, but just sufficiently—so, to prevent them being washed away by rain. The May thunderstorms should start the germination, and with the germination will commence weeding, and it is on the degree of efficiency that this is supervised that the success of the crop will depend. As soon as the seedlings begin to appear, the ground must be completely weeded. The area must be divided into plots containing not more than 1 acre each, and weeding must go on simultaneously in each. The great danger, if this is not done, is that seedlings will be swamped before the weeding party reaches them. Four complete weedings in the year with normal rainfall should put the plants beyond the reach of weeds in the first year, but the most important weedings are the first two. If the weeding is done properly, and this will only be effected if the District Forest Officer personally devotes considerable attention to it, the crop should be all that is required. It will need, as I know from personal experience, a deal of driving on the District Forest Officer's part to get Rangers to do this work efficiently. As soon as one's back is turned, a Ranger often thinks that a few days do not matter, and the plants get swamped; or he puts on too few coolies at one end of a plot instead of attacking the weeds simultaneously from different parts. The necessity for efficient weeding is specially insisted on here, for, if it is done properly, a complete crop is obtainable by dibbling. This does away with the necessity of planting, which would involve special difficulties in this locality, where the streams dry up at a time when they would be required for nursery work. It will cost Rs. 12 per acre to do the first year's weeding, at the end of which, in normal years, the plants should be safe from weeds. Rupees 3 may, however, be provided per acre for weeding in the second year, but that should be sufficient. It costs Rs. 12-15-0 per acre to fell forest with heavy bamboos. Parts of the forest contain less bamboos than others, so there may be some savings in some coupes, and some excess on others. The cost of extraction of marketable

timber will go into a separate account. We have not much experience in this locality of burning felled forest, so as to leave a clean surface for dibbling, and experience must show what it should cost, but Rs. 3 per acre should be sufficient, while the cost of dibbling and collection of seeds should amount to the same. This leaves Rs. 4 out of Rs. 40 per acre for contingencies, such as extra weeding. Dibbling seeds 3 feet × 3 feet in normal years will give considerably more plants than 1,210 per acre, but should gaps occur here and there, they can be filled up by transplanting seedlings where they are less than 6 feet × 6 feet apart. The tending of the established crop will be dealt with in a later section, but the question of an underwood for the teak must now be considered. In order to get the best results from teak heavy thinnings during the first 50 years are necessary. These thinnings will let in sufficient light for an underwood of shade bearing species. We have little practical experience of this operation, and must learn as we proceed. There are several species that are suitable for such an underwood, viz., Rosewood, Pterocarpus marsupium, Xylia dolabriformis, and possibly others. As the rotation for teak in these concentrated regeneration areas will be about 130 years, there will be plenty of time for the trees of the underwood to attain to a large size by the time the teak is felled, and there is no reason why they should not be left after the final crop of teak has been removed to put on girth increment to bring them up to the 7 feet—8 feet girth class. It is not likely, even if these species were sown at the same time as the teak, that they would interfere with the growth of the teak; so they should be introduced as early as possible, either after the thinning in the 10th year or after that in the 15th year; until it is decided by local experience which is the best time to introduce them, the 10th year may be fixed for the present. They must be introduced by dibbling and efficiently protected from weeds. If, after the thinning in the 10th year, there is sufficient light for them to germinate, and keep alive, even should they grow very slowly, it will be five years gained during which time they will be developing a root system and will be ready to take advantage of future openings in the cover. If the 10th year is found to be unsuitable, the 15th can be tried. In making the sowings for this underwood each species should be kept separate. Rosewood is much the most valuable and 15 acres out of the 25 might be devoted to that species, 7 to Pterocarpus marsupium and 3 to Xylia. The latter species should only be tried where it already exists in the forest, for it is only in some parts of the forest that it is found.

(3) *Tending the rest of the forest.*—As already stated this operation might be attended to if there were sufficient labour. It has been shown that we ought to establish 50 acres of teak annually by concentrated regeneration, to be followed by the introduction of an underwood. As we can only see our way to start with 25 acres, there is no need to consider at present this question of general tending. If, at some future date, it is found possible to take it up, it may be dealt with. The operations then to be considered will be helping established plants of the superior species outside the areas allotted for concentrated regeneration to make headway, getting rid of inferior species interfering with the better species, and thinning out the superior species that are interfering with each other.

(4) *Lantana eradication and bamboos.*—A scheme for getting rid of lantana is given in a later section. As regards bamboos they will be exterminated and replaced by teak on the concentrated regeneration areas. They seed sporadically and advantage will be taken of their doing so when they seed in the areas which are being treated for concentrated regeneration as far as possible. We cannot, however, with much advantage, go in pursuit of patches of bamboos that seed, as this would mean upsetting all our plan of operations. To get the best teak we must start with a fully cleared area. We have in this plan concentrated all our operations. The annual selection fellings are combined with the regeneration operations, i.e., they both take place in the same coupe, so that the marketable timber from both can be dealt with by the same line of transport. We are having to construct an expensive transport system, but it will be an efficient one. We cannot, therefore, abandon our regular prescribed operations because a patch of bamboos has seeded in a coupe, which may not be dealt with for 20,30, or more years, as we should not be able to remove the timber, which we should have to fell to get the best results for the teak. We cannot increase the labour supply to deal with larger areas of seeding

bamboos, so it is best to follow regularly the plan laid down, and if bamboo seeds in the areas being dealt with it will make our task easier to that extent.

(c) *The exploitable age.*

Mr. Porter in his working scheme took 120 years as the age that it would take teak to attain a diameter of 2—2½ feet. It is proposed to take for this plan trees of over 7 feet girth as mature. It is a suitable size to take considering the difficulties of transport. It yields timber of sufficient size for the market where, so far, no preferential rates are paid for timber of any particular size, the great desideratum being straight sound logs. A number of tree analyses have been made to ascertain at what age the mean annual increment culminates, but as it does not culminate in trees of 9 feet girth there was no necessity to go further.

The following ring countings were made to ascertain the number of years teak takes to reach a girth of 8 feet. The measurements were taken on stumps of trees felled in compartment XXI. Thirty-one trees were measured which gave 150 years to attain a girth of 8 feet without bark. The rate a tree grows however depends greatly on its exact locality. Trees grown on a saddle, or on the sunny side of a ridge, grow a great deal faster than those unfavourably situated on the other side of the ridge, where they do not get so much light. These forest trees have grown up untended. Trees grown in the concentrated regeneration plots should certainly attain to the 7 feet—8 feet girth class in 130 years.

(iii)

(3).—THE FELLINGS—MOUNT STUART WORKING CIRCLE.

(*a*) *The general working scheme; calculation of the possibility.*—The general scheme is to remove the mature and over-mature timber in the Mount Stuart Working Circle in a series of fifty annual coupes so laid out that each will contain an approximately equal amount of saleable timber. This Working Circle as has been shown, contains at present the following mature timber of the eight superior species—

	C. FT.
Teak	18,48,114
Other superior species	25,99,153
Total	44,47,267

Without trying to calculate the increment to be added to the trees now mature during the somewhat long felling period, it may be taken that there will be at least 89,000 cubic feet of what is now mature timber to be removed annually of which 41 per cent will be teak. To this we have to add the timber of 7 feet girth and under, that will be removed on the 25 acres to be cleared for concentrated regeneration. The 6 feet—7 feet girth class gives us 1,820 cubic feet for the 25 acres, so for all the classes not exceeding 7 feet girth we may expect 5,000 cubic feet of which 37 per cent will be teak.

There should, therefore, be 36,490 and 1,850 = 38,340 cubic feet of teak and 52,510 and 3,150 = 55,660 cubic feet of other superior species available for removal annually, i.e., 94,000 cubic feet. The tops and branches of teak trees should yield 200 sets of spokes and felloes, or say 2,500 cubic feet. Thus there should be a total of 96,500 cubic feet of superior timber, without reckoning on any demand for such timbers as are at present unfashionable. Some demand for such, if sold cheaply, is sure to come, so the annual amount of timber for felling and removal may be reckoned at 100,000 cubic feet of which 40,840 cubic feet will be teak.

The curve showing the rate of growth given in the appendix shows that in the course of 50 years all those teak trees now in the 6 feet—7 feet girth class will

have attained to the 7 feet—8 feet girth class, i.e., will have become mature. As we are taking special measures to deal with regeneration of teak, there is no reason why any timber on becoming mature, as the coupes are taken up, should be left unfelled for the second period, so that half the quantity of timber now in the 6 feet —7 feet girth class will also have to be removed during the first fifty years, as the trees become mature. There are in this class 1,113,040 cubic feet of superior timber of which 37 per cent will be teak. This would give on an average 22,260 cubic feet a year, the half of which would be 11,130. This timber would only become mature gradually and the average yield from this source would only be obtained about the 25th year. Account must be taken of it and 11,130 cubic feet entered as the average per annum although the first few years of working the extra yield will be very small.

There is then the increment to be considered for the trees which are now mature, from the commencement of felling, to the end of the felling period. It would need a very long, and intricate set of calculations, which would be based on insufficient data before any result could be arrived at to estimate this increment, so it will not be attempted. During 50 years 7 feet—8 feet girth class would become the 8 feet—9 feet class and so on. All we need say at present is that we shall commence with a minimum of 100,000 cubic feet for which we should be able to find a market and as years go on, the outturn will gradually increase.

When the steam tramline is in working order, it should be able to transport 12 tons, or 600 cubic feet a day, which at 300 working days a year, means 180,000 cubic feet a year. Deducting the 100,000 cubic feet mentioned above, which alone, if transported, should make the system pay well, there will be 80,000 cubic feet of cheap transport available. This can be used for the exploitation of bamboos, for inferior timbers, if there is demand for them, and later for timber, poles, etc., from the thinnings. There is demand for bamboos, as we sell coupes situated in most unfavourable places for exploitation, whereas we shall be able to put them on the market under favourable circumstances. The weight of a 13-foot bamboo, which is the usual size they require at the Pollachi market, is about 40 lb. and the equivalent in bamboos for 80,000 cubic feet of teak would be about 100.000 bamboos. There will doubtless be a good and increasing demand for such bamboos, and with a good demand, labour will doubtless increase. However it will not be wise to reckon at first on being able to cut and sell 100,000 bamboos a year, so 20,000 may be estimated for, but every effort should be made to exploit bamboos to the full extent of the transport available. This leaves plenty of transport for more inferior timbers if demand should arise. The valuation figures show that there are on the average 24 cubic feet per acre of the mature round timber of the four principal unfashionable species besides other timbers not included in the list. This gives 3,700 cubic feet per annum, if a sale can be found for them, as we have already included 3,500 cubic feet of such timber in the 100,000 cubic feet previously mentioned. As mentioned above the yield of superior species will gradually increase and in time the tramline should work continuously at its full capacity.

(*b*) *The period for which the fellings are prescribed.*—The fellings, for reasons already given, have been arranged in a series of 50 annual coupes.

(*c*) *Areas to be felled, annually or periodically order of their allotment.*—The arrangement of the fellings is complicated by the fact that the steam tramway has yet to be constructed. It is war time, and it will not be until the war is over that we shall be in a position to get material for the new line. We cannot tell the date of the ending of the war. The Forest Engineer will be able to complete with the work of the main line as far as the depot in old compartment XVIII, which is the terminus of the present line, in two years after receiving sanction to commence. Until the new line is ready for transport work, we must continue to work on the old unsatisfactory lines of cattle traction. As has already been explained part of the forest has already been worked over under Mr. Porter's scheme, and it would have been more satisfactory to have been able to commence under this plan with the portion of the forest which has not been worked under that scheme. We cannot however do that. The stock map shows the

areas according to (1) the quantity of teak per acre (2) the quantity of other superior species per acre. It will be seen that the areas with the largest quantities of teak per acre, are those in the most remote parts of the forest. It must necessarily be years before the new transport system can reach them.

Map No. 4 shows the 50 new coupes. They have been arranged, as regards area, so that each gives as nearly as possible 89,000 cubic feet of timber of the eight superior species. As regards position, we have to arrange matters so as to carry on with cattle traction until the steam tramway comes to our relief. We can work coupes Nos. I, II, III, and IV as an emergency measure by cattle traction with the assistance of six furlongs of new rails which we have in hand. These can be laid along the old tramline track towards Sungam, from where the present line branches from the old line. If sanction to commence work in accordance with this plan is received during March 1918, coupe No. I can be felled in 1918-19, and the others in consecutive years. This will give us transport work by cattle traction during the years 1920-21, 1921-22, 1922-23, and 1923-24. This, it is hoped, will give sufficient time for the new steam tramline to be in a position to commence transport work in coupe V, the first it will be in a position to tap after entering the Working Circle near Aiyasawmi mudi. If it arrives before then, cattle traction can be abolished, and coupe V taken in hand earlier, leaving coupe IV. If things turn out so that the new tramline is not ready by the time coupe V should be worked, then other local coupes near Anaipadi must be taken up. As a table has to be made showing the felling sequence, the work may be taken up in the order of numerical sequence, subject to adjustments as noted above. The system of tramline is shown on the map and explained under the section allotted to roads.

(*d*) *Nature and mode of executing fellings.*—All trees of the eight superior species down to 7 feet girth, will be regularly felled in the annual coupe and as many trees of the same size of the other species as demand can be found for. So long as we have to retain cattle traction the trees may be converted into logs as at present. The average size log is about 40 cubic feet but much larger logs are however transported in carts down the ghat road. Not more than 50 cubic feet should, as a rule, be placed in a cart. Logs considerably larger than this must be sawn into two longitudinally. Logs that are so large that they cannot even be dragged to the tramline must be sawn up in situ in the same way. When the steam tramline is ready, the train will consist of three double bogies, which will carry 4 tons each. Logs up to 30 feet length will be able to be transported. Taking teak as an average, this will mean 200 cubic feet per truck or 66.6 cubic feet per log, if three logs are carried on each truck. This will enable larger timber to be placed on the market and consequently better prices should be obtainable. The size of the logs to be placed on the truck is limited, up to a maximum of 200 cubic feet, the carrying capacity of the truck, to what can be dragged. The average dragging capacity of 12 elephants working in the Tunacadavu range is a log of 38 cubic feet. It would take two average ones to drag a log of 66 cubic feet. The largest elephant of the 12 can drag a log of 75 cubic feet. A definite size of log cannot of course be laid down as the shape of trees vary so as to do the difficulties of the dragging. No log should be of larger size than 100 cubic feet, as such logs would be difficult to drag. A log must be barked as soon as felled so that it may season. The number of the log, its cubical contents, year of felling, and the letter representing its species should be chiselled on it in the presence of the responsible Deputy Ranger who measures it without delay. The custom of timber fellers in these forests is to cut trees into logs with axes instead of sawing across. It would be more economical if some arrangement could be come to for cross-sawing the logs. It is difficult to get sawyers to come to these forests for sawing large logs longitudinally, so as to make them transportable. If a portable sawing machine that could do such work exists, it would be a great advantage to have one. A special officer is being deputed to Canada to study the question of lumbering, and perhaps he may come across something suitable there.

(*e*) *Tabular statement of fellings to be made.*—The fellings follow the annual coupes as laid down in Map No. IV.

Tabular statement of fellings to be made.

Coupe number.	Area in acres.	Coupe number.	Area in acres.
I	330	XXVIII	220
II	277	XXIX	136
III	223	XXX	246
IV	326	XXXI	270
V	782	XXXII	270
VI	577	XXXIII	185
VII	485	XXXIV	355
VIII	469	XXXV	135
IX	374	XXXVI	125
X	252	XXXVII	285
XI	165	XXXVIII	222
XII	150	XXXIX	320
XIII	148	XL	260
XIV	148	XLI	460
XV	156	XLII	670
XVI	152	XLIII	535
XVII	152	XLIV	414
XVIII	137	XLV	425
XIX	326	XLVI	550
XX	150	XLVII	250
XXI	149	XLVIII	745
XXII	158	XLIX	560
XXIII	349	L	425
XXIV	200		
XXV	210	Total	15,208
XXVI	136		
XXVII	125		

(*f*) *Forecast of condition of crops at the expiry of the felling period.*—At the expiry of the felling period there will be a series of 50 various sized coupes containing trees of girth classes up to 7 feet plus the increment added in by 0.49 years growth. In the case of teak this would give trees up to a little over 8 feet girth, for ordinary forest untended trees. There would be woods of teak 25 acres each varying in age from 0.50 years of which, according to the age found suitable, many would have been underplanted with a shade bearing species.

(V)
(v).—SUPPLEMENTARY REGULATIONS.

(*a*) *Concentrated regeneration and tending.*

(1) *Sowings.*—These have already been described in detail in a previous section.

(2) *Cleaning, weeding, and tending of the crop and under sowing with rosewood, etc.*—Dibbling 3 feet × 3 feet has been prescribed with the double object of ensuring a complete crop of plants at least 6 feet × 6 feet, and in order to reduce forking and branching to a minimum.

In order to get the best advice as regards the tending of pure teak woods, I consulted Mr. R. Bourne, District Forest Officer, Nilambur, who is now engaged in revising the Working Plan for the Nilambur Teak Plantations. He has been good enough to send me a complete note on the subject, which has been put on record for future reference. As Nilambur is only a day's motor run from Pollachi, it would be well if the District Forest Officer in charge of these forests should visit Nilambur, and study the way that they are dealing with similar sized trees on similar soils there. The following brief extracts from Mr. Bourne's note will be of use as a general guide as to what should be done, and we will presume that our dibblings have given us a crop of teak spaced at the most 6 feet × 6 feet. "To obtain even growth, and consequently even spacing, at ten years with the height growth attained in good qualities, an early thinning, as soon as the energies of growth are diverted from the production of a long leading shoot to the development of the crown, is essential."

9 240
"This early thinning at about 6 or 7 years would leave ~~12~~ ~~605~~ trees per acre ~~12~~ feet × ~~12~~ feet. The next thinning would leave ~~302~~ trees per acre and this should take place when the trees are ten years old." Mr. Bourne proceeds to say

270

tha- " it is impossible to lay down any ages for subsequent thinnings. Woods must be thinned when required. The selection of the actual age must be left to the officer in charge. It is only possible to say that the ages for such further thinnings will be about 15, 25, and 40 years. . . . It is perfectly clear that the principal thinnings must be completed at a comparatively early age. Observation of the best grown trees of 7 feet girth in the forest shows that the final crop should consist of 30 trees per acre.

It must be left to the Forest Officer of the day, with the Nilambur Plantations within reach to assist him, to decide how much should be actually taken out at the thinnings at 15, 25, 50 and subsequent years. As, however, some estimate has to be made of the quantity of produce which the thinning will yield, one is made.

First thinning at six years will give 605 saplings of no value. Second thinning at 10 years will yield 303 poles per acre, leaving 302 per acre. The third thinning at 15 years will yield 151 poles per acre, leaving 151 per acre. The fourth thinning at 25 years will yield 75 poles per acre, leaving 76 per acre The fifth thinning at 50 years will yield 26 trees per acre leaving 50. The 50 trees per acre must be reduced to 30 per acre for the final crop at the discretion of the officer of the day.

The thinning and tending of the underwood must also be left to the discretion of the officer of the day.

(b) Fire protection.

(1) *Mount Stuart Working Circle.*—The chief danger from fire in this Working Circles comes from the Kollengode side, from the Coimbatore-Malabar boundary to the junction of Kollengode, and Cochin, and on as far as Tellikal. There is also danger of fires commencing in the Gudaravalli Working Circle spreading up the hill side, and getting on to the plateau at the Pandarivarai Aiyasawmi mudi ridge. There should be no special difficulty in dealing with these fires. From Tellikal as far as the Tekadi village, a distance of $7\frac{3}{4}$ miles, the reserve is bounded by a river. The water often dries up in the hot weather, and the river-bed gets covered with a thick layer of dry leaves. The Kollengode forests on the opposite side of the river are fired regularly every year, and unless steps are taken to prevent it, these fires are apt to cross the river-bed by means of the dry leaves and set fire to our forests. In some years like 1917, owing to rains in February and March, the water in the river did not dry up entirely. In a country like this where there are no local villages, besides having fire lines, it is necessary to have gangs of fire patrols, in charge of a Forester, or Forest Guard, stationed at intervals along the line of danger, who will be able to prevent any fires crossing the fire line, and getting into the Working Circle. The fire season is not a long one. These forests receive the benefit of both the south-west and the north-east monsoons, and frequently rain in February with showers in March, April and May. At present a guide line 12 feet broad is cut at a minimum distance of 100 feet from the river from Tellikal to Tekadi. At times it is further from the river, as it does not exactly follow every bend of the river, but is taken from point to point. From the guide line the undergrowth is burnt down to the river, a simple operation compared with the burning of some fire lines. Nothing is cut between the guide line and the river, i.e., there is no cleared fire line, and considering the shortness of the fire season there does not seem to be any necessity for one. The growth consists of fine large trees mixed with bamboos. Of course one disadvantage of not having a cleared line is that the leaves of bamboos and the trees, continue to fall after the burning has taken place but, if the fire gangs do their work properly, the 12 foot guide line can be kept sufficiently free of leaves by three of the gang, while two patrol. There does not seem to be any necessity for altering this system. A proper gang system has only been recently introduced. It worked in the fire season of 1916-17, which was a favourable one, and in which no fires were allowed to cross from Kollengode, although the forests there burnt as usual throughout. Fire gangs, combined with the fire tracing described, should enable us to keep out fires from this side. The gangs should consist of five men, each in charge of a Forester or Forest Guard, and should be stationed at Tellikal, Padiparai, and the Tekadi rest-house. Their duties will be to patrol the line from Pulaliyan Mudi, through Tellikal, Padiparai, past the Tekadi bungalow and Tekadi village as far as the Coimbatore-Malabar boundary; to keep the guide lines free of leaves, and to watch the Kollengode and Cochin fires, and prevent them

crossing the fire line. From Tekadi village to the Coimbatore boundary a distance of $2\frac{1}{2}$ miles a fire line 100 feet broad is fire traced. Two guide lines each 6 feet broad are cut. This line with the assistance of the fire patrol gang protects the forest from the fires coming from Kollengode on the north. It requires careful watching as charcoal is made in the neighbouring Kollengode forests, and the charcoal burners allow their fire to escape and overrun the local forest without any consideration.

Next comes the fire line along the Coimbatore-Malabar boundary. This should run as far as the Sichalipallam and stop there Its distance will be $4\frac{1}{2}$ miles of which 2 miles runs through the Karianshola and does not require burning. The guide lines are 6 feet each.

As regards the south side of the Tekadi forests, hitherto a fire line has been run along the crags at the top of the ridge. This is unsuitable and requires revision. To the north of the top of the ridge are precipices and steep rocky ground, so that, if a fire should come over the top of the ridge it could be easily dealt with by gang patrols. Along the foot of the hills runs the Sichalipallam which after $2\frac{1}{4}$ miles joins the Tunacadavu Ar. These streams serve as a line of basis for defence against fire. It does not seem necessary for the present to do more than have a central gang station at the junction of the Sichalipallam and the Tunacadavu Ar, south of Sungam. Here a double gang of ten men may be stationed from the 15th February to the 1st of June. One gang of five would patrol eastwards as far as the Malabar-Coimbatore fire line and watch all the surrounding forest, while the other would patrol west as far as Tellikal. Their united strength should enable them to deal with any fire on this side of the forest.

There are two interior lines fire traeed, and no alteration need be made in these. The first is a straight line which runs from Puvanakadavu to Sungam a distance of 3 miles. The second runs from Sungam to Tellikal along the path. These serve as useful interior lines in case a fire should happen to get across from Kollengode, or originate inside the forest.

The cost of these operations is as follows :—

(1) Fire tracing the line from Pulaliyan mudi to Tekadi. One guide line 12 feet broad. The Cochin Forest Department will do the one on the Cochin side between Pulaliyanmudi and Tellikal. Length of line $8\frac{3}{4}$ miles or say 9 miles—

	RS.
Cost of guide line cutting at Rs. 5 per mile	45
Cost of burning at Rs. 10	90
Total	135

(2) Fire tracing the line from Tekadi to the Coimbatore-Malabar boundary two guide lines 6 feet each, width of line 100 feet. Length of line $2\frac{1}{2}$ miles—

	RS.	A.	P.
Cost of guide lines Rs. $7\frac{1}{2}$ for the two lines ...	18	12	0
Cost of burning at Rs. 10 per mile	25	0	0
Total	43	12	0

(3) Fire tracing the Malabar-Coimbatore boundary as far as the Sichalipallam. The length of the line outside the Shola is $2\frac{1}{2}$ miles. For this two guide lines 6 feet broad are cut, and any regrowth on the line, for this is a cleared line, being the Malabar-Coimbatore boundary should also be cut. Any regrowth on the line in the Shola portion should be cut. The width of the line is 18 feet—

	RS.	A.	P.
Cost of cutting guide lines on the regrowth in the new Shola portion Rs. 10 per mile for $2\frac{1}{2}$ miles ...	25	0	0
Cost of burning the same at Rs. 5 per mile ...	12	8	0
Cost of cutting the regrowth in the Shola portion Rs. 5 per mile	10	0	0
Total	47	8	0

Cost of fire patrol gang. Of these there will be five stationed at Tellikal, Padiparai, Tekadi bungalow, and a double one at the junction of the Sichalipallam and the Tunacadavu Ar.

Twenty-five men for 105 days at As. 6 per day = Rs. 984-6-0. Total cost Rs. 1,211 which works to Rs. 45 per square mile.

The portion of the forest east of the Malabar-Coimbatore boundary has next to be considered. The first portion of this consists of the forest to the north of the Vengolimalai-Umayamalai ridge. The area contains a portion of Karianshola on the north-west, and the Bamboo Working Circle on the south and south-east. It is considered sufficient if a fire line 100 feet broad be fire-traced from Top Slip along the road as far as the Tunacadavu Ar. a distance of four miles and on for two miles along the footpath to the Aragundi Saddle. Along the four miles of road only one guide line 12 feet broad need be cut, but two are required along the remaining two miles. A fire patrol gang of five men will be required at Top Slip to patrol between Pandarivarai and Aragundi Saddle. A line should also be fire traced around the Top Slip depot as long as it is maintained.

To the south of Vengolimalai-Umayamalai ridge the following operations should be carried out. Instead of the line along the ridge which has been fire traced hitherto it will be better to fire trace to a width of 100 feet the path from Aragundi Saddle, through Ulandiparai as far as the Varigalli Ar. Two guide lines will be required. The present line to the top of Vengoli and down along the Cochin frontier is an absurd line. What should be done is to fire trace from Aragundi Saddle to the edge of the Shola as shown on the map, and from point 2,280 a line should be traced to the frontier as shown on the map, whence the frontier boundary should be fire traced as far as the path to Palacadavu. The ground here slopes very steeply down to the Sin Ar. No burning should be done on this line but it should be cleared of grass and undergrowth to a width of 15 feet. From the Sin Ar to where the boundary of the Working Circle turns northwards along the ridge, the district boundary should be fire traced. No line need be cut along the ridge. To complete the protection, two fire patrol gangs will be required from 15th February to the end of May. Each gang should consist of five men each and should be in charge of a Forester or Forest Guard. One gang should be stationed at Palacadavu in the south-west and the other at the site of the proposed forest rest-house in the north-east. The cost of these operations is as follows :—

		RS.	A.
(1)	Fire tracing line along the road from Topslip to the Tunacadavu Ar. Length 4 miles. One guide line 12 feet broad, Rs. 5 per mile—Rs. 20; burning the fire line 100 feet broad Rs. 10 per mile, Rs. 40	60	0
(2)	Fire tracing the line along the path from Aragundi Saddle through the Ulandiparai and on to the Varigalli Ar. Two guide lines 12 feet broad and 3½ miles long at Rs. 10 per mile, Rs. 35. Fire tracing the same, Rs. 35	70	0
(3)	Fire tracing on the west as described, 3 miles. Two guide lines 12 feet each for 3 miles at Rs. 10. Burning the line, 3 miles at Rs. 10. Clearing half a mile down the slopes to the Sin Ar to a width of 15 feet at Rs. 11-8-0 per mile	5	12
(4)	Fire tracing Topslip depot. Lump sum	20	0
(5)	Pay of three fire patrol gangs to be stationed as already described	590	10
	Total ...	746	6

The cost of fire protecting this section also works out at Rs. 45 per square mile.

(c) *Lantana eradication.*

The lantana area, as seen on map No. 3 covers about 5,000 acres. We should like to deal with this as rapidly as possible, but the labour difficulty again intervenes. It is no use prescribing large areas to be dealt with at first. When we can, as we shall be able to, under this plan, give regular work all the year round, we may be able to increase our labour supply. Not only is there demand in this range, but

we have a long series of coppice with standard coupes along the foot of the hills besides bamboo coupes. These are all forest works although the coupes are sold standing. There is severe competition for labour. It is better to make an elastic scheme which will allow larger areas to be taken in hand, as labour can be permanently secured. Lantana work is like weeding, i.e., it has to be repeated. Each area has to be worked over for three successive years, after which the area has to receive attention from a permanent gang of men who pull up any further plants which may appear, so that if one prescribes a hundred acres a year of original pulling, it means that in the second, and more in the third year, a much larger area has to be dealt with. The procedure is to dig out the plants by the roots taking care not to break off the roots in doing so. The plants are then piled in heaps and burnt when dry. This operation is carried out in three successive years. This even, is not found sufficient as stray plants are found in the fourth year which, if not at once removed, soon furnish seeds for a new crop. A special gang must, therefore, be placed at the Range Officer's disposal and he must see to it that all stray plants that appear after the third pulling are removed. The work will not be entirely unremunerative expense, for, after the lantana has been pulled up, seeds of teak, which are easily collected, should be sown broadcast. As the lantana has to be pulled three years in succession, this will be in the nature of weedings for the seedlings, numbers of which should survive and grow up into useful plants. I do not see the use of prescribing more than 100 acres a year to commence with, but this should be increased as soon as the District Forest Officer can see his way to it. It is of great importance that this work should be efficiently carried out. The Range Officer must be held personally responsible for it. A control map and a special lantana eradication control book must be maintained. The Range Officer must keep a copy of this, and the other control maps as well as the District Forest Officer. As soon as the first pulling has been completed in a block, that block should be coloured on the map, when the second pulling has been received, a band of a different colour should be placed across the block on the map, and another after the third pulling. In the special book which the Ranger will maintain he will note the work done by the special gang on areas which have received their third pulling. He will inspect such areas once a quarter and certify that they are free from all lantana and if they are not, he will state what steps he has taken to have any lantana that he may have observed removed. No slackness can be permitted in this matter, as new plants arise so quickly and produce seeds for further propagation of the pest. The District Forest Officer should regularly inspect this special book and enter his remarks in it. The cost of these operations will be Rs. 10 per acre for first pulling, Rs. 4 for second, and Rs. 2 for the third. A gang of three men must be available for supervising areas which have received three pullings. A bag of teak seeds costs Re. 1.

(*d*) *Roads and tram lines.*

At present we have the old Ghat Road from Sethumadai to Topslip, which connects with the old tramway, which runs through Anaipadi, and on to a point in the middle of the forest as shown on the map. The earthwork of a road four miles long which it was intended, should be taken on to Ulandi, has been completed and a good deal of metal has been stacked on it.

It is now proposed to construct a better and more business-like method of transport in the shape of a steam tramway, which will run from Anaimalai village, through which will pass the proposed new railway from Palghat to Dindigul. Anamalai is seven miles from Sethumadai, which is two miles from the foot of the ghat road. The new tramline will pass through Sethumadai and run along the Gudaravalli valley, and after ascending the hill side by means of reversing stations, will enter the Working Circle near Aiyasawmi mudi. It will run as shown on the map through the new coupes Nos. V, VI, VII, VIII, IX and XLII as far as the present rail road of the old tramline. This section of the new tramline will be considered the main permanent line. Branch lines will be run as shown on the map from the main line. In order to save expense, there will be temporary lines, branching from the main line, which will be taken up and relaid as required. The scheme is in the hands of the

Forest Engineer Mr. F. J. Marshall. One train will run daily from Anamalai to the forest. It will exchange empty trucks for loaded ones, which will be kept ready, and will return with them to Anamalai the same day, and discharge the logs into the depot. When the branch lines come to be constructed, and the distance of haulage increases, a second train will bring logs up to the main line for the first train to take off to Anamalai. The tram will consist of an engine and three double bogie trucks, which will take four tons of timber each. This means 180,000 cubic feet a year. The scheme is estimated to pay well, if 100,000 cubic feet are transported annually. The estimates of this plan show that with a little unfashionable timber this amount is available, without including bamboos. There are plenty of bamboos that we want to dispose of, besides which there will, as has been shown, be all the increment which the forest will put on. This will gradually amount to a considerable outturn before the end of felling period. The Forest Engineer estimates that the new tramline will on the average cost As. 10 per cubic foot on an estimate of 1,00,000 tons, so the more we produce we can provide over and above that amount, the less per cubic foot will the transport charges amount to. This figure provides for all depreciation of materials. The tramline and bridges will be so constructed that carts will be able to pass along it. This is very necessary with reference to the outturn from thinnings from the teak plots. These can, where the coupes lie along the permanent line, be dealt with directly, but when thinnings have to be made in coupes along the tracks from which the temporary line has been removed, it will be necessary to cart the outturn to the nearest place where the tram train is working, and this can be done by a few carts.

Buildings.—There are the following buildings in the range—

(1) A good resthouse at Mount Stuart.

(2) A good resthouse at Tekadi for which the outhouses have to be completed.

(3) A Range Officer's quarters at Mount Stuart.

(4) Quarters sufficient for the Assistant Veterinary Inspector, Permanent-way Inspector, fitter and one Deputy Ranger at Mount Stuart.

(5) Range clerk's quarters for two clerks.

(6) Foresters' quarters at Anaipadi.

(7) A set of lines for two Forest Guards and a Range peon at Mount Stuart.

(8) A set of coolie lines for coolies who repair the tramline near Mount Stuart.

(9) There is a small resthouse of two rooms alongside the large one.

What is now required is the construction of a set of nine well-built huts at Anaipadi for Deputy Rangers. These should be always maintained so long as they are required. When the new tramline comes, it will be sufficient if about 8 of such sheds are constructed in the coupes of the year for subordinates in charge of local operations. Cheaper huts for the four Foresters, and four Forest guards, may be made when required, say Rs. 50 each. If we are to attract labour, we must construct proper temporary coolie lines. Such lines are easily made. It cannot be laid down exactly how many are required as one set of lines will often serve for several years' work. Rupees 150 per annum may be allotted for them. Quarters must be built for a third clerk at Mount Stuart.

I do not see the necessity of constructing more resthouses. In order to properly supervise the regeneration operations, the District Forest Officer must camp on the spot, and with a steam tramline, which will transport tents and samans, it will be better to use tents than to build expensive bungalows at fixed points far away from work. It is thus seen that a small amount of construction of temporary sheds for Deputy Rangers, Foresters, and Forest Guards have to be undertaken periodically. This expenditure may be estimated at say Rs. 500 a year. The outhouses for the Tekadi buildings have to be finished at a cost of Rs. 1,000. The annual repairs in the range may be put at Rs. 300.

(*v*).—MISCELLANEOUS.

(*a*) *Collection of data and upkeep of record and control forms.*—As we are commencing the creation of regular teak woods, data, as regards rate of height growth, girth growth and volumes should be regularly kept in selected coupes. It would

be better to keep these in a special book by themselves, so that they can be seen at a glance, instead of having to search them out piecemeal of the journal.

The control forms mentioned below must be regularly maintained in an uptodate manner.

FORM A.—This form is devised to control the felling, dragging and transport of timber. We have still to clear up the old coupes; so while that is being done the felling in the first of the new coupes can be carried out, and the transport start fair in the year 1919–20. The amount of timber that will be approximately available each year has been estimated. All trees of the eight superior species over 7 feet girth will be felled in the coupe.

If a sale can be found for the unfashionable timbers they may also be felled when the steam tramway has been constructed as it will be able to transport a considerable quantity of such timber.

The actual felling and logging outturns will be entered, according to species, in totals of number of logs, and cubical contents, in column 6 monthwar. The timber felled and logged in one year will be dragged and transported the next year. After the felling and logging has been completed the outturn will be known, and will be entered in column 3 for the next year in totals according to species, number of logs, and cubical contents. The monthly actuals of logs dragged according to species, number of logs and cubical contents should be entered in column 7. The entry in column 3 shows the quantities that have to be dragged and trammed during the year, and if these actuals fall short of the figures in column 3, explanation will have to be put on record as to why the actual amount of timber felled has not been dragged and trammed to the sale depot. The actuals of timber trammed to the sale depot will be entered monthly in column 8. When the steam tramline has been constructed, this will be a simple operation, as the timber will be loaded on to the tram truck at the tramline depot and unloaded at the sale depot. As the new line will not be ready for some years, extra entries will have to be made in this column as the transport will be in three sections. Firstly, the tramming from the tramline depot to Top Slip must be noted monthly, then the carting from Top Slip to Sethumadai, and then the carting from Sethumadai to the sale depot.

There will be no entries in the columns for dragging and tramming in the first year of working.

At the end of each year's working, a clear note must be entered in the register giving the following information :—

(*a*) The reason for any deficit in the felling of all the trees of the prescribed size, with details of the number of trees unfelled, and a statement as to when the felling will be made good. All felling in one coupe should be completed before any is commenced in the next coupe.

(*b*) The reason for any deficit in the dragging of timber during the year, with details of such deficit. Every effort must be made to keep the felling and dragging up to date, and to guard against allowing timber to remain for years on a coupe unremoved.

(*c*) The reason for any deficit in quantity of timber trammed must be given.

If there are any deficits in felling, dragging, or tramming during any year, they must be made good at the commencement of the next year, and if they are not made good during the year a special report will be submitted to the Conservator explaining why they have not been made good. Such deficits must be brought forward in the columns 2, 3 and 4 as work to be done in the next year with the coupe No. 1 which the timber refers carefully noted above it.

If this register is properly kept up, the state of the working and clearance of coupes and depots can be seen at a glance and controlled. This control register, of course, has nothing to do with the ordinary timber register prescribed in the Code.

Provision has been made for bringing forward the balance available for exploitation. There cannot be any excess exploitation as in each coupe all the trees over seven feet girth are to be removed. The amount of the outturn has been estimated

as far as possible for the eight superior species and should any demand be found for the less fashionable timbers, they may be felled to meet such demand from the coupe of the year.

Record of works.—This will be a brief record of all works carried out in connexion with the construction and repair of communications and buildings, wells, demarcation, regeneration and cultural operations, protection from fire, lantana eradication, etc., also improvement fellings, thinnings, clearings and other tending operations, when these are distinct from the main explanations prescribed. Expenditure under A-VIII (*b*) and (*c*) will not be shown in this form. To provide for a record of operations not definitely prescribed in the plan, this record will be divided in the following manner and kept up accordingly.

(1) Prescriptions of the working plan and the results of working with cost.

(2) Suggested measures of the working plan.

(3) Measures neither prescribed nor suggested in the working plan but carried out during the year.

Control Journal.—In the control journal will be recorded all noteworthy occurrences which bear on the management and improvement of the forest, more particularly on the reproduction of the more valuable species and on the suitability or otherwise of the system of management prescribed in the working plan. The main object of the journal should be to record observations made on the spot, and information not obtainable from the prescribed forms. In this plan it will be important to record full information about the concentrated regeneration operations, their success or otherwise, the dates of clearing, dibbling and regeneration, the method of weeding, and filling up blanks. Similarly, the thinning operations should be described in detail and, in due course, the operations undertaken to introduce an underwood. The results of fire protection must be put on record with suggestions for improvement in system prescribed. Mention shall be made of the labour supply, and efforts made to increase it. Mention should be made of the success or otherwise of supply of agricultural implements and the method of disposal of timber especially as regards the demand for unfashionable timber.

Control maps.—It is necessary to show on a map the progress of exploitation and regeneration, for this purpose a copy of the working plan map with the coupe shown on it should be kept flat between cardboard. When a coupe has had the trees prescribed felled, it should receive a colour wash—say crimson. When all the logs have been dragged from the coupe to the tramline depot, black horizontal lines half an inch apart should be ruled across the coupe (but not across the regeneration area). When all the spokes and felloes have been prepared and removed from the coupe, black vertical lines should be ruled. The area of concentrated regeneration should be accurately entered in the coupe and coloured green. As each of the prescribed thinnings is carried out in such areas, a coloured line should be ruled across the area, the same colour being used to denote thinnings carried out at similar ages of the crop. The year in which the coupe should have been felled and the year or years of actual working may be entered on the coupe area. In this way the controlling officer will be able to see at a glance which coupes have been worked, and in which years, whether all the timber has been disposed of, whether the tops and branches of teak have been converted into spokes and felloes, and whether the regeneration and thinning operations have been carried out.

A similar map showing fires will be maintained.

(*b*) *Markets for timbers at present not in demand.*

Efforts should be made to find purchases for some of these timbers. Four of them are noted in the enumeration lists. A notice should be put up in the sale depot stating that such timber could be supplied on demand, if a rate can be agreed upon. The steam tramway will be able to transport all the fashionable timber and a lot of other material as well. Part of this will be utilized in transporting spokes and felloes and bamboos, but there will still be spare transport which can be used to carry the less fashionable species, which can be sold at a cheap rate. There might

be a good deal of demand for such timber at As. 4 and 6 a cubic foot if good sound timber were put on the market, and the removal of such trees will benefit the growth of superior species.

(*c*) *Forest staff.*

In order to carry out the prescriptions of this plan the following staff are necessary :—

One First-grade Ranger.
One Deputy Ranger to look after the fellings and coupe timber registers and for marking trees to be felled.
One Deputy Ranger to look after the regeneration operations.
One Deputy Ranger to look after the elephants and timber dragging and the registers.
One Deputy Ranger to look after the tramming to Topslip until the steam tramway is constructed and the buffaloes and bulls.
One Deputy Ranger to look after the carting from Topslip to Sethumadai until the steam tramway is ready.
One Deputy Ranger to look after the Ghat road until the steam tramway is opened.
One Deputy Ranger for Lantana work.
Two Deputy Rangers for fire protection and for relief of others in case of sickness.
One Deputy Ranger to be in charge of the provision store and registers.
Four Foresters and six Forest Guards for general duty for assistance in any of the above operations and for procuring labour.
One Depot gumasta at the loading depot.
One Depot gumasta at Topslip until the steam tramline is constructed.
One Depot gumasta at Sethumadai.
One Depot gumasta at the Sale Depot.
One Permanent-way Inspector.
One Fitter.
Three Range Clerks.

The office work will increase when the working plan is put in force and the office staff must be strengthened, with all the timber returns, elephant work returns, provision accounts for elephants and cattle and the many other items of accounts, etc., two poorly paid clerks are not sufficient. There should be another added with better pay say Rs. 25—30.

(*d*) *Financial Statement.*

Revenue.—By sale at the Pollachi depot or at the depot near the Palghat-Dindigul Railway.

					RS.
By sale of	38,340	cubic feet of teak	at Rs. 2-8-0	per cubic foot.	95,850
,,	1,774	,, of rosewood	at ,, 2-4-0	,,	3,991
,,	53,886	,, of superior timber	at Re. 1-0-0	,,	53,886
,,	3,500	,, of other timber	at ,, 0-6-0	,,	1,312
,,	200 sets of teak spokes and felloes		at Rs. 15	per set.	3,000
,,	20,000 bamboos		at As. 3 to As. 4	each ...	4,000
,,	Elephants			... ...	5,000
				Total ...	1,67,039

The above figures are average figures based on enumerations but the proportion of teak to other species will vary somewhat from year to year. Since the months for which the figures have been given for sales, the price of teak has gone up and will, doubtless, be higher for many years after the war than it was before. The opening of the new railway will give us access to new markets, which will also tend to keep up the price. The above should be the revenue to commence with, but there will, after a few years, be revenue from thinnings to be added. As time proceeds the quantity of timber extracted owing to increment which will bring to maturity the present 6-foot to 7-foot girth class will increase and with it the revenue.

Expenditure.—This has to be considered separately for the period of five years before the new tramline arises.

	Rs.
A. With cattle traction for four years—	
(1) Cost of felling, logging, barking, and when necessary sawing 94,000 cubic feet of superior timber at one anna per cubic foot	5,875
(2) Cost of felling, logging, barking, and when necessary sawing 3,500 cubic feet of other timber, should there be demand ...	219
(3) Cost of making 200 sets of spokes and felloes at Rs. 3-5-4 per set	667
(4) Cost of dragging to tramline depot the abovementioned timber at As. 1-5 per cubic foot	8,854
(5) Cost of commission to drivers for tramming at 5—7 pies per cubic foot (100,000)	2,969
(6) Cost of maintenance of 50 tramming cattle at Rs. 500 per mensem	6,000
(7) Cost of a gang of four men for loading trucks at the tramline depot	450
(8) Cost of carting 100,000 cubic feet to Pollachi including maintenance of cattle	19,520
(9) Maintenance of tramline from Sungam to Topslip	300
(10) Maintenance of road from Topslip to the bridge beyond Sethumadai	1,830
(11) Repairs to tram trucks	260
(12) Cost of buildings and repairs	800
(13) Repairs to elephants' harness	150
(14) Cost of fire protection	2,000
(15) Cost of lantana eradication	1,938
(16) Cost of elephant-capturing operations outside the leased forests	750
(17) Cost of 25 acres of concentrated regeneration of teak at Rs. 40 per acre	1,000
(18) Rewards for elephants captured	500
(19) Cost of making agricultural implements	150
(20) Cost of improvement of water-supply	250
Total ...	54,482

	Rs.	A.	P.
Establishment—			
Pay of first-grade ranger	150	0	0
Local allowance	50	0	0
Pay of ten deputy rangers	350	0	0
Local allowance	175	0	0
Pay of four foresters	80	0	0
Local allowance	40	0	0
Pay of six forest guards	56	0	0
Local allowance	12	0	0
Pay of two depot gumastas in the forest	50	0	0
,, one depot gumasta at the sale depot	30	0	0
,, permanent-way inspector	25	0	0
Local allowance	12	8	0
Pay of fitter	40	0	0
Range clerks—			
One on	25	0	0
Local allowance	12	8	0
One on	20	0	0
Local allowance	10	0	0
One on	15	0	0
Local allowance	7	8	0
Total per mensem ...	1,160	8	0
Total per annum ...	13,926	0	0
Grand total, expenditure ...	68,408	0	0
Revenue estimated for, if all the timber available is sold	1,67,039	0	0
Net surplus	98,631	0	0

	Rs.
B. With steam-traction—	
(1) Cost of felling, logging, barking and when necessary sawing 94,000 cubic feet of superior timber at 1 anna per cubic foot	5,875
(2) Cost of felling, logging, barking and when necessary sawing 3,500 cubic feet of other timber, should there be demand ...	219
(3) Cost of making 200 sets of spokes and felloes at Rs. 3-5-4 per set	667
(4) Cost of cutting and placing at the tramline depot 20,000 bamboos at 1 anna each	1,250
(5) Cost of dragging to the tramline depot the abovementioned timber at 1 anna 5 pies per cubic foot	8,854
(6) Loading charges	450
(7) Cost of transport by steam tramway of 100,000 cubic feet of timber at an average cost of 10 annas per cubic foot ...	62,500
(8) Cost of buildings and repairs	800
(9) Repairs to elephant harness	150
(10) Cost of fire protection	2,000
(11) Cost of lantana eradication	1,938
(12) Cost of elephant capturing operations outside the leased forests	750
(13) Rewards for the capture of elephants	500
(14) Cost of 25 acres of concentrated regeneration	1,000
(15) Cost of making agricultural implements	150
(16) Cost of improvement of the water-supply	250
Total ...	87,353
Establishment charges—	
Three deputy rangers will be dispensed with when cattle traction is abolished	12,036
Total ...	99,389

Note.—The cost of items Nos. 11 and 14 will increase if sufficient labour can be found for an increased area to be taken in hand.

(*a*) The charges for felling, logging and barking are As. 10-6 per candy of $12\frac{1}{2}$ cubic feet. The difference between that and 1 anna per cubic foot is provision for sawing large logs.

(*b*) There are 15 elephants now working. They can at present drag 925 cubic feet over a lead of 800 yards. These will be sufficient.

(*c*) *Tramming.*—Cattle traction has to be continued for some years pending the arrival of the new tramline. The figures previously given as the average cost of tramming from the centre of the forest were included, depreciation and line repairs, etc. The cost of tramming now given is the actual commission paid to drivers for taking loads from the tramline depot to Topslip. We shall be tramming from points between Anaipadi and Sungam. For coupe I, As. 5 may be paid per candy and As. 6 for coupes II, III, and IV. It takes a day for trucks to be taken from Anaipadi to Topslip and back. So a day and a half on the average may be allotted for a trip in the section between Anaipadi and Sungam. This gives four trips per week. The average load taken is 50 cubic feet, i.e., 200 cubic feet per truck per week. Ten trucks per day will be somewhat more than sufficient. Ten trucks require 40 buffaloes or bulls and allowing for sickness 25 per cent, 50 head of cattle must be kept for tramming. At present we have 29 buffaloes and 46 bulls. The 46 bulls will be required for carting. So we require to purchase 21 good buffaloes. These can be purchased in Habyal and Mungoden, North Kanara. All the cattle can be sold when the steam-tram arrives. The monthly cost of a team of four is Rs. 40. So the monthly cost of 50 cattle is Rs. 500.

The 6 furlongs of new roads and slopes will have to be laid along the old tramline track from Anaipadi towards Sungam, and one old bridge repaired. This will cost a small amount which has not yet been estimated.

(*d*) *Carting.*—The average amount carried in a cart is 35 cubic feet per trip to Sethumadai. Three trips are made per week or 105 cubic feet per cart, i.e., each cart will transport 5,460 cubic feet per annum. To cart 100,000 cubic feet we

shall require 19 carts and 38 bulls. A reserve of 20 per cent for bulls is necessary, say 46 bulls in all, and which will cost Rs. 460 per mensem or Rs. 5,520 per annum. The commission paid to drivers is As. 8 per candy of 12½ cubic feet. So for 100,000 cubic feet, it amounts to Rs. 4,000. We have at present 46 bulls available for this carting. There are ten serviceable carts in use. So 13 more must be made, as a reserve of four carts is required. These cost Rs. 45 each, and require Rs. 10 for repairs a year. The total cost of carting 100,000 cubic feet of timber down the ghat comes to Rs. 9,745.

Carting from Sethumadai to Pollachi is done by private carts at Rs. 1-2-9 per candy or As. 1-6 per cubic foot. The cost of carting 100,000 cubic feet will come to Rs. 9,375—

Sundries 395

The annual carting charges, therefore, amount to Rs. 19,520. The following has to be paid to bring the number of cattle and carts up to requirements :—

Buffaloes 21 at ... ...
Carts 13 at Rs 45 585

(*e*) *Road repairs.*—The ghat road costs Rs. 1,000 to maintain and the cost between the foot of the hill and Sethumadai costs Rs. 872, Rs. 600 of this may be debited to this range, as should Rs. 150 out of Rs. 230, the cost of the repairs to the mile of the road beyond Sethumadai.

(*f*) The Forest Engineer gives me at present an average figure of As. 10 per cubic foot for 100,000 for the total transport charges for the steam tramway. If more than 100,000 cubic feet or the equivalent of the same in bamboos is transported the cost per cubic foot will be reduced in proportion. His scheme will be sent up for sanction separately. This As. 10 per cubic foot, I understand, includes all depreciation charges.

(*g*) There will be small other periodical charges, such as digging wells. The Forest Engineer will include some of these in his scheme. There are some small charges to be incurred on account of the hydraulic ram at Mount Stuart. So Rs. 250 per annum may be entered for improvement of water-supply.

(*e*) *Tabular statement of operations to be carried out if sanction is given to start works under this plan in March* 1918.

Financial.	
Year 1918–19 ...	(1) Felling and dragging timber to be cut as prescribed for coupe I.
	(2) Concentrated regeneration in coupe I, 25 acres.
	(3) Lantana clearing first pulling No. 1 block.
	(4) Fire protection as prescribed.
	(5) Broadcast sowing of teak seeds in lantana, block I.
	(6) Tramline and laying 6 furlongs of line and road repairs.
	(7) Elephant catching operations.
„ 1919–20 ...	(1) Tramming and carting to Pollachi, timber felled and dragged in 1918–19, coupe I.
	(2) Felling and dragging timber to be cut as prescribed in coupe II.
	(3) Weeding on the 25 acres of coupe I.
	(4) Concentrated regeneration in coupe II, 25 acres.
	(5) Second pulling lantana in block I.
	(6) First pulling lantana in block II.
	(7) Broadcast sowing of teak in block II.
	(8) Fire protection.
	(9) Tramline and road repairs.
	(10) Elephant catching operations.
„ 1920–21 ...	(1) Tramming and carting to Pollachi timber felled in coupe II.
	(2) Felling and dragging timber to be cut as prescribed in coupe III.
	(3) Weeding in 25 acres of coupe I.
	(4) „ 25 „ II.
	(5) Concentrated regeneration in 25 acres in coupe III.
	(6) Third pulling of lantana in block I.
	(7) Second „ „ II.
	(8) First „ „ III.
	(9) Broadcast sowing of teak seeds in block III.
	(10) Fire protection.
	(11) Tramline and road repairs.
	(12) Elephant catching operations.

(*e*) *Tabular statement of operations to be carried out if sanction is given to start works under this plan in March* 1918—cont.

Financial.	
Year 1921–22 ...	(1) Tramming and carting to Pollachi timber felled in coupe III.
	(2) Felling and dragging timber to be cut as prescribed in coupe IV.
	(3) Weeding in 25 acres of coupe I (final weeding).
	(4) Weeding in 25 acres of coupe II.
	(5) ,, ,, III.
	(6) Concentrated regeneration in coupe IV, 25 acres.
	(7) Supplementary lantana pulling in block I.
	(8) Third pulling of lantana in block II.
	(9) Second ,, ,, III.
	(10) First ,, ,, IV.
	(11) Broadcast sowing of teak seeds in lantana, block I.
	(12) Fire protection.
	(13) Elephant catching operations.
	(14) Tramline and road repairs.
,, 1922–23 ...	(1) Tramming and carting to Pollachi timber felled in coupe IV.
	(2) Felling and dragging timber to be cut as prescribed in coupe V.
	(3) Weeding 25 acres in coupe II (final weeding).
	(4) Weeding 25 acres in coupe III.
	(5) ,, ,, IV.
	(6) Concentrated regeneration in coupe V, 25 acres.
	(7) Supplementary lantana pulling in blocks I and II.
	(8) Third pulling of lantana in block III.
	(9) Second ,, ,, IV.
	(10) First ,, ,, V.
	(11) Broadcast sowing of teak seeds in lantana, block V.
	(12) Fire protection.
	(13) Elephant catching operations.
	(14) Tramline and road repairs.
,, 1923–24 ...	(1) Tramming to Pollachi of timber felled in coupe V.
	(2) Felling and dragging timber to be cut as prescribed in coupe VI.
	(3) Weeding 25 acres in coupe III (final weeding).
	(4) Weeding 25 acres in coupe IV.
	(5) ,, ,, V.
	(6) Concentrated regeneration in coupe VI, 25 acres.
	(7) Supplementary lantana pulling in blocks I, II and III.
	(8) Third pulling of lantana in block IV.
	(9) Second ,, ,, V.
	(10) First ,, ,, VI.
	(11) Broadcast sowing of teak seeds in lantana, block VI.
	(12) Fire protection.
	(13) Elephant catching operations.
	(14) Upkeep of steam tramline.

The work in other years is similar with the thinning of concentrated regeneration of teak woods and the introduction and tending of the underwood as prescribed.

(*f*) *Note.*—In the latter part of 1917 an urgent demand for timber squares for the Munitions Board was received. The supply of squares of heartwood at least 12 inches square and 25 feet long was at once put in hand. Trees nearest to the tramline were selected. The work is still in progress. The sizes and outturn, and locality in which these are felled have been put on record, so that credit may be given to them towards the 100,000 cubic feet of timber to be felled annually.

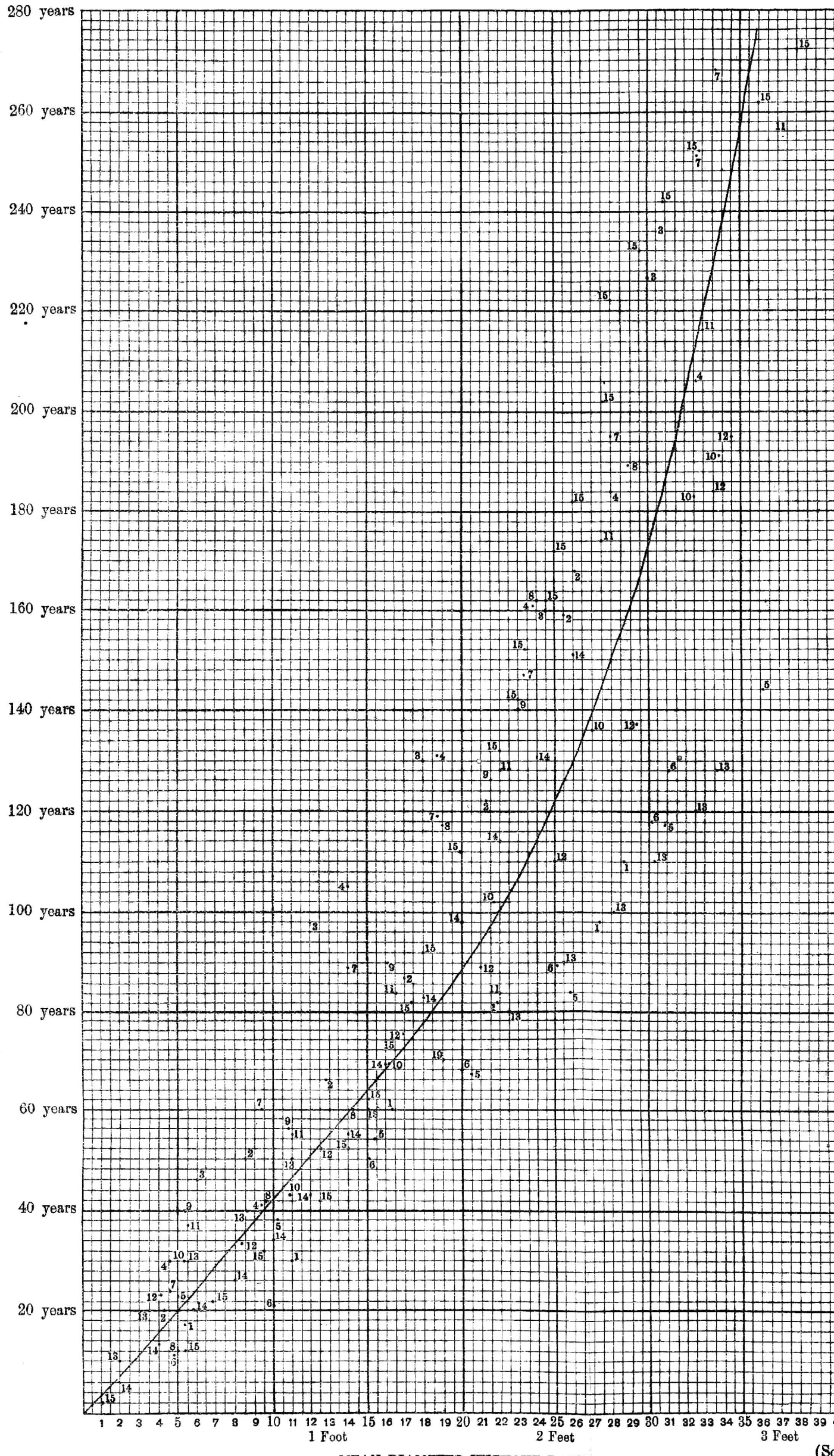
(vi) APPENDICES

(*a*) MAPS.*

1. Map showing the old compartments and the portion on which enumeration has been now carried out and the new working circle.
2. Maps showing stock of marketable timber in Mount Stuart and Ulandi working circles.
3. Map showing the lantana area and coupes in which it is to be eradicated under the new scheme and fire lines.
4. Map showing the proposed tramway line routes and the new exploitation coupes.
5. Diameter curve for teak.

No. 1653

* Number 4 alone printed separately; others not printed.



MEAN DIAMETER WITHOUT BARK

(Sd.) H. Wood.
4-3-18

Reg. No. 187
Copies 258

Zinco., Survey office, Madras.
1919

APPENDIX (b) (1).

Calculations of the number of trees of each girth class in old compartment I, Tekadi leased forest below the 6—7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	61	1·8	109	60	1·8	108	..	1·8	..	..	1·8	..
6–12 ,, ..	22		39	218		392	34		61	79		142
1–2 feet ..	53		95	182		327	49		88	116		208
2–3 ,, ..	87		156	62		111	50		90	108		194
3–4 ,, ..	223		401	29		52	83		149	207		372
4–5 ,, ..	262		471	44		79	100		180	253		455
5–6 ,, ..	206		370	21		37	91		163	194		349
Total ..	..	..	1,641	..	..	1,106	..	..	731	..	..	1,720
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	157		282	9		16	1		1	3		5
1–2 feet ..	125		228	5		9	1		1	5		9
2–3 ,, ..	98		176	1		1	1		1	5		3
3–4 ,, ..	144		259	3		5	..		..	7		12
4–5 ,, ..	185		333	..		..	1		1	7		12
5–6 ,, ..	147		264	1		1	1		1	4		7
Total ..	..	..	1,542	..	..	32	..	..	5	..	..	54
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	20		36	156		280	71		127	37		66
1–2 feet ..	24		43	68		122	473		851	78		140
2–3 ,, ..	38		68	54		97	661		1,189	69		124
3–4 ,, ..	50		90	55		99	313		563	102		183
4–5 ,, ..	42		75	45		81	96		172	65		117
5–6 ,, ..	24		43	15		27	46		82	36		64
Total ..	..	..	355	..	..	706	..	..	2,984	..	..	694

Total number of trees below the 6—7 feet girth class in compartment No. I—

Teak .. .. .. ,, ..	1,641	Species at present unsaleable	4,739
Rosewood	1,106		
Other superior species	4,084	Grand total ..	11,570

Calculations of the number of trees of each girth class in old compartment II, Tekadi leased forest, etc.

	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	1,356	2·5	3,390	391	2·5	977	..	2·5	..	..	2·5	..
6–12 ,, ..	258		645	761		1,902	237		592	327		817
1–2 feet ..	80		200	503		1,257	306		765	222		555
2–3 ,, ..	95		237	131		327	183		457	151		377
3–4 ,, ..	144		360	55		137	227		567	188		470
4–5 ,, ..	213		532	28		70	181		452	132		330
5–6 ,, ..	181		452	19		47	180		450	114		285
Total ..	2,327	..	5,816	1,888	..	4,717	1,314	..	3,283	1,134	..	2,834
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	2·5	..				..	2·5	..	..	2·5	..
6–12 ,, ..	361		902				44		110	3		7
1–2 feet ..	180		450				69		172	2		5
1–3 ,, ..	88		220		Nil.		66		165	3		7
3–4 ,, ..	53		132				107		267	5		12
4–5 ,, ..	43		107				58		145	4		10
5–6 ,, ..	34		85				25		62	3		7
Total ..	759	..	..	..	..	..	369	..	921	20	..	48
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	2·5	..	..	2·5	..	..	2·5	..	..	2·5	..
6–12 ,, ..	47		117	65		162	84		210	16		40
1–2 feet ..	33		82	28		70	429		1,072	26		65
2–3 ,, ..	34		85	18		45	411		1,027	13		32
3–4 ,, ..	32		80	18		45	175		437	25		62
4–5 ,, ..	22		55	8		20	73		182	19		47
5–6 ,, ..	17		42	7		17	24		60	9		22
Total ..	185	..	461	144	..	359	1,196	..	2,988	108	..	268

Total number of trees below the 6—7 feet girth class in compartment No. II—

Teak	5,816	Species at present unsaleable	4,076
Rosewood	4,717		
Other superior species	8,982	Grand total ..	23,591

Calculations of the number of trees of each girth class in old compartment No. III, Tekadi leased Forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	1,382	2·0	2,764	659	2·0	1,318	..	2·0	..	..	2·0	..
6–12 ,, ..	78		156	746		1,492	89		178	196		392
1–2 feet ..	279		558	684		1,368	220		440	175		350
2–3 ,, ..	339		678	210		420	175		350	128		256
3–4 ,, ..	379		758	100		200	213		426	174		348
4–5 ,, ..	389		778	36		72	204		408	134		268
5–6 ,, ..	335		670	23		46	170		340	141		282
Total ..	..	..	6,362	..	..	4,916	..	..	2,142	..	..	1,896
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	2·0	..	..	2·0	..	..	2·0	..	..	2·0	..
6–12 ,, ..	872		1,744	198		396	15		30	1		2
1–2 feet ..	471		942	224		448	8		16	5		10
2–3 ,, ..	164		328	72		144	9		18	4		8
3–4 ,, ..	175		350	58		116	18		36	1		2
4–5 ,, ..	158		316	10		20	18		36	2		4
5–6 ,, ..	128		256	3		6	2		4	2		4
Total ..	..	..	3,936	..	..	1,130	..	..	140	..	..	30
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	2·0	..	..	2·0	..	..	2·0	..	..	2·0	..
6–12 ,, ..	15		30	22		44	66		132	37		32
1–2 feet ..	21		42	21		42	343		686	37		74
2–3 ,, ..	34		68	9		18	452		904	29		74
3–4 ,, ..	49		98	10		20	482		964	19		58
4–5 ,, ..	27		54	6		12	280		560	17		38
5–6 ,, ..	22		44	3		6	128		256	16		34
Total ..	..	..	336	..	..	142	..	..	3,502	..	..	310

Total number of trees below the 6–7 feet girth class in compartment No. III—

Teak	6,362	Species at present unsaleable	4,290
Rosewood	4,916		
Other superior species	9,274	Grand total ..	24,842

Calculations of the number of trees of each girth class in old compartment No. IV, Tekadi leased forest, etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	1,112	1·0	1,112	384	1·0	384	..	1·0	..	..	1·0	..
6–12 ,, ..	121		121	788		788	336		336	509		509
1–2 feet ..	134		134	632		632	564		564	378		378
2–3 ,, ..	185		185	290		290	379		379	264		264
3–4 ,, ..	227		227	119		119	307		307	275		275
4–5 ,, ..	274		274	41		41	235		235	295		295
5–6 ,, ..	307		307	29		29	225		225	245		245
Total ..	..	..	2,360	..	..	2,283	..	..	2,046	..	..	1,966
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·0	..	..	1·0	..	..	1·0	..	..	1·0	..
6–12 ,, ..	686		686	1,290		1,290	63		63	19		19
1–2 feet ..	601		601	523		523	48		48	28		28
2–3 ,, ..	231		231	198		198	55		55	23		23
3–4 ,, ..	260		260	144		144	71		71	20		20
4–5 ,, ..	305		305	99		99	32		32	12		12
5–6 ,, ..	288		288	41		41	20		20	13		13
Total ..	..	..	2,371	..	..	2,295	..	..	289	..	..	115
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	1·0	..	..	1·0	..	..	1·0	..	..	1·0	..
6–12 ,, ..	25		25	61		61	91		91	69		69
1–2 feet ..	24		24	28		28	895		895	90		90
2–3 ,, ..	23		23	13		13	1,287		1,287	48		48
3–4 ,, ..	29		29	9		9	904		904	33		33
4–5 ,, ..	14		14	15		15	449		449	24		24
5–6 ,, ..	11		11	14		14	196		196	14		14
Total ..	..	..	126	..	..	140	..	..	3,822	..	..	278

Total number of trees below the 6–7 feet girth class in compartment No. IV—

Teak	2,360	Species at present unsaleable	4,366
Rosewood	2,283		
Other superior species	9,082	Grand total ..	18,091

Calculations of the number of trees of each girth class in old compartment No. V, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	1,156	1·6	1,849	256	1·6	409	..	1·6	..	..	1·6	..
6–12 ,, ..	432		691	178		284	283		452	496		793
1–2 feet ..	138		220	135		216	296		473	350		560
2–3 ,, ..	85		136	53		84	192		307	156		249
3–4 ,, ..	127		203	36		57	252		403	121		193
4–5 ,, ..	151		241	17		27	240		384	60		96
5–6 ,, ..	134		214	3		4	186		297	45		72
Totai ..	..		3,554	..		1,081	..		2,316	..		1,963
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	1·6	..		1·6		..	1·6	..	..	1·6	..
6–12 ,, ..	142		227				62		99	5		8
1–2 feet ..	103		164				81		129	5		8
2–3 ,, ..	44		70	Nil.			54		86	6		9
3–4 ,, ..	33		52				41		65	1		1
4–5 ,, ..	22		35				36		57	1		1
5–6 ,, ..	7		11				36		57	..		..
Total ..	..	..	559	..	..	..	..	..	493	..	..	..
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	1·6	..	..	1·6	..	..	1·6	..	..	1·6	..
6–12 ,, ..	12		19	9		14	51		81	5		8
1–2 feet ..	17		27	10		16	127		203	19		30
2–3 ,, ..	11		17	3		4	78		124	6		9
3–4 ,, ..	20		32	4		6	45		72	3		4
4–5 ,, ..	9		14	2		3	9		14	7		11
5–6 ,, ..	2		3	2		3	4		6	2		3
Total ..	.	..	112	..	..	4	..	..	500	..	..	65

Total number of trees below the 6–7 feet girth class in compartment No. V.—

Teak	3,554	Species at present unsaleable	723
Rosewood	1,081		
Other superior species	5,358	Grand total ..	10,716

Old compartment No. VI, Tekadi leased forest, etc.

	TEAK.			ROSEWOOD.			KARUMARUDA.			PILLAMARUDU.		
0–6 inches ..	1,137	1·8	2,046	591	1·8	1,063	..	1·8	..	..	1·8	..
6–12 ,, ..	75		135	388		698	170		306	221		397
1–2 feet ..	109		196	363		653	158		284	191		343
2–3 ,, ..	145		261	115		207	195		351	185		333
3–4 ,, ..	172		309	30		54	216		388	173		311
4–5 ,, ..	258		464	23		41	216		388	150		270
5–6 ,, ..	217		390	13		23	146		262	90		162
Total ..	..		3,601	..		2,739	..		1,979	..		1,816
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	267		480	129		232	58		104	6		10
1–2 feet ..	247		444	115		207	132		237	12		21
2–3 ,, ..	136		244	61		109	160		288	8		14
3–4 ,, ..	133		239	52		93	112		201	4		7
4–5 ,, ..	74		133	28		50	45		81	1		1
5–6 ,, ..	54		97	13		23	19		34	2		3
Total ..	..	..	1,637	..	..	714	..	..	945	..	..	56
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	22		39	36		64	123		221	44		79
1–2 feet ..	40		72	35		63	779		1,402	47		84
2–3 ,, ..	24		43	12		21	597		1,074	31		55
3–4 ,, ..	21		37	10		18	251		451	22		39
4–5 ,, ..	16		28	16		28	37		66	5		9
5–6 ,, ..	15		27	11		19	13		23	16		28
Total ..	..	..	246	..	..	213	..	..	3,237	..	..	249

Total number of trees below the 6–7 feet girth class in compartment No. VI.—

Teak	3,801	Species at present unsaleable ..	3,990
Rose wood	2,737		
Other superior species	7,147	Total ..	17,675

Calculations of the number of trees of each girth class in old compartment No. VII, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	573	1·7	974	250	1·7	425	..	1·7	..	..	1·7	..
6–12 ,, ..	48		81	412		700	131		222	279		474
1–2 feet ..	111		188	456		775	291		494	225		382
2–3 ,, ..	84		142	199		338	175		297	138		234
3–4 ,, ..	115		195	93		158	163		277	156		265
4–5 ,, ..	171		290	65		110	135		229	167		283
5–6 ,, ..	195		331	36		61	148		251	105		178
Total ..	..	..	2,201	..	..	2,567	..	..	1,770	..	..	1,816
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·7	..	..	1·7	..	..	1·7	..	..	1·7	..
6–12 ,, ..	1,597		2,714	100		170	14		23	7		11
1–2 feet ..	1,132		1,924	134		227	18		30	29		49
2–3 ,, ..	338		574	50		85	22		37	18		30
3–4 ,, ..	241		409	24		40	23		39	18		30
4–5 ,, ..	195		331	24		40	9		15	7		11
5–6 ,, ..	135		229	6		10	7		11	6		10
Total ..	..	..	6,181	..	.	572	..	..	155	..	..	141
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	1·7	..	..	1·7	..	..	1·7	..	..	1·7	..
6–12 ,, ..	11		18	29		49	83		141	98		166
1–2 feet ..	3		5	15		25	960		1,632	100		170
2–3 ,, ..	3		5	18		30	1,080		1,836	56		95
3–4 ,, ..	8		13	14		23	603		1,025	27		45
4–5 ,, ..	9		15	11		18	272		462	18		30
5–6 ,, ..	10		17	11		18	125		212	11		18
Total ..	..	..	73	..	..	163	..	..	5,308	..	..	524

Total number of trees below the 6–7 feet girth class in compartment No. VII—

Teak	2,201	Species at present unsaleable	6,068
Rosewood	2,567		
Other superior species	10,635	Grand total ..	21,471

Old compartment No. VIII, Tekadi leased forest, etc.

	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	268	1·7	455	108	1·7	183	..	1·7	..	..	1·7	..
6–12 ,, ..	54		91	132		224	34		57	147		249
1–2 feet ..	29		49	89		151	76		129	102		173
2–3 ,, ..	46		78	52		88	62		105	65		110
3–4 ,, ..	66		112	24		40	82		139	96		163
4–5 ,, ..	107		181	14		23	37		62	99		168
5–6 ,, ..	153		260	11		18	37		62	128		217
Total ..	..	..	1,326	..	..	727	..	..	554	..	..	1,080
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·7	..	..	1·7	..	..	..	..	..	1·7	..
6–12 ,, ..	656		1,115	824		1,400	..	..	..	7		11
1–2 feet ..	493		838	436		741	..	..	..	14		23
2–3 ,, ..	205		348	281		477	..	..	..	9		15
3–4 ,, ..	106		180	175		297	..	..	..	11		18
4–5 ,, ..	79		134	91		154	..	..	..	13		22
5–6 ,, ..	92		156	41		69	..	..	..	6		10
Total ..	..	..	2,771	..	..	3,138	..	..	..	..	..	99
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	1·7	..	..	1·7	..	..	1·7	..	..	1·7	..
6–12 ,, ..	8		13	18		30	61		103	34		57
1–2 feet ..	6		10	19		32	377		640	61		103
2–3 ,, ..	1		1	12		20	687		1,167	35		59
3–4 ,, ..	2		3	4		6	617		1,048	25		42
4–5 ,, ..	3		5	2		3	258		438	12		20
5–6 ,, ..	..		..	3		5	100		170	12		20
Total ..	..	..	32	..	..	96	..	..	3,566	..	..	301

Total number of trees below the 6–7 feet girth class in compartment No. VIII—

Teak	1,226	Species at present unsaleable	3,995
Rosewood	727		
Other superior species	7,642	Grand total ..	13,590

Calculations of the number of trees of each girth class in old compartment No. IX, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	165	2·0	330	35	2·0	70	..	2·0	..	..	2·0	..
6–12 ,, ..	23		46	92		184	28		56	115		230
1–2 feet ..	16		32	87		174	54		108	54		108
2–3 ,, ..	24		48	29		58	33		66	33		66
3–4 ,, ..	37		74	22		44	32		64	43		86
4–5 ,, ..	87		174	20		40	33		66	51		102
5–6 ,, ..	65		130	17		34	24		48	56		112
Total ..	..	..	834	..	..	604	..	..	408	..	..	704
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	20	..	..	2·0	..	..	2·0	..	..	2·0	..
6–12 ,, ..	174		346	129		258	..		..	2		4
1–2 feet ..	134		268	80		160	1		2	4		8
2–3 ,, ..	50		100	41		82	..		..	5		10
3–4 ,, ..	41		82	38		76	..		..	3		6
4–5 ,, ..	53		106	29		58	..		..	9		18
5–6 ,, ..	49		98	15		30	1		2	2		4
Total ..	..	..	1,002	..	..	664	..	..	4	..	..	50
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
06 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6–12 ,, ..	6		12	25		50	95		190	18		36
1–2 feet ..	11		22	12		24	530		1,060	27		54
2–3 ,, ..	15		30	6		12	776		1,552	30		60
3–4 ,, ..	18		36	4		8	539		1,078	15		30
4–5 ,, ..	15		30	4		8	199		398	11		22
5–6 ,, ..	20		40	6		12	61		122	11		22
Total ..	..	..	170	..	..	114	..	..	4,400	..	..	224

Total number of trees below the 6–7 feet girth class in compartment No. IX—

Teak	834	Species at present unsaleable	4,908
Rosewood	604		
Other superior species	2,832	Grand total ..	9,178

Calculation of the number of trees of each girth class in old compartment No. X, Tekadi leased forest, etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	84	2·3	193	19	2·3	43	..	2·3	..	..	2·3	..
6–12 ,, ..	10		23	59		135	20		46	123		282
1–2 feet ..	17		39	78		179	40		92	184		423
2–3 ,, ..	10		23	29		66	28		64	105		241
3–4 ,, ..	27		62	36		32	19		43	94		216
4–6 ,, ..	49		112	18		41	19		43	134		308
5–6 ,, ..	48		110	17		39	26		59	108		248
Total ..	..	..	562	..	..	535	..	..	347	..	..	1,718
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6–12 ,, ..	247		568	148		340	..		..	1		2
1–2 feet ..	341		784	207		476	..		..	9		20
2–3 ,, ..	125		287	117		269	..		..	6		13
3–4 ,, ..	97		223	74		170	1		2	4		9
4–5 ,, ..	86		197	42		96	3		6	1		2
5–6 ,, ..	85		195	36		82	..		..	1		9
Total ..	..	..	2,254	..	..	1,433	..	..	8	..	..	48
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6–12 ,, ..	2		4	8		18	48		110	42		96
1–2 feet ..	3		6	21		48	318		731	82		188
2–3 ,, ..	1		2	8		18	413		949	52		119
3–4 ,, ..	5		11	10		23	435		1,000	24		55
4–5 ,, ..	2		4	8		18	180		414	12		27
5–6 ,, ..	5		11	6		13	132		303	10		23
Total ..	..	..	38	..	..	138	..	..	3,507	..	..	508

Total number of trees below the 6–7 feet girth class in compartment No. X—

Teak	562	Species at present unsaleable	4,191
Rosewood	585		
Other superior species	5,808	Grand total ..	11,146

Calculations of the number of trees of each girth class in old compartment No. XI, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Teak. Number of trees in the sample plot.	Multiplier.	Teak. Total number of trees in the compartment.	Rosewood. Number of trees in the sample plot.	Multiplier.	Rosewood. Total number of trees in the compartment.	Karumarudu. Number of trees in the sample plot.	Multiplier.	Karumarudu. Total number of trees in the compartment.	Pillamarudu. Number of trees in the sample plot.	Multiplier.	Pillamarudu. Total number of trees in the compartment.
0— 6 inches ..	328	2·4	787	28	2·4	67	..	2·4	..	..	2·4	..
6—12 ,, ..	67		160	120		288	66		158	199		477
1–2 feet ..	57		136	79		189	129		309	211		506
2–3 ,, ..	102		244	67		160	71		170	156		374
3–4 ,, ..	144		345	56		134	139		333	238		571
4–5 ,, ..	217		520	74		177	83		199	235		564
5–6 ,, ..	212		508	29		69	57		136	182		436
Total ..	1,127	..	2,700	453	..	1,084	545	..	1,305	1,221	..	2,928
	Venteak.			**Irul.**			**Vengai.**			**Manjakadambai.**		
6—2 inches ..	368	2·4	883	664	2·4	1,593	1	2·4	2	10	2·4	24
1–2 feet ..	293		703	549		1,317	..		..	13		31
2–3 ,, ..	138		331	288		691	..		..	13		31
3–4 ,, ..	204		489	252		604	..		..	7		16
4–5 ,, ..	217		520	193		463	1		2	2		4
5–6 ,, ..	154		369	73		175	..		..	3		7
Total ..	1,374	..	..	..	..	..	2	..	4	48	..	113
	Vagai.			**Poovathi.**			**Thadashi.**			**Nirkadambai.**		
6—12 inches ..	14	2·4	33	24	2·4	57	68	2·4	163	24	2·4	57
1–2 feet ..	25		60	10		24	342		820	41		98
2–3 ,, ..	17		40	9		21	457		1,096	41		98
3–4 ,, ..	18		43	9		21	448		1,075	25		60
4–5 ,, ..	12		28	8		19	312		748	20		48
5–6 ,, ..	11		26	7		16	180		432	5		12
Total ..	97	..	230	67	..	158	1,807	..	4,334	156	..	373

Total number of trees below the 6–7 feet girth class in compartment No. XI—

Teak	2,700	Species at present unsaleable	5,095
Rosewood	1,084		
Other superior species	12,488	Grand total ..	21,367

Old compartment No. XII, Tekadi leased forest, etc.

	Teak. Number of trees in the sample plot.	Multiplier.	Teak. Total number of trees in the compartment.	Rosewood. Number of trees in the sample plot.	Multiplier.	Rosewood. Total number of trees in the compartment.	Karumarudu. Number of trees in the sample plot.	Multiplier.	Karumarudu. Total number of trees in the compartment.	Pillamarudu. Number of trees in the sample plot.	Multiplier.	Pillamarudu. Total number of trees in the compartment.
0— 6 inches ..	435	1·8	7,383	31	1·8	55	..	1·8	..	..	1·8	..
6—12 ,, ..	24		43	109		196	35		63	126		226
1–2 feet ..	48		86	96		172	74		133	124		223
2–3 ,, ..	86		154	44		79	57		102	118		212
3–4 ,, ..	137		246	39		70	72		129	146		262
4–5 ,, ..	196		352	34		61	42		75	182		327
5–6 ,, ..	220		396	30		54	68		122	144		259
Total ..	1,146	..	8,660	383	..	687	348	..	624	840	..	1,509
	Venteak.			**Irul.**			**Vengai.**			**Manjakadambai.**		
6—12 inches ..	408	1·8	734	821	1·8	1,477	1	1·8	1	4	1·8	7
1–2 feet ..	409		736	666		1,198	2		3	17		30
2–3 ,, ..	142		255	321		577	..		..	10		18
3–4 ,, ..	142		255	194		349	..		..	10		18
4–5 ,, ..	130		234	127		228	2		3	7		12
5–6 ,, ..	120		216	61		109	4		7	9		16
Total ..	1,351	..	2,430	2,190	..	3,938	9	..	14	57	..	101
	Vagai.			**Poovathi.**			**Thadashi.**			**Nirkadambai.**		
6—12 inches ..	1	1·8	1	18	1·8	32	22	1·8	39	45	1·8	81
1–2 feet ..	3		5	17		30	284		511	61		109
2–3 ,, ..	2		3	8		14	407		732	54		97
3–4 ,, ..	5		9	3		5	534		961	43		77
4–5 ,, ..	4		7	3		5	220		396	15		27
5–6 ,, ..	3		5	2		3	124		223	11		19
Total ..	18	..	30	51	..	89	1,591	..	2,862	229	..	410

Total number of trees below the 6–7 feet girth class in compartment No. XII—

Teak	8,660	Species at present unsaleable	3,391
Rosewood	687		
Other superior species	8,661	Grand total ..	21,354

Calculations of the number of trees of each girth class in old compartment No. XIII, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Teak. Number of trees in the sample plot.	Multiplier.	Teak. Total number of trees in the compartment.	Rosewood. Number of trees in the sample plot.	Multiplier.	Rosewood. Total number of trees in the compartment.	Karumarudu. Number of trees in the sample plot.	Multiplier.	Karumarudu. Total number of trees in the compartment.	Pillamarudu. Number of trees in the sample plot.	Multiplier.	Pillamarudu. Total number of trees in the compartment.
0— 6 inches ..	148	1·7	251	66	1·7	112	..	1·7	..	..	1·7	..
6— 12 ,, ..	35		59	129		219	56		95	144		244
1—2 feet ..	41		69	166		282	134		227	148		251
2–3 ,, ..	35		59	68		115	84		142	108		183
3–4 ,, ..	97		164	78		132	99		168	124		210
4–5 ,, ..	126		214	52		88	59		100	137		232
5-6 ,, ..	145		246	28		47	52		88	100		170
Total ..	..	..	1,062	..	..	995	..	..	820	..	..	1,290
	Venteak.			**Irul.**			**Vengai.**			**Manjakadmbai.**		
0— 6 inches ..	..	1·7	..	..	1·7	..	..	1·7	..	..	1·7	..
6— 12 ,, ..	300		510	684		1,162	3		5	4		6
1–2 feet ..	281		477	576		979	6		10	16		27
2–3 ,, ..	78		132	299		508	2		3	7		11
3–4 ,, ..	115		195	209		355	4		6	9		15
4–5 ,, ..	98		166	72		122	7		11	2		3
5–6 ,, ..	73		124	22		37	5		8	3		5
Total ..	..	..	1,604	..	..	3,163	..	..	43	..	..	67
	Vagai.			**Poovathi.**			**Thadashi.**			**Nirkadambai.**		
0— 6 inches ..	..	1·7	..	..	1·7	..	..	1·7	..	..	1·7	..
6--12 ,, ..	12		20	15		25	15		25	40		68
1–2 feet ..	18		30	14		23	311		528	50		85
2–3 ,, ..	9		15	16		27	462		785	36		61
3–4 ,, ..	7		11	12		20	381		647	12		20
4–5 ,, ..	8		13	2		3	170		289	13		22
5–6 ,, ..	5		8	7		11	57		96	5		8
Total ..	..	..	97	..	..	109	..	..	2,370	..	..	264

Total number of trees below the 6–7 feet girth class in compartment No. XIII—

Teak	1,062	Species at present unsaleable	2,840
Rosewood	995		
Other superior species	6,987	Grand total ..	11,884

Old compartment No. XIV, Tekadi leased forest, etc.

Girth.	Teak. Number of trees in the sample plot.	Multiplier.	Teak. Total number of trees in the compartment.	Rosewood. Number of trees in the sample plot.	Multiplier.	Rosewood. Total number of trees in the compartment.	Karumarudu. Number of trees in the sample plot.	Multiplier.	Karumarudu. Total number of trees in the compartment.	Pillamarudu. Number of trees in the sample plot.	Multiplier.	Pillamarudu. Total number of trees in the compartment.
0— 6 inches ..	321	1·8	577	13	1·8	23	..	1·8	..	..	1·8	..
6—12 ,, ..	40		72	40		72	7		12	47		184
1–2 feet ..	49		88	63		113	40		72	94		169
2–3 ,, ..	56		100	45		81	39		70	82		147
3–4 ,, ..	100		180	30		54	43		77	110		198
4–5 ,, ..	133		239	24		43	30		54	112		201
5–6 ,, ..	143		257	12		21	31		55	116		208
Total ..	..	..	1,513	..	..	407	..	..	340	..	..	1,007
	Venteak.			**Irul.**			**Vengai.**			**Manjakadambai.**		
0— 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6—12 ,, ..	217		390	633		1,139	2		3	..		..
1–2 feet ..	276		496	855		1,539	3		5	4		7
2–3 ,, ..	101		181	362		651	..		..	5		9
3–4 ,, ..	140		252	232		417	..		..	9		16
4–5 ,, ..	105		189	192		345	2		3	2		3
5–6 ,, ..	108		194	136		244	2		3	3		5
Total ..	..	..	1,702	..	..	4,335	..	..	14	..	..	40
	Vagai.			**Poovathi.**			**Thadashi.**			**Nirkadambai.**		
0— 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6—12 ,, ..	10		18	2		3	12		21	9		16
1–2 feet ..	9		16	7		12	200		360	18		32
2–3 ,, ..	8		14	2		3	296		532	17		30
3–4 ,, ..	6		10	6		10	267		480	9		16
4–5 ,, ..	12		21	8		14	130		234	6		10
5–6 ,, ..	1		1	4		7	79		142	5		9
Total ..	..	..	80	49	..	49	..	..	1,769	..	..	113

Total number of trees below the 6–7 feet girth class in compartment No. XIV—

Teak	1,513	Species at present unsaleable	2,011
Rosewood	407		
Other superior species	7,438	Grand total ..	11,369

Calculations of the number of trees of each girth class in old compartment No. XV, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	252	2·1	529	47	2·1	98	..	2·1	..	..	2·1	..
6—12 „ ..	34		71	94		197	46		96	170		357
1–2 feet ..	53		111	82		172	88		184	156		327
2–3 „ ..	41		86	33		69	49		102	76		159
3–4 „ ..	47		98	19		39	27		56	61		128
4–5 „ ..	51		107	8		16	29		60	47		98
5–6 „ ..	42		88	7		14	37		77	46		96
Total ..	..	..	1,090	..	..	605	..	..	575	..	..	1,165
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0— 6 inches ..	..	2·1	..	..	2·1	..	..	2·1	..	..	2·1	..
6—12 „ ..	451		947	897		1,883	..		..	8		16
1–2 feet ..	667		1,400	848		1,780	..		..	4		8
2–3 „ ..	227		476	328		688	2		4	3		6
3–4 „ ..	120		252	157		329	2		4	1		2
4–5 „ ..	61		128	101		212	1		2	3		6
5–6 „ ..	73		153	60		126	..		..	2		4
Total ..	..	..	3,356	..	..	5,018	..	..	10	..	..	42
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0— 6 inches ..	..	2·1	..	..	2·1	..	..	2·1	..	..	2·1	..
6—12 „ ..	9		18	10		21	67		140	44		92
1–2 feet ..	6		12	3		6	514		1,079	29		60
2–3 „ ..	3		6	3		6	799		1,677	18		37
3–4 „ ..	7		14	5		10	500		1,050	6		12
4–5 „ ..	5		10	5		10	191		401	8		16
5–6 „ ..	4		8	5		10	69		144	6		12
Total ..	..	..	68	..	..	63	..	..	4,491	..	..	229

Total number of trees below the 6–7 feet girth class in compartment No. XV—

Teak	1,090	Species at present unsaleable	4,851
Rosewood	605		
Other superior species	10,166	Grand total ..	16,712

Old compartment No. XVI, Tekadi leased forest, etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	300	1·6	480	97	1·6	155	..	1·6	..	..	1·6	..
6—12 „ ..	39		62	113		180	37		59	185		296
1–2 feet ..	49		78	185		296	78		124	143		228
2–3 „ ..	42		67	54		86	37		59	87		139
3–4 „ ..	69		110	40		64	50		80	94		150
4–5 „ ..	75		120	22		35	49		78	79		126
5–6 „ ..	132		211	11		17	51		81	72		115
Total ..	..	..	1,128	..	..	833	..	..	481	..	..	1,054
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0— 6 inches ..	..	1·6	..	..	1·6	..	..	1·6	..	..	1·6	..
6—12 „ ..	387		619	90		144	3		4	2		3
1–2 feet ..	513		820	122		195	2		3	9		14
2–3 „ ..	155		248	54		86	2		3	2		3
3–4 „ ..	134		214	37		59	1		1	1		1
4–5 „ ..	174		278	29		46	1		1	..		..
5–6 „ ..	143		228	8		12	..		..	1		1
Total ..	..	..	2,407	..	..	542	..	..	12	..	..	22
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0— 6 inches ..	..	1·6	..	..	1·6	..	..	1·6	..	..	1·6	..
6—12 „ ..	15		24	37		59	136		217	21		33
1–2 feet ..	26		41	23		36	1,030		1,648	29		46
2–3 „ ..	13		20	20		32	1,339		2,142	29		46
3–4 „ ..	18		28	37		59	596		953	17		27
4–5 „ ..	13		20	13		20	139		222	19		30
5–6 „ ..	15		24	16		25	40		64	16		25
Total ..	..	..	157	..	..	231	..	..	5,246	..	..	207

Total number of trees below the 6–7 feet girth class in compartment No. XVI—

Teak	1,128	Species at present unsaleable	5,841
Rosewood	833		
Other superior species	4,518	Grand total ..	12,320

Calculations of the number of trees of each girth class in old compartment No. XVII, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	438	2	876	139	2	278	..	2	..	..	2	..
6–12 ,, ..	100		200	187		374	43		86	155		312
1–2 feet ..	77		154	204		408	68		136	115		230
2–3 ,, ..	66		132	72		144	38		76	79		158
3–4 ,, ..	161		322	50		100	72		144	127		254
4–5 ,, ..	190		380	25		50	85		170	120		240
5–6 ,, ..	181		362	20		40	81		162	89		178
Total ..	..	..	2,426	..	..	1,394	..	..	774	..	..	1,372
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	2	..				..	2	..	..	2	..
6–12 ,, ..	256		512				14		28	..		..
1–2 feet ..	272		544				16		32	5		10
2–3 ,, ..	95		190	Nil.			4		8	3		6
3–4 ,, ..	106		212				1		2	2		4
4–5 ,, ..	100		200				2		4	3		6
5–6 ,, ..	68		136				..		..	1		2
Total ..	..	..	1,794	..	..	..	..	..	74	..	..	28
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6–12 ,, ..	30		60	26		52	175		350	13		26
1–2 feet ..	38		76	18		36	816		1,632	7		14
2–3 ,, ..	31		62	26		52	815		1,630	13		26
3–4 ,, ..	26		52	12		24	409		818	13		26
4–5 ,, ..	30		60	19		38	57		114	9		18
5–6 ,, ..	22		44	8		16	18		36	3		6
Total ..	..	..	354	..	..	218	..	..	4,580	..	..	116

Total number of trees below the 6–7 feet girth class in compartment No. XVII—

Teak	2,426	Species at present unsaleable	5,268
Rosewood	1,394		
Other superior species	4,042	Grand total ..	13,130

Old compartment No. XVIII, Tekadi leased forest, etc.

Girth.												
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	1,011	1	1,011	237	1	237	..	1	..	..	1	..
6–12 ,, ..	86		86	166		166	92		92	555		555
1–2 feet ..	146		146	191		191	236		236	324		324
2–3 ,, ..	123		123	87		87	136		136	173		173
3–4 ,, ..	192		192	37		37	133		133	153		153
4–5 ,, ..	177		177	31		31	143		143	135		135
5–6 ,, ..	186		186	20		20	130		130	114		114
Total ..	..	..	1,921	..	..	769	..	..	870	..	..	1,454
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	1	..	..	1	..	..	1	..	..	1	..
6–12 ,, ..	1,321		1,321	1,784		1,784	5		5	7		7
1–2 feet ..	1,619		1,619	2,114		2,114	5		5	14		14
2–8 ,, ..	590		590	752		752	1		1	17		17
3–4 ,, ..	352		352	396		396	4		4	13		13
4–5 ,, ..	178		178	306		306	7		7	8		8
5–6 ,, ..	139		139	147		147	2		2	9		9
Total ..	..	..	4,199	..	..	5,499	..	..	24	..	..	68
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	1	..	..	1	..	..	1	..	..	1	..
6–12 ,, ..	7		7	19		19	169		169	59		59
1–2 feet ..	19		19	22		22	1,471		1,471	77		77
2–3 ,, ..	11		11	19		19	1,981		1,981	41		41
3–4 ,, ..	13		13	17		17	1,280		1,280	31		31
4–0 ,, ..	15		15	15		15	403		403	43		43
5–6 ,, ..	9		9	10		10	135		135	30		30
Total ..	..	..	74	..	..	102	..	..	5,439	..	..	281

Total number of trees below the 6–7 feet girth class in compartment No. XVIII—

Teak	1,921	Species at present unsaleable	5,896
Rosewood	769		
Other superior species	12,114	Grand total ..	20,700

Calculations of the number of trees of each girth class in old compartment No. XIX, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	263	2·3	604	30	2·3	69	..	2·3	..	..	2·3	..
6—12 ,, ..	72		165	63		144	38		87	271		623
1— 2 feet ..	127		292	93		213	91		209	176		404
2— 3 ,, ..	84		193	52		119	68		156	116		266
3— 4 ,, ..	79		181	46		105	75		172	139		319
4— 5 ,, ..	105		241	32		73	87		200	180		414
5— 6 ,, ..	98		225	21		48	65		149	70		161
Totol ..	..	..	1,901	..	..	771	..	..	973	..	..	2,187
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0— 6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6—12 ,, ..	596		1,370	567		1,304	..		..	3		6
1— 2 feet ..	905		2,081	847		1,948	1		2	11		25
2— 3 ,, ..	375		862	526		1,299	2		4	13		29
3— 4 ,, ..	175		407	285		655	1		2	6		13
4— 5 ,, ..	130		299	196		450	1		2	10		23
5— 6 ,, ..	44		101	86		197	..		..	2		4
Total ..	..	..	5,120	..	..	5,763	..	..	10	..	..	100
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0— 6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6—12 ,, ..	5		11	19		43	38		87	26		59
1— 2 feet ..	13		29	24		55	343		788	34		78
2— 3 ,, ..	13		29	34		78	852		1,952	58		133
3— 4 ,, ..	16		36	28		64	849		1,952	80		69
4— 5 ,, ..	19		43	44		101	334		814	19		43
5— 6 ,, ..	14		32	17		39	72		165	21		48
Total ..	..	..	180	..	..	380	..	..	5,765	..	..	430

Total number of trees below the 6–7 feet girth class in compartment No. XIX—

Teak	1,901	Species at present unsaleable ..	6755
Rosewood	771		
Other superior species	14,153	Grand total ..	23,580

Calculations of the number of trees of each girth class in old compartment No. XX, Tekadi leased forest, etc.

Girth.												
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	607	2	12,214	19	2	38	..	2	..	..	2	..
6—12 ,, ..	40		80	52		104	39		78	100		200
1— 2 feet ..	79		158	80		160	70		140	84		168
2— 3 ,, ..	94		188	48		95	56		112	70		140
3— 4 ,, ..	91		182	27		54	53		106	78		156
4— 5 ,, ..	146		292	10		32	66		132	101		202
5— 6 ,, ..	146		292	15		30	49		73	80		160
Total ..	..	..	2,406	..	..	514	..	..	646	..	..	1,026
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0— 6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6—12 ,, ..	164		328	1,024		2,048	..		..	7		14
1— 2 feet ..	138		276	1,324		2,648	1		2	6		12
2— 3 ,, ..	61		122	904		1,808	2		4	4		8
3— 4 ,, ..	100		200	469		938	3		9	4		8
4— 5 ,, ..	147		294	167		334	..		..	5		10
5— 6 ,, ..	138		266	67		134	..		..	2		4
Total ..	..	..	1,486	..	..	7,910	..	..	12	..	..	56
	VAGAI.			POOVATHI.			THADASHI			NIRKADAMBAI.		
0— 6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6—12 ,, ..	2		4	9		18	45		90	39		98
1— 2 feet ..	3		6	9		18	323		666	31		62
2— 3 ,, ..	2		4	5		10	653		1,306	21		42
3— 4 ,, ..	3		6	6		12	541		1,082	9		18
4— 5 ,, ..	5		10	4		8	209		418	5		10
5— 6 ,, ..	4		8	6		12	62		124	3		6
Total ..	..	..	38	..	..	78	..	..	3,686	..	..	236

Total number of trees below the 6–7 feet girth class in Compartment No. XX—

Teak	2,406	Species at present unsaleable ..	4,038
Rosewood	514		
Other superior species	11,136	Grand total ..	18,094

Calculations of the number of trees of each girth class in old compartment No. XXI, Tekadi leased forest below the 6–7 feet girth class.

Girth	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	533	2·2	1,172	45	2·2	99	..	2·2	..	..	2·2	..
6–12 ,, ..	60		132	130		286	44		96	183		402
1–2 feet ..	107		235	151		332	94		206	146		321
2–3 ,, ..	94		206	64		140	59		129	110		242
3–4 ,, ..	131		288	27		59	85		187	132		290
4–5 ,, ..	121		266	23		50	102		224	95		209
5–6 ,, ..	89		195	15		30	85		187	57		125
Total ..	..	..	2,494	..	..	999	..	..	..	..	..	1,589
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	2·2	..	..	2·2	..	..	2·2	..	..	2·2	..
6–12 ,, ..	341		75	1,091		2,400	1		2	12		26
1–2 feet ..	312		686	1,348		2,965	..		..	5		11
2–3 ,, ..	166		365	597		1,313	5		11	6		13
3–4 ,, ..	144		316	307		675	2		4	6		13
4–5 ,, ..	120		264	215		473	..		..	2		4
5–6 ,, ..	87		191	130		286	..		..	2		4
Total ..	..	..	2,572	..	..	8,112	..	..	17	..	..	71
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	2·2	..	..	2·2	..	..	2·2	..	..	2·2	..
6–12 ,, ..	2		4	10		22	34		74	47		103
1–2 feet ..	1		2	14		30	310		682	52		114
2–3 ,, ..	2		4	11		24	441		970	38		83
3–4 ,, ..	1		2	5		11	241		530	27		59
4–5 ,, ..	3		6	7		15	88		193	19		41
5–6 ,, ..	2		4	6		13	45		99	10		22
Total ..	..	..	22	..	..	115	..	..	2,548	..	..	422

Total number of trees below the 6–7 feet girth class in compartment No. XXI—

Teak	2,494	Species at present unsaleable	3,107
Rosewood	999		
Other superior species	13,390	Grand total ..	19,990

Calculations of the number of trees of each girth class in old compartment No. XXII, Tekadi leased forest, etc.

	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0–6 inches ..	158	2·3	363	19	2·3	43	..	2·3	..	..	2·3	..
6–12 ,, ..	111		255	94		216	94		216	148		340
1–2 feet ..	98		225	50		115	89		204	75		172
2–3 ,, ..	91		209	34		78	70		161	74		170
3–4 ,, ..	90		207	27		62	60		138	91		209
4–5 ,, ..	151		347	20		46	68		156	118		271
5–6 ,, ..	156		358	15		34	77		177	79		181
Total ..	..	..	1,964	..	..	594	1,052	..	1,052	..	..	1,343
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0–6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6–12 ,, ..	186		427	1,825		4,197	2		4	3		6
1–2 feet ..	120		276	1,237		2,845	3		6	8		18
2–3 ,, ..	94		216	774		1,780	2		4	7		16
3–4 ,, ..	118		271	442		1,016	3		6	12		27
4–5 ,, ..	171		393	233		535	2		4	..		..
5–6 ,, ..	117		269	89		204	4		9	3		6
Total ..	..	..	1,852	..	..	10,577	..	..	33	..	..	73
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0–6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6–12 ,, ..	3		6	28		64	52		119	31		71
1–2 feet ..	5		11	12		27	283		650	21		48
2–3 ,, ..	3		6	6		13	364		837	31		71
3–4 ,, ..	1		2	8		18	254		584	12		27
4–5 ,, ..	3		6	5		11	182		418	2		4
5–6 ,, ..	1		2	5		11	73		167	2		4
Total ..	..	..	33	..	..	144	..	..	2,775	..	..	325

Total number of trees below the 6–7 feet girth class in compartment No. XXII—

Teak	1,964	Species unsaleable at present	3,177
Rosewood	594		
Other superior species	14,930	Grand total ..	20,665

Calculations of the number of trees of each girth class in old compartment No. XXIII, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	29		52	128		230	36		64	73		131
1–2 feet ..	106		190	208		374	136		244	170		306
2–3 ,, ..	126		226	76		136	162		291	182		327
3–4 ,, ..	124		223	32		57	204		367	133		239
4–5 ,, ..	161		289	21		37	219		394	99		178
5–6 ,, ..	164		295	16		28	197		354	76		136
Total ..	..	..	1,275	..	..	862	..	..	1,714	..	..	1,317
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	55		99	408		734	9		16	17		30
1–2 feet ..	70		126	1,017		1,830	19		34	4		7
2–3 ,, ..	38		68	431		775	21		37	..		..
3–4 ,, ..	50		90	108		194	10		18	..		..
4–5 ,, ..	45		81	47		84	12		21	..		..
5–6 ,, ..	39		70	26		46	3		5	2		3
Total ..	..	..	534	..	..	3,663	..	..	131	..	..	40
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	6		10	44		79	31		55	45		81
1–2 feet ..	7		12	23		41	146		262	17		30
2–3 ,, ..	6		10	20		36	191		343	15		27
3–4 ,, ..	7		12	8		14	87		157	2		3
4–5 ,, ..	4		7	9		16	35		63	2		3
5–6 ,, ..	3		5	3		5	14		25	5		9
Total ..	..	..	56	..	..	191	..	..	904	..	..	153

Total number of trees below the 6–7 feet girth class in compartment No. XXIII—

Teak	1,275
Rosewood	862
Other superior species	7,399
Species at present unsaleable ..	1,304
Grand total ..	10,840

Calculations of the number of trees of each girth-class in old compartment No. XXIV, Tekadi leased forest, etc.

	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
6 inches ..	372	2·3	855	71	2·3	163	..	2·3	147	..	2·3	..
6–12 ,, ..	93		213	271		623	64		351	159		365
1–2 feet ..	136		312	261		600	153		211	199		457
2–3 ,, ..	105		241	110		253	92		342	159		365
3–4 ,, ..	173		397	79		181	149		393	197		453
4–5 ,, ..	303		696	63		144	171		331	186		427
5–6 ,, ..	268		616	43		98	144		1,775	120		276
Total ..	..	..	3,330	..	..	2,062	..	..		..	..	2,343
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6–12 ,, ..	354		814	1,623		3,732	3		6	4		9
1–2 feet ..	420		966	2,070		4,761	1		2	16		36
2–3 ,, ..	125		287	906		2,083	..		..	12		27
3–4 ,, ..	169		388	599		1,377	..		..	11		25
4–5 ,, ..	237		545	303		696	..		..	6		13
5–6 ,, ..	179		411	132		303	1		2	5		11
Total ..	..	..	3,411	..	..	12,952	..	..	10	..	..	121
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	2·3	..	..	2·3	..	..	2·3	..	..	2·3	..
6–12 ,, ..	4		9	22		50	41		94	28		64
1–2 feet ..	8		18	16		36	404		929	84		193
2–3 ,, ..	6		13	15		34	580		1,334	57		131
3–4 ,, ..	4		9	9		20	656		1,508	29		66
4–5 ,, ..	3		6	9		20	284		653	9		20
5–6 ,, ..	1		2	9		20	121		278	11		25
Total ..	..	..	57	..	..	180	..	..	4,796	..	..	499

Total number of trees below the 6–7 feet girth class in compartment No. XXIV—

Teak	3,330
Rosewood	2,062
Other superior species ..	20,612
Species at present unsaleable ..	5,532
Grand total ..	31,536

Calculations of the number of trees of each girth class in old compartment No. XXV, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	1,058	1·8	1,904	33	1·8	59	..	1·8	..	..	1·8	..
6–12 ,, ..	233		419	501		901	284		511	360		648
1–2 feet ..	348		626	611		1,099	528		950	375		675
2–3 ,, ..	210		378	152		273	389		700	223		401
3–4 ,, ..	277		498	80		144	421		757	209		376
4–5 ,, ..	183		329	32		57	247		444	108		194
5–6 ,, ..	184		331	14		25	188		338	81		145
Total ..	..	..	4,485	..	..	2,558	..	..	3,700	..	..	2,439
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	118		212	444		799	18		32	3		5
1–2 feet ..	125		225	653		1,175	36		64	1		1
2–3 ,, ..	69		124	245		441	25		45	3		5
3–4 ,, ..	66		118	165		297	36		64	2		3
4–5 ,, ..	57		107	67		120	10		18	1		1
5–6 ,, ..	43		77	51		91	5		9	1		1
Total ..	..	..	858	..	..	2,923	..	..	232	..	..	16
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6–12 ,, ..	2		3	25		45	15		27	12		21
1–2 feet ..	8		14	30		54	135		243	13		23
2–3 ,, ..	6		10	8		14	208		374	3		5
3–4 ,, ..	11		19	7		12	195		351	5		9
4–5 ,, ..	4		7	5		9	79		142	8		14
5–6 ,, ..	5		9	7		12	29		52	3		5
Total ..	..	..	62	..	..	146	..	..	1,189	..	..	77

Total number of trees below the 6–7 feet girth class in compartment No. XXV—

Teak	4,485	Species at present unsaleable	1,474
Rosewood	2,558		
Other superior species	10,168	Grand total ..	18,685

Calculations of the number of trees of each girth class in old compartment No. XXVI, Tekadi leased forest, etc.

Girth.												
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	1,561	1·4	2,185	16	1·4	22	..	1·4	..	..	1·4	..
6–12 ,, ..	27		37	70		98	16		22	146		204
1–2 feet ..	56		78	109		152	65		91	227		317
2–3 ,, ..	29		40	60		84	30		42	151		211
3–4 ,, ..	49		68	60		84	41		57	192		268
4–5 ,, ..	90		126	37		51	28		39	146		204
5–6 ,, ..	95		133	25		35	29		40	119		166
Total ..	..	..	2,667	..	..	526	..	..	291	..	..	1,370
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·4	..	..	1·4	..	..	1·4	..	..	1·4	..
6–12 ,, ..	563		788	779		1,090	1		1	3		4
1–2 feet ..	874		1,223	1,301		1,821	..		..	7		9
2–3 ,, ..	263		368	652		912	..		..	4		5
3–4 ,, ..	226		316	489		684	..		..	4		5
4–5 ,, ..	183		256	330		462	..		..	4		5
5–6 ,, ..	147		205	156		218	..		..	1		1
Total ..	..	..	3,156	..	..	5,187	..	..	1	..	..	29
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	1·4	..	..	1·4	..	..	1·4	..	..	1·4	..
6–12 ,, ..	..		..	14		19	30		42	28		39
1–2 feet ..	..		..	16		22	193		270	55		77
2–3 ,, ..	3		4	10		14	445		623	42		58
3–4 ,, ..	1		1	9		12	663		928	44		61
4–5 ,, ..	..		..	16		22	375		525	22		30
5–6 ,, ..	2		2	5		7	129		180	10		14
Total ..	..	..	7	..	..	96	..	..	2,568	..	..	279

Total number of trees below the 6–7 feet girth class in compartment No. XXVI—

Teak	2,667	Species at present unsaleable	2,950
Rosewood	526		
Other superior species	10,034	Grand total ..	16,177

Calculations of the number of trees of each girth class in old compartment No. XXVII, Tekadi leased forest below the 6–7 feet girth class.

Girth	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	1,500	2·5	3,750	29	2·5	72	..	2·5	..	..	2·5	..
6–12 ,, ..	126		315	89		222	88		220	177		442
1–2 feet ..	237		592	90		225	191		477	225		562
2–3 ,, ..	177		442	42		105	164		410	159		397
3–4 ,, ..	170		425	34		85	145		362	131		327
4–5 ,, ..	272		680	24		60	127		317	111		277
5–6 ,, ..	253		632	16		40	103		257	69		172
Total ..	..	..	6,836	..	..	809	..	..	2,043	..	..	2,177
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	2·5	..	..	2·5	..	..	2·5	..	..	2·5	..
6–12 ,, ..	605		1,512	1,730		4,325	8		20	8		20
1–2 feet ..	758		1,895	1,984		4,960	10		25	15		37
2–3 ,, ..	492		1,230	1,363		3,407	5		12	11		27
3–4 ,, ..	373		932	875		2,187	12		30	15		37
4–5 ,, ..	303		757	459		1,147	6		15	6		15
5–6 ,, ..	226		565	205		512	4		10	6		15
Total ..	..	..	6,891	..	..	16,538	..	..	112	..	..	151
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	2·5	..	..	2·5	..	..	2·5	..	..	2·5	..
6–12 ,, ..	2		5	11		27	13		32	7		17
1–2 feet ..	5		12	7		17	159		397	23		57
2–3 ,, ..	1		2	2		5	319		797	16		40
3–4 ,, ..	1		2	5		12	365		912	12		30
4–5 ,, ..	3		7	3		7	259		647	2		5
5–6 ,, ..	1		2	2		5	124		310	4		10
Total ..	..	..	30	..	..	73	..	..	3,095	..	..	159

Total number of trees below the 6–7 feet girth class in compartment No. XXVII—

Teak	6,836	Species at present unsaleable	3,357
Rosewood	809		
Other superior species	27,912	Grand total ..	38,914

Calculations of the number of trees of each girth class in old compartment No. XXVIII, Tekadi leased forest below the 6–7 feet girth class

Girth	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	142	2·2	312	42	2·2	92	..	2·2	..	..	2·2	..
6–12 ,, ..	45		99	229		503	64		140	115		253
1–2 feet ..	70		154	255		561	138		303	137		301
2–3 ,, ..	26		57	74		162	78		171	116		255
3–4 ,, ..	50		110	58		127	115		253	106		233
4–5 ,, ..	32		70	29		63	71		156	53		116
5–6 ,, ..	52		114	20		44	79		173	43		94
Total ..	..	..	916	..	..	1,552	..	..	1,195	..	..	1,252
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	2·2	..	..	2·2	..	..	2·2	..	..	2·2	..
6–12 ,, ..	57		125	1,376		3,027	7		15	1		2
1–2 feet ..	109		239	1,873		4,120	12		26	5		11
2–3 ,, ..	72		158	790		1,738	14		30	5		11
3–4 ,, ..	81		178	494		1,086	19		41	8		17
4–5 ,, ..	37		81	224		492	9		19	3		6
5–6 ,, ..	26		57	151		332	6		13	8		17
Total ..	..	..	838	..	..	10,795	..	..	134	..	..	64
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	2·2	..	..	2·2	..	..	2·2	..	..	2·2	..
6–12 ,, ..	10		22	22		48	15		33	109		240
1–2 feet ..	43		94	35		77	197		433	89		195
2–3 ,, ..	46		101	16		35	238		523	61		134
3–4 ,, ..	58		127	20		44	162		356	57		125
4–5 ..	47		103	20		44	58		127	30		66
5–6 ,, ..	22		48	10		22	32		70	10		22
Total ..	..	..	495	..	..	270	..	..	1,542	..	..	782

Total number of trees below the 6–7 feet girth class in compartment No. XXVIII—

Teak	916	Species at present unsaleable	3,089
Rosewood	1,552		
Other superior species	14,378	Grand total ..	19,835

Calculations of the number of trees in each girth class in old compartment No. XXIX, Tekadi leased forest below the 6-7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0- 6 inches ..	285	1·6	456	28	1·6	44	..	1·6	..	..	1·6	..
6-12 ,, ..	92		147	121		193	25		40	202		323
1- 2 feet ..	93		148	58		92	47		75	147		235
2- 3 ,, ..	75		120	42		67	33		52	96		153
3- 4 ,, ..	71		113	30		48	31		49	83		132
4- 5 ,, ..	64		102	27		43	27		43	93		148
5- 6 ,, ..	40		64	19		30	28		44	76		124
Total ..	..	..	1,150	..	..	517	..	..	303	..	..	1,112
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0- 6 inches ..	..	1·6	..	..	1·6	..	..	1·6	..	..	1·6	..
6-12 ,, ..	1,308		2,092	1,790		2,864	5		8	6		9
1- 2 feet ..	1,088		1,740	1,296		2,073	5		8	14		22
2- 3 ,, ..	427		683	664		1,062	9		14	30		48
3- 4 ,, ..	219		350	390		624	6		9	14		22
4- 5 ,, ..	150		240	225		360	9		14	14		22
5- 6 ,, ..	105		168	96		153	4		6	10		16
Total ..	..	..	5,273	..	..	7,136	..	..	59	..	..	139
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0- 6 inches ..	..	1·6	..	..	1·6	..	..	1.6	..	..	1·6	..
6 12 ,, ..	12		19	27		43	63		100	21		33
1- 2 feet ..	24		38	20		32	330		528	33		52
2- 3 ,, ..	35		56	21		33	764		1,222	48		76
3- 4 ,, ..	47		75	20		32	930		1,488	30		48
4- 5 ,, ..	46		73	22		35	289		462	17		27
5- 6 ,, ..	15		24	13		20	64		102	16		25
Total ..	..	..	285	..	..	195	..	..	3,902	..	..	261

Totai number of trees below the 6–7 feet girth class in compartment No. XXIX—

Teak	1,150	Species at present unsaleable	4,643
Rosewood	517		
Other superior species	14,022	Grand total ..	20,332

Calculations of the number of trees in each girth class in old compartment No. XXX Tekadi leased forest, etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0- 6 inches ..	104	2	208	6	2	12	..	2	..	..	2	..
6-12 ,, ..	112		224	20		40	11		22	55		110
1- 2 feet ..	98		196	40		80	19		38	33		66
2- 3 ,, ..	69		138	14		28	42		84	24		48
3- 4 ,, ..	65		130	7		14	26		52	29		58
4- 5 ,, ..	57		114	15		30	24		48	42		84
5- 6 ,, ..	41		82	9		18	16		32	33		66
Total ..	..	..	1,092	..	..	222	..	..	276	..	..	432
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0- 6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6-12 ,, ..	211		422	88		176	9		18	1		2
1- 2 feet ..	189		378	157		314	10		20	..		..
2- 3 ,, ..	63		126	92		184	8		16	1		2
3- 4 ,, ..	71		142	65		130	8		16	1		2
4- 5 ,, ..	57		114	66		132	7		14	2		4
5- 6 ,, ..	50		100	44		88	3		6	1		2
Total ..	..	..	1,282	..	..	1,024	..	..	90	..	..	12
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0- 6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6012 ,, ..	4		8	15		30	39		78	3		6
1- 2 feet ..	10		20	17		34	270		540	12		24
2- 3 ,, ..	6		12	11		22	383		766	7		14
3- 4 ,, ..	10		20	11		22	425		850	6		12
4- 5 ,, ..	20		40	7		14	87		174	2		4
5- 6 ,, ..	6		12	2		4	10		20	..		..
Total ..	..	..	112	..	..	126	..	..	2,428	..	..	60

Total number of trees below the 6–7 feet girth class in compartment No. XXX—

Teak	1,092	Species at present unsaleable	2,726
Rosewood	222		
Other superior species	3,116	Grand total ..	7,156

Calculations of the number of trees of each girth class in old compartment No. XXXI, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	809	2	1,618	46	2	92	..	2	..	..	2	..
6–12 ,, ..	204		408	78		156	19		38	192		384
1–2 feet ..	187		374	104		208	32		64	201		402
2–3 ,, ..	103		206	37		74	35		70	137		274
3–4 ,, ..	76		152	40		80	64		128	111		222
4–5 ,, ..	72		144	16		32	46		92	63		126
5–6 ,, ..	44		88	7		14	41		82	50		100
Total ..	..	..	2,990	..	..	656	..	..	474	..	..	1,508
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6–12 ,, ..	494		988	13		26	11		22	1		2
1–2 feet ..	446		892	8		16	38		76	2		4
2–3 ,, ..	220		440	4		8	34		68	3		6
3–4 ,, ..	139		278	3		6	34		68	4		8
4–5 ,, ..	78		156	2		4	27		54	1		2
5–6 ,, ..	82		164	..		..	14		28	..		..
Total ..	..	..	2,918	..	..	..	..	..	316	..	..	22
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0– 6 inches ..	..	2	..	..	2	..	..	2	..	..	2	..
6–12 ,, ..	15		30	10		20	57		114	10		30
1–2 feet ..	29		58	15		30	653		506	31		62
2–3 ,, ..	37		74	14		28	556		1,312	22		44
3–4 ,, ..	39		78	9		18	562		1,124	13		26
4–5 ,, ..	47		94	13		26	144		288	13		26
5–6 ,, ..	42		84	6		12	48		96	8		16
Total ..	..	..	418	..	..	134	..	..	3,440	..	..	194

Total number of trees below the 6–7 feet girth class in compartment No. XXXI—

Teak	2,990	Species at present unsaleable	4,186
Rosewood	656		
Other superior species	5,298	Grand total ..	13,130

Calculations of the number of trees of each girth class in old compartment No. XXXII, Tekadi leased forest, etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	478	1·6	764	129	1·6	206	..	1·6	..	..	1·6	..
6–12 ,, ..	204		326	231		369	21		33	239		382
1–2 feet ..	270		432	170		272	44		70	153		244
2–3 ,, ..	141		225	77		123	61		97	84		134
3–4 ,, ..	86		137	42		67	63		100	86		137
4–5 ,, ..	51		81	19		30	44		70	51		81
5–6 ,, ..	49		78	9		14	44		70	41		65
Total ..	..	..	2,043	..	..	1,081	..	..	440	..	..	1,043
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0– 6 inches ..	..	1·6	..	..	1·6	..	..	1·6	..	..	1·6	..
6–12 ,, ..	487		779	40		64	24		38	..		..
1–2 feet ..	541		865	49		78	39		62	2		3
2–3 ,, ..	254		406	26		41	26		41	..		..
3–4 ,, ..	120		192	9		14	18		28	1		1
4–5 ,, ..	46		73	..		..	9		14	..		..
5–6 ,, ..	31		49	..		..	12		19	2		3
Total ..	..	..	2,364	..	..	197	..	..	202	..	..	7
	VAGAI.			POOVATHI.			THADASHI.			NIBKADAMBAI.		
0– 6 inches ..	..	1·6	..	..	1·6	..	..	1·6	..	..	1·6	..
6–12 ,, ..	62		99	32		51	32		51	11		17
1–2 feet ..	90		144	31		49	226		361	15		24
2–3 ,, ..	73		116	39		62	432		691	13		20
3–4 ,, ..	94		150	29		46	234		374	16		25
4–5 ,, ..	66		105	16		25	64		102	7		11
5–6 ,, ..	50		80	16		25	23		36	7		11
Total ..	..	..	694	..	..	258	..	..	1,615	..	..	108

Total number of trees below the 6–7 feet girth class in compartment No. XXXII—

Teak	2,043	Species at present unsaleable	2,675
Rosewood	1,081		
Other superior species	4,253	Grand total ..	10,052

NOTE

Calculations of the number of trees of each girth class in old compartment No. XXXIII, Tekadi leased forest below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
TEAK.			
0– 6 inches ..	1,409	3	4,227
6–12 ,, ..	101		303
1– 2 feet ..	389		1,167
2– 3 ,, ..	296		888
3– 4 ,, ..	151		453
4– 5 ,, ..	105		315
5– 6 ,, ..	99		297
Total ..	..	..	7,650
ROSEWOOD.			
0– 6 inches ..	159	3	477
6–12 ,, ..	157		471
1– 2 feet ..	455		1,365
2– 3 ,, ..	166		498
3– 4 ,, ..	42		126
4– 5 ,, ..	28		84
5– 6 ,, ..	14		42
Total ..	..	..	3,063
KARUMARUDA.			
0– 6 inches ..	..	3	..
6–12 ,, ..	100		300
1– 2 feet ..	375		1,125
2– 3 ,, ..	146		438
3– 4 ,, ..	115		345
4– 5 ,, ..	144		432
5– 6 ,, ..	108		324
Total ..	..	..	2,964
PILLAMARUDU.			
0– 6 inches ..	..	3	..
6–12 ,, ..	98		294
1– 2 feet ..	143		429
2– 3 ,, ..	88		264
3– 4 ,, ..	67		201
4– 5 ,, ..	63		189
5– 6 ,, ..	66		198
Total ..	..	..	1,575
VENTEAK.			
0– 6 inches ..	..	3	..
6–12 ,, ..	357		1,071
1– 2 feet ..	732		2,196
2– 3 ,, ..	363		1,089
3– 4 ,, ..	162		486
4– 5 ,, ..	78		234
5– 6 ,, ..	48		144
Total ..	..	..	5,220
IRUL.			
0– 6 inches ..	..	3	..
6–12 ,, ..	1		3
1– 2 feet ..	1		3
2– 3 ,, ..	1		3
3– 4 ,, ..	..		..
4– 5 ,, ..	..		..
5– 6 ,, ..	..		..
Total ..	..	..	9
VENGAI.			
0– 6 inches ..	..	3	..
6–12 ,, ..	33		99
1– 2 feet ..	90		270
2– 3 ,, ..	99		297
3– 4 ,, ..	37		111
4– 5 ,, ..	29		87
5– 6 ,, ..	14		42
Total ..	..	..	906
MANJAKADAMBAI.			
0– 6 inches ..	..	3	..
6–12 ,, ..	1		3
1– 2 feet ..	1		3
2– 3 ,, ..	1		3
3– 4 ,, ..	3		9
4– 5 ,, ..	1		3
5– 6 ,, ..	1		3
Total ..	..	..	24
VAGAI.			
0– 6 inches ..	..	3	..
6–12 ,, ..	25		75
1– 2 feet ..	43		129
2– 3 ,, ..	36		108
3– 4 ,, ..	55		165
4– 5 ,, ..	54		162
5– 6 ,, ..	40		120
Total ..	..	..	759
POOVATHI.			
0– 6 inches ..	..	3	..
6–12 ,, ..	13		39
1– 2 feet ..	13		39
2– 3 ,, ..	13		39
3– 4 ,, ..	11		33
4– 5 ,, ..	14		42
5– 6 ,, ..	10		30
Total ..	..	..	222
THADASHI.			
0– 6 inches ..	..	3	..
6–12 ,, ..	92		276
1– 2 feet ..	509		1,527
2– 3 ,, ..	761		2,283
3– 4 ,, ..	570		1,710
4– 5 ,, ..	88		264
5– 6 ,, ..	28		84
Total ..	..	..	6,144
NIRKADAMBAI.			
0– 6 inches ..	..	3	..
6–12 ,, ..	4		12
1– 2 feet ..	1		3
2– 3 ,, ..	3		9
3– 4 ,, ..	1		3
4– 5 ,, ..	4		12
5– 6 ,, ..	3		9
Total ..	..	..	48

Total number of trees below the 6–7 feet girth class in compartment No. XXXIII—

Teak	7,650	Species at present unsaleable ..	7,173
Rosewood	3,063		
Other superior species	10,698	Grand total ..	28,584

Calculations of the number of trees of each girth class in old compartment No. XXXIV, Tekadi leased forest, etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
TEAK.			
0– 6 inches ..	770	2	1,540
6–12 ,, ..	561		1,122
1– 2 feet ..	489		978
2– 3 ,, ..	358		716
3– 4 ,, ..	255		510
4– 5 ,, ..	143		286
5– 6 ,, ..	102		204
Total ..	..	..	5,356
ROSEWOOD.			
0– 6 inches ..	223	2	446
6–12 ,, ..	776		1,552
1– 2 feet ..	437		874
2– 3 ,, ..	136		272
3– 4 ,, ..	65		130
4– 5 ,, ..	43		86
5– 6 ,, ..	18		36
Total ..	..	..	3,396
KARUMARUDU.			
0– 6 inches ..	..	2	..
6–12 ,, ..	309		618
1– 2 feet ..	342		684
2– 3 ,, ..	173		346
3– 4 ,, ..	121		242
4– 5 ,, ..	62		124
5– 6 ,, ..	31		62
Total ..	..	..	2,076
PILLAMARUDU.			
0– 6 inches ..	..	2	..
6–12 ,, ..	259		518
1– 2 feet ..	185		370
2– 3 ,, ..	91		182
3– 4 ,, ..	104		208
4– 5 ,, ..	70		140
5– 6 ,, ..	43		86
Total ..	..	..	1,504
VENTEAK.			
0– 6 inches ..	..	2	..
6–12 ,, ..	693		1,386
1– 2 feet ..	444		888
2– 3 ,, ..	262		524
3– 4 ,, ..	128		256
4– 5 ,, ..	39		78
5– 6 ,, ..	15		30
Total ..	..	..	3,162
IRUL.			
0– 6 inches ..	..	2	..
6–12 ,, ..	2		4
1– 2 feet ..	1		2
2– 3 ,, ..	1		2
3– 4 ,, ..	..		..
4– 5 ,, ..	..		..
5– 6 ,, ..	..		..
Total ..	..	..	8
VENGAI.			
0– 6 inches ..	..	2	..
6–12 ,, ..	200		400
1– 2 feet ..	205		410
2– 3 ,, ..	125		250
3– 4 ,, ..	94		188
4– 5 ,, ..	34		68
5– 6 ,, ..	16		32
Total ..	..	..	..
MANJAKADAMBAI.			
0– 6 inches ..	..	2	..
6–12 ,, ..	4		8
1– 2 feet ..	5		10
2– 3 ,, ..	4		8
3– 4 ,, ..	10		20
4– 5 ,, ..	3		6
5– 6 ,, ..	2		4
Total ..	..	..	56
VAGAI.			
0– 6 inches ..	..	2	..
6–12 ,, ..	62		124
1– 2 feet ..	91		182
2– 3 ,, ..	95		190
3– 4 ,, ..	104		208
4– 5 ,, ..	90		180
5– 6 ,, ..	33		66
Total ..	..	..	950
POOVATHI.			
0– 6 inches ..	..	2	..
6–12 ,, ..	22		44
1– 2 feet ..	24		48
2– 3 ,, ..	11		22
3– 4 ,, ..	8		16
4– 5 ,, ..	7		14
5– 6 ,, ..	1		2
Total ..	..	..	146
THADASHI.			
0– 6 inches ..	..	2	..
6–12 ,, ..	254		508
1– 2 feet ..	499		998
2– 3 ,, ..	691		1,382
3– 4 ,, ..	417		834
4– 5 ,, ..	70		140
5– 6 ,, ..	11		22
Total ..	..	..	3,884
NIRKADAMBAI.			
0– 6 inches ..	..	2	..
6–12 ,, ..	5		10
1– 2 feet ..	9		18
2– 3 ,, ..	15		30
3– 4 ,, ..	5		10
4– 5 ,, ..	2		4
5– 6 ,, ..	3		6
Total ..	..	..	78

Total number of trees below the 6–7 feet girth class in compartment XXXIV—

Teak	5,356	Species at present unsaleable ..	5,058
Rosewood	3,396		
Other superior species	8,154	Grand total ..	21,964

Calculations of the number of trees of each girth class in old compartment No. A, Tekadi leased forest below 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0-6 inches ..	31	1·8	55	77	1·8	138	..	1·8	..	..	1·8	..
6-12 ,, ..	10		18	65		117	18		32	148		266
1-2 feet ..	9		16	36		64	51		91	121		217
2-3 ,, ..	2		3	23		41	13		23	48		86
3-4 ,, ..	7		12	15		27	19		34	71		127
4-5 ,, ..	17		30	13		23	22		39	49		88
5-6 ,, ..	11		19	12		21	37		66	58		104
Total ..	87	..	153	..	..	431	..	..	285	..	..	888
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0- 6 inches ..	..	1·8	..	..	1·8	..				..	1·8	..
6-12 ,, ..	304		547	158		284				1		1
1-2 feet ..	497		894	232		417				9		16
2-3 ,, ..	106		190	79		142	Nil.			6		10
3-4 ,, ..	73		131	27		48				3		5
4-5 ,, ..	65		117	35		63				4		7
5-6 ,, ..	43		77	25		45				4		7
Total ..	..	..	1,956	..	..	999	..	..	..	..	..	46
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
0- 6 inches ..	..	1·8	..	..	1·8	..	..	1·8	..	..	1·8	..
6-12 ,, ..	6		10	30		54	60		108	21		37
1-2 feet ..	8		14	22		39	823		1,481	19		34
2-3 ,, ..	11		19	22		39	1,147		2,064	26		46
3-4 ,, ..	10		18	23		41	705		1,269	21		37
4-5 ,, ..	6		10	19		34	123		221	21		37
5-6 ,, ..	6		10	10		18	20		36	13		23
Total ..	..	..	81	..	..	225	..	..	5,179	..	..	214

Total number of trees below the 6–7 feet girth class in compartment No. A—

Teak	153	Species unsaleable at present	5,699
Rosewood	431		
Other superior species	4,174	Grand total ..	10,457

Calculations of the number of trees of each girth class in Block No. I, Mount Stuart Forest section, below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0- 6 inches ..	1,042	2·5	2,605	556	2·5	840	..	2·5	..	..	2·5	..
6-12 ,, ..	117		292	159		397	17		42	39		97
1-2 feet ..	333		832	114		285	41		102	35		87
2-3 ,, ..	321		802	48		120	36		90	31		77
3-4 ,, ..	337		842	37		92	53		132	22		55
4-5 ,, ..	282		705	32		80	47		117	21		52
5-6 ,, ..	290		725	18		45	32		80	20		50
Total ..	..	..	6,803	..	..	1,859	..	..	563	..	..	418
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6-12 inches ..	244	2·5	610				2	2·5	5	3	2·5	7
1-2 feet ..	272		680				3		7	3		7
2-3 ,, ..	124		310				1		2	14		35
3-4 ,, ..	98		245		Nil.		1		2	3		7
4-5 ,, ..	83		207				1		2	4		10
5-6 ,, ..	106		265				..		..	8		20
Total ..	..	..	2,317	..	..	..	..	..	18	..	..	86
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6-12 inches ..	33	2·5	82	16	2·5	40	25	2·5	62	5	2·5	12
1-2 feet ..	25		62	18		45	229		572	27		67
2-3 ,, ..	19		47	10		25	289		722	24		60
3-4 ,, ..	41		102	5		12	338		845	10		25
4-5 ,, ..	48		120	3		7	204		510	12		30
5-6 ,, ..	52		130	..		..	91		227	5		12
Total ..	..	..	543	..	..	129	..	..	2,938	..	..	206

Total number of trees below the 6–7 feet girth class in Block No. I—

Teak	6,803	Species at present unsaleable	3,816
Rosewood	1,859		
Other superior species	3,402	Grand total ..	15,880

Calculations of the number of trees of each girth class in Block No. II, Mount Stuart Forest Section, below the 6—7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	961	3	2,883	247	3	741	..	3	..	..	3	..
6—12 ,, ..	295		885	76		228	16		48	222		666
1–2 feet ..	385		1,155	79		237	81		243	276		828
2–3 ,, ..	215		645	45		135	105		315	147		441
3–4 ,, ..	178		534	49		147	117		351	163		489
4–5 ,, ..	173		519	40		120	146		438	142		426
5–6 ,, ..	200		600	25		75	125		375	132		396
Total ..	..	..	7,221	..	..	1,683	..	..	1,770	..	..	3,246
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6–12 inches ..	494	3	1,482	71	3	213	42	3	126	4	3	12
1–2 feet ..	574		1,722	154		462	40		126	3		9
2–3 ,, ..	230		690	102		306	33		99	5		15
3–4 ,, ..	136		408	68		204	27		81	3		9
4–5 ,, ..	98		294	21		63	24		72	5		15
5–6 ,, ..	71		213	18		54	19		57	4		12
Total ..	..	..	4,809	..	..	1,302	..	..	555	..	..	72
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6–12 inches ..	53	3	159	35	3	105	48	3	144	3	3	9
1–2 feet ..	85		255	28		84	286		858	15		45
2–3 ,, ..	62		186	17		51	404		1,212	11		33
3–4 ,, ..	72		216	9	8	27	378		1,134	13		39
4–5 ,, ..	55		165	7		21	204		612	7		21
5–6 ,, ..	34		102	7		21	109		327	2		6
Total ..	..	..	1,083	..	..	309	..	..	4,287	..	..	153

Total number of trees below the 6–7 feet girth class in Block No. II—

Teak	7,221
Rosewood	1,683
Other superior species	11,754
Species at present unsaleable	5,832
Grand total ..	26,490

Calculations of the number of trees of each girth class in Block No. III, Mount Stuart Forest Section, etc.

	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	228	3·3	752	129	3·3	425	..	3·3	..	..	3·3	..
6—12 ,, ..	126		415	123		405	77		254	171		564
1–2 feet ..	88		290	66		217	75		247	123		405
2–3 ,, ..	69		227	39		128	62		204	71		234
3–4 ,, ..	55		181	34		112	66		217	66		217
4–5 ,, ..	79		260	17		56	53		174	50		165
5–6 ,, ..	71		234	12		39	51		168	34		112
Total ..	..	..	2,359	..	..	1,382	..	..	1,264	..	..	1,697
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6—12 inches ..	202	3·3	666				33	3·3	108	4	3·3	13
1–2 feet ..	137		452				64		211	2		6
2–3 ,, ..	60		198				38		125	..		..
3–4 ,, ..	54		178		Nil.		29		95	..		..
4–5 ,, ..	59		194				15		49	..		..
5–6 ,, ..	30		99				13		42	..		..
Total ..	..	..	1,787	..	..	..	..	..	630	..	..	19
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6—12 inches ..	55	3·3	181	21	3·3	69	36	3·3	118	9	3·3	29
1–2 feet ..	59		194	9		29	172		567	3		9
2–3 ,, ..	43		141	4		13	147		485	2		6
3–4 ,, ..	27		89	3		9	95		313	..		..
4–5 ,, ..	10		33	4		13	31		102	5		16
5–6 ,, ..	4		13	5		16	9		29	6		19
Total ..	..	..	651	..	..	149	..	..	1,614	..	..	79

Total number of trees below the 6-7 feet girth class in Block No. III—

Teak	2,359
Rosewood	1,382
Other superior species	5,397
Species at present unsaleable	2,493
Grand total ..	11,631

Calculations of the number of trees of each girth class in Block No. IV, Mount Stuart Forest section, below the 6–7 feet girth class.

Girth.	Teak. Number of trees in the sample plot.	Multiplier.	Teak. Total number of trees in the block.	Rosewood. Number of trees in the sample plot.	Multiplier.	Rosewood. Total number of trees in the block.	Karumarudu. Number of trees in the sample plot.	Multiplier.	Karumarudu. Total number of trees in the block.	Pillamarudu. Number of trees in the sample plot.	Multiplier.	Pillamarudu. Total number of trees in the block.
0–6 inches ..	266	2	532	92	2	184	..	2	..	..	2	..
6–12 ,, ..	19		38	49		98	12		24	79		158
1–2 feet ..	26		52	52		104	19		38	103		206
2–3 ,, ..	22		44	18		36	12		24	51		102
3–4 ,, ..	28		56	27		54	10		20	57		114
4–5 ,, ..	17		34	18		36	15		30	79		158
5–6 ,, ..	13		26	11		22	9		18	54		108
Total ..	..	..	782	..	..	534	..	..	154	..	..	846
	Venteak.			**Irul.**			**Vengai.**			**Manjakadambai.**		
6–12 inches ..	137	2	274				10	2	20	3	2	6
1–2 feet ..	143		286				13		26	2		4
2–3 ,, ..	54		108	Nil.			5		10	1		2
3–4 ,, ..	60		120				3		6	2		4
4–5 ,, ..	44		88				5		10	1		2
5–6 ,, ..	52		104				3		6	1		2
Total ..	..	..	980	..	..	..	..	..	..	..	..	..
	Vagai.			**Poovathi.**			**Thadashi.**			**Nirkadambai.**		
6–12 inches ..	107	2	214	38	2	76	57	2	114	2	2	4
1–2 feet ..	157		314	9		18	491		982	3		6
2–3 ,, ..	141		282	6		12	478		956	3		6
3–4 ,, ..	151		302	1		2	305		610	1		2
4–5 ,, ..	106		212	1		2	98		196	2		4
5–6 ,, ..	52		104	4		8	15		30	..		..
Total ..	..	..	1,428	..	..	118	..	..	2,888	..	..	22

Total number of trees below the 6–7 feet girth class in Block No. IV—

Teak	782
Rosewood	534
Other superior species	2,078
Species at present unsaleable	4,456
Grand total ..	7,850

Calculations of the number of trees of each girth class in Block No. V, Mount Stuart Forest section, etc.

Girth.	Teak. Number of trees in the sample plot.	Multiplier.	Teak. Total number of trees in the block.	Rosewood. Number of trees in the sample plot.	Multiplier.	Rosewood. Total number of trees in the block.	Karumarudu. Number of trees in the sample plot.	Multiplier.	Karumarudu. Total number of trees in the block.	Pillamarudu. Number of trees in the sample plot.	Multiplier.	Pillamarudu. Total number of trees in the block.
0– 6 inches ..	401	4·5	1,804	226	4·5	1,011	..	4·5	..	..	4·5	..
6–12 ,, ..	178		801	140		630	306		1,377	125		562
1–2 feet ..	142		639	109		490	279		1,255	49		220
2–3 ,, ..	183		823	42		189	158		711	38		171
3–4 ,, ..	167		751	29		130	67		301	48		216
4–5 ,, ..	134		603	18		81	48		216	47		211
5–6 ,, ..	87		391	14		63	30		135	37		166
Total ..	..	..	5,812	..	..	2,594	..	..	3,995	..	..	1,546
	Venteak.			**Irul.**			**Vengai.**			**Manjakadambai.**		
6–12 inches ..	335	4·5	1,507				61	4·5	274	3	4·5	13
1–2 feet ..	96		432				102		459	8		36
2–3 ,, ..	17		76	Nil.			58		261	6		27
3–4 ,, ..	22		99				58		261	3		13
4–5 ,, ..	42		189				37		166	2		9
5–6 ,, ..	27		121				24		108	1		4
Total ..	..	..	2,424	..	..	..	..	..	1,529	..	..	102
	Vagai.			**Poovathi.**			**Thadashi.**			**Nirkadambai.**		
6–12 inches ..	112	4·5	504	23	4·5	103	209	4·5	940	12	4·5	54
1–2 feet ..	47		211	12		54	113		508	5		22
2–3 ,, ..	18		81	5		22	108		486	1		4
3–4 ,, ..	19		85	5		22	262		1,179	1		4
4–5 ,, ..	28		126	4		18	121		544	2		9
5–6 ,, ..	16		72	3		13	40		180	2		9
Total ..	..	..	1,079	..	..	232	..	..	3,837	..	..	102

Total number of trees below the 6–7 feet girth class in Block No. V—

Teak	5,812
Rosewood	2,594
Other superior species	9,596
Species at present unsaleable	5,250
Grand total ..	23,252

Calculations of the number of trees of each girth class in Block No. I, Ulandi Forest section below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	798	2·8	2,264	209	2·8	585	..	2·8	..	..	2·8	..
6—12 ,, ..	59		165	129		361	295		826	347		971
1–2 feet ..	49		137	135		378	278		778	240		672
2–3 ,, ..	48		134	43		120	153		428	186		520
3–4 ,, ..	101		282	24		67	165		462	217		607
4–5 ,, ..	191		534	19		53	144		403	284		795
5–6 ,, ..	150		420	11		30	101		282	184		515
Total ..	..	..	3,936	..	..	1,594	..	..	3,179	..	..	4,080
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6—12 inches ..	321	2·8	898				17	2·8	47	4	2·8	11
1–2 feet ..	235		658				51		142	4		11
2–3 ,, ..	77		215				33		92	5		14
3–4 ,, ..	75		210	Nil.			39		109	1		2
4–5 ,, ..	78		218				38		106	..		..
5–6 ,, ..	105		294				23		64	1		2
Total ..	..	..	2,493	..	..	..	..	..	560	..	..	40
	VENGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6—12 inches ..	30	2·8	84	80	2·8	224	180	2·8	504	31	2·8	86
1–2 feet ..	39		109	96		268	1,398		3,914	47		131
2–3 ,, ..	27		75	61		170	1,815		5,082	21		58
3–4 ,, ..	43		120	60		168	1,411		3,950	14		39
4–5 ,, ..	55		154	27		75	441		1,234	14		39
5–6 ,, ..	53		148	17		47	134		375	3		8
Total ..	..	..	690	..	..	952	..	..	15,059	..	..	361

Total number of trees below the 6–7 feet girth class in Block No. I—

Teak	3,936
Rosewood	1,594
Other superior species	10,352
Species at present unsaleable	17,062
Grand total ..	32,944

Calculations of the number of trees of each girth class in Block No. II, Ulandi Forest, section etc.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	227	4·1	930	579	4·1	2,373	..	4·1	..	..	4·1	..
6—12 ,, ..	15		61	194		795	55		225	216		885
1–2 feet ..	24		98	142		582	93		381	212		869
2–3 ,, ..	22		90	68		278	91		373	168		688
3–4 ,, ..	54		221	31		127	74		303	229		938
4–5 ,, ..	63		258	35		143	60		246	224		918
5–6 ,, ..	62		254	12		49	37		151	180		738
Total ..	..	..	1,912	..	..	4,347	..	..	1,679	..	..	5,036
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6—12 inches ..	234	4·1	959	..	4·1	..	33	4·1	135	6	4·1	24
1–2 feet ..	186		762	1		4	29		118	4		16
2–3 ,, ..	80		328	..		..	12		49	3		12
3–4 ,, ..	80		328	..		..	16		65	2		8
4–5 ,, ..	100		410	..		..	18		73	1		4
5–6 ,, ..	87		356	..		..	11		45	4		16
Total ..	..	..	3,143	..	..	4	..	..	485	..	..	80
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6—12 inches ..	61	4·1	250	102	4·1	418	168	4·1	688	20	4·1	82
1–2 feet ..	75		307	103		422	1,164		4,772	16		65
2–3 ,, ..	63		258	78		319	1,719		7,047	17		69
3–4 ,, ..	86		352	81		332	1,344		5,510	8		32
4–5 ,, ..	78		319	57		233	413		1,693	7		28
5–6 ,, ..	39		159	41		168	140		574	6		24
Total ..	..	..	1,645	..	..	1,892	..	..	20,284	..	..	300

Total number of trees below the 6–7 feet girth class in Block No. II—

Teak	1,912
Rosewood	4,347
Other superior species	10,427
Species at present unsaleable	24,121
Grand total ..	40,807

Calculations of the number of trees of each girth class in Block No. III, Ulandi Forest section below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	781	2·3	1,796	466	2·3	1,071	..	2·3	..	..	2·3	..
6—12 ,, ..	70		161	90		207	84		193	148		340
1–2 feet ..	93		213	76		174	105		241	143		328
2–3 ,, ..	85		195	42		96	87		200	89		204
3–4 ,, ..	133		305	19		43	76		174	143		328
4–5 ,, ..	146		335	18		41	83		190	151		347
5–6 ,, ..	121		278	14		32	93		213	149		342
Total ..	..	..	3,283	..	..	1,664	..	..	1,211	..	..	1,889
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6—12 inches ..	117	2·3	269				12	2·3	27	23	2·3	52
1–2 feet ..	73		167				13		29	9		20
2–3 ,, ..	36		82				7		16	3		6
3–4 ,, ..	44		101	Nil.			4		9	11		25
4–5 ,, ..	40		92				6		13	6		13
5–6 ,, ..	56		128				4		9	7		16
Total ..	..	..	839	..	..	..	..	..	103	..	..	132
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6—12 inches ..	41	2·3	94	30	2·3	69	150	2·3	345	9	2·3	20
1–2 feet ..	23		52	49		112	765		1,759	10		23
2–3 ,, ..	30		69	22		50	1,114		2,562	9		20
3–4 ,, ..	48		110	30		69	734		1,688	2		4
4–5 ,, ..	51		117	20		46	207		476	1		2
5–6 ,, ..	25		57	12		27	57		131	1		2
Total ..	..	..	499	..	..	373	..	..	6,961	..	..	71

Total number of trees below the 6–7 feet girth class in Block No. III—

Teak	3,283	Species at present unsaleable	7,904
Rosewood	1,664		
Other superior species	4,174	Grand total ..	17,025

Calculations of the number of trees of each girth class in Block No. IV, Ulandi Forest section, etc.

	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0— 6 inches ..	1,005	2·8	2,814	240	2·8	672	..	2·8	..	..	2·8	..
6—12 ,, ..	124		347	67		187	90		252	84		235
1–2 feet ..	87		243	81		226	114		319	99		277
2–3 ,, ..	94		263	53		148	116		324	74		207
3–4 ,, ..	154		431	25		70	157		439	118		330
4–5 ,, ..	152		425	13		36	122		341	128		358
5–6 ,, ..	112		313	10		28	94		263	88		246
Total ..	..	..	4,836	..	..	1,367	..	..	1,938	..	..	1,653
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
0— 6 inches ..	65	2·8	182				54	2·8	151	27	2·8	75
6—12 ,, ..	43		120				50		140	16		44
2–3 feet ..	24		67				31		86	10		28
3–4 ,, ..	23		64	Nil.			43		120	8		22
4–5 ,, ..	56		156				18		50	6		16
5–6 ,, ..	34		95				16		44	10		28
Total ..	..	..	..	..	..	..	..	..	591	..	..	213
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6—12 inches ..	9	2·8	25	17	2·8	47	135	2·8	378	20	2·8	56
1–2 feet ..	13		36	18		50	688		1,926	10		28
2–3 ,, ..	25		70	16		44	708		1,982	9		25
3–4 ,, ..	44		123	12		33	549		1,537	3		8
4–5 ,, ..	40		112	10		28	180		504	4		11
5–6 ,, ..	11		30	7		19	50		140	2		5
Total ..	..	..	396	..	..	221	..	..	6,467	..	..	133

Total number of trees below the 6–7 feet girth class in Block No. IV—

Teak	4,836	Species at present unsaleable	7,217
Rosewood	1,367		
Other superior species	5,079	Grand total ..	18,499

Calculations of the number of trees of each girth class in Block No. V, Ulandi forest section, below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	114	3·6	410	203	3·6	730	..	3·6	..	..	3·6	..
6–12 ,, ..	11		39	156		561	120		432	125		450
1–2 feet ..	20		72	54		194	140		504	111		399
2–3 ,, ..	13		46	25		90	60		216	56		201
3–4 ,, ..	21		75	22		79	56		201	89		320
4–5 ,, ..	28		100	23		82	39		140	96		345
5–6 ,, ..	23		82	14		50	32		115	122		439
Total ..	..	..	824	..	..	1,786	..	..	1,638	..	..	2,154
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6–12 inches ..	164	3·6	590		Nil.		11	3·6	39	13	3·6	46
1–2 feet ..	142		511				5		18	11		39
2–3 ,, ..	26		93				2		7	1		3
3–4 ,, ..	29		104				4		14	1		3
4–5 ,, ..	36		129				2		7	1		3
5–6 ,, ..	35		126				2		7	..		..
Total ..	..	..	1,553	..	..	..	..	..	92	..	..	94
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6–12 inches ..	32	3·6	115	76	3·6	273	233	3·6	838	18	3·6	64
1–2 feet ..	40		144	42		151	1,375		4,950	14		50
2–3 ,, ..	20		72	29		104	1,609		5,792	5		18
3–4 ,, ..	37		133	36		129	1,104		3,974	8		28
4–5 ,, ..	25		90	28		100	304		1,094	..		..
5–6 ,, ..	9		32	27		97	85		306	2		7
Total ..	..	..	586	..	..	854	..	..	16,954	..	..	167

Total number of trees below the 6–7 feet girth class in block No. V—

Teak	824	Species at present unsaleable ..	18,561
Rosewood	1,786		
Other superior species	5,531	Grand total ..	26,702

Calculations of the number of trees of each girth class in Block No. VI, Ulandi forest section, etc.

	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	3	3·7	11	311	3·7	1,150	..	3·7	..	..	3·7	..
6–12 ,, ..	2		7	140		518	132		488	39		144
1–2 feet ..	..		..	71		262	95		351	62		229
2–3 ,, ..	..		..	34		125	52		192	24		88
3–4 ,, ..	..		..	48		177	89		329	45		166
4–5 ,, ..	1		3	21		77	122		451	49		181
5–6 ,, ..	1		3	21		77	93		344	37		136
Total ..	..	..	24	..	..	2,386	..	..	2,155	..	..	944
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6–12 inches ..	148	3·7	547		Nil.		33	3·7	122	11	3·7	40
1–2 feet ..	108		399				27		99	8		29
2–3 ,, ..	48		177				15		55	5		18
3–4 ,, ..	56		207				18		66	9		33
4–5 ,, ..	101		373				3		11	9		33
5–6 ,, ..	80		296				6		22	10		37
Total ..	..	..	1,999	..	..	..	..	..	375	..	..	190
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6–12 inches ..	84	3·7	310	106	3·7	392	128	3·7	473	35	3·7	129
1–2 feet ..	88		325	80		296	939		3,474	27		99
2–3 ,, ..	56		207	23		88	942		3,485	13		48
3–4 ,, ..	58		214	34		125	847		3,133	9		33
4–5 ,, ..	46		170	21		77	219		810	8		29
5–6 ,, ..	41		151	12		44	80		296	3		11
Total ..	..	..	1,377	..	..	1,022	..	..	11,671	..	..	349

Total number of trees below the 6–7 feet girth class in block No. VI—

Teak	24	Species at present unsaleable ..	14,419
Rosewood	2,386		
Other superior species ..	5,663	Grand total ..	22,492

Calculations of the number of trees of each girth class in Block No. VII, Ulandi forest section, below the 6–7 feet girth class.

Girth.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.
	TEAK.			ROSEWOOD.			KARUMARUDU.			PILLAMARUDU.		
0– 6 inches ..	101		151	175		262	..		..	..		
6–12 ,, ..	18		27	67		100	97		145	128		192
1–2 feet ..	20		30	50		75	140		210	126		189
2–3 ,, ..	24	1·5	36	20	1·5	30	91	1·5	136	72	1·5	108
3–4 ,, ..	47		70	16		24	73		109	123		184
4–5 ,, ..	41		61	13		19	78		117	145		217
5–6 ,, ..	37		55	5		7	62		93	109		163
Total ..	..	..	430	..	..	517	..	..	810	..	..	1,053
	VENTEAK.			IRUL.			VENGAI.			MANJAKADAMBAI.		
6–12 inches ..	138		207				4		6	12		18
1–2 feet ..	120		180				..		..	3		4
2–3 ,, ..	36		54				..		..	2		3
3–4 ,, ..	21	1·5	31	Nil.			..	1·5	..	4	1·5	6
4–5 ,, ..	41		61				..		..	1		1
5–6 ,, ..	30		45				..		..	1		1
Total ..	..	..	578	..	..	..	..	..	6	..	..	33
	VAGAI.			POOVATHI.			THADASHI.			NIRKADAMBAI.		
6–12 inches ..	74		111	36		54	158		237	31		46
1–2 feet ..	51		76	52		78	934		1,401	29		43
2–3 ,, ..	36		54	25		37	1,088		1,632	13		19
3–4 ,, ..	42	1·5	63	26	1·5	39	837	1·5	1,255	15	1·5	22
4–5 ,, ..	33		49	22		33	217		325	10		15
5–6 ,, ..	24		36	11		16	61		91	4		6
Total ..	..	..	389	..	..	257	..	..	4,941	..	..	151

Total number of trees below the 6–7 feet girth class in block No. VII—

Teak	430
Rosewood	517
Other superior species	2,480
Species at present unsaleable	5,738
Grand total ..	9,165

APPENDIX No. *b* (2).

Showing the number of trees in the 6–7 feet and higher girth classes incluidng volume figures. Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. I—Area 306 acres, area of the sample plot 164 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6–7 feet ..	207	1·8	372	58	21,576	10·2	2,200	10	2,157	4,357	17,219
7–8 ,, ..	169		304	74	22,496	10	2,249		2,249	4,498	17,998
8–9 ,, ..	104		187	94	17,578	8·4	1,476		1,757	3,233	14,345
9–10 ,, ..	52		93	123	11,439	7·5	857		1,143	2,000	9,439
10–11 ,, ..	21		37	99	3,663	6·6	241		366	607	3,056
11–12 ,, ..	24		43	187	8,041	6·1	490		804	1,294	6,747
12–13 ,, ..	13		23	157	3,611	5·6	202		361	563	3,048
13–14 ,, ..	10		18	261	4,698	6·2	244		469	713	3,985
14–15 ,, ..	6		10	289	2,890	4·9	141		289	430	2,460
15–16 ,, ..	1		1	183	183	4·6	8		18	26	157
Total ..	607	..	1,088	..	96,175	..	8,108	..	9,613	17,721	78,454
Rosewood—											
6–7 feet ..	25	1·8	45	44	1,980	19·5	386	10	198	584	1,396
7–8 ,, ..	22		39	61	2,379	17·8	423		237	660	1,719
8–9 ,, ..	13		23	98	2,254	16	360		225	585	1,669
9–10 ,, ..	9		16	121	1,936	14·2	274		193	467	1,469
10–11 ,, ..	5		9	118	1,062	12·9	136		106	242	820
11–12 ,, ..	1		1	146	146	12	17		14	31	115
12–13 ,, ..	4		7	187	1,309	11·11	145		130	275	1,034
14–15 ,, ..	2		3	349	1,047	9·7	101		104	205	842
15–16 ,, ..	1		1	306	306	9·2	28		30	58	248
19–20 ,, ..	1		1	400	400	17·7	30		40	70	330
Total ..	83	..	145	..	12,819	..	1,900	..	1,277	3,177	9,642
Venteak—											
6–7 feet ..	125	1·8	225	48	10,800	7·4	799	10	1,080	1,879	8,901
7–8 ,, ..	96		172	67	11,524	6·6	760		1,152	1,912	9,612
8–9 ,, ..	59		106	88	9,328	5·8	541		932	1,473	7,855
9–10 ,, ..	18		32	128	4,096	5·2	212		409	621	3,475
10–11 ,, ..	7		12	129	1,548	4·8	74		154	228	1,320
11–12 ,, ..	5		9	130	1,170	4·4	51		117	161	1,002
13–14 ,, ..	1		1	130	130	3·8	4		13	17	113
Total ..	311	..	557	..	38,596	..	2,441	..	3,857	6,298	32,298
Pillamarudu—											
6–7 feet ..	170	1·8	306	58	17,748	14·5	2,573	10	1,774	4,347	13,401
7–8 ,, ..	144		259	67	17,353	12·9	2,238		1,735	3,973	13,380
8–9 ,, ..	79		142	94	13,348	11·5	1,535		1,334	2,869	10,479
9–10 ,, ..	41		73	110	8,030	10·2	819		803	1,622	6,408
10–11 ,, ..	30		54	124	6,696	9·3	622		669	1,291	5,405
11–12 ,, ..	18		32	188	6,016	8·6	517		601	1,118	4,898
12–13 ,, ..	5		9	238	2,142	8	171		214	385	1,757
13–14 ,, ..	8		14	234	3,276	7·5	245		327	572	2,704
14–15 ,, ..	2		3	241	723	7	50		72	122	601
15–16 ,, ..	1		1	404	404	6·6	26		40	66	338
17–18 ,, ..	1		1	272	272	5·8	15		27	12	230
18–19 ,, ..	1		1	310	310	5 5	17		31	48	262
Total ..	500	..	895	..	76,318	..	8,828	..	7,627	16,455	59,863
Karumarudu—											
6–7 feet ..	67	1·8	120	59	7,080	24	1,699	10	708	2,407	4,673
7–8 ,, ..	78		140	82	11,480	21·4	2,456		1,148	3,604	7,876
8–9 ,, ..	73		131	119	15,589	19·2	2,993		1,558	4,551	11,038
9–10 ,, ..	52		93	122	11,346	17·1	1,940		1,134	3,074	8,272
10–11 ,, ..	41		73	138	10,074	15·2	1,531		1,007	2,538	7,536
11–12 ,, ..	47		84	213	17,892	14·3	2,558		1,789	4,347	13,545
12–13 ,, ..	20		36	254	9,144	13·4	1,225		914	2,139	7,005
13–14 ,, ..	19		34	285	9,690	12·5	1,211		969	2,180	7,510
14–15 ,, ..	4		7	293	2,051	11·7	239		205	444	1,607
15–16 ,, ..	9		16	409	6,544	11·1	726		654	1,380	5,164
16–17 ,, ..	4		7	405	2,835	10·3	292		283	575	2,260
17–18 ,, ..	3		5	419	2,095	9·7	203		209	412	1,683
19–20 ,, ..	5		9	715	6,435	8 8	566		643	1,209	5,226
Total ..	422	..	755	..	1,12,255	..	17,639	..	11,221	28,860	83,395
Manjakadambai—											
6–7 feet ..	3	1·8	5	77	385	19·5	75	10	38	113	272
7–8 ,, ..	2		3	118	354	17·8	63		35	98	256
9–10 ,, ..	1		1	153	153	14·2	21		15	36	117
13–14 ,, ..	1		1	279	279	10·3	28		27	55	224
14–15 ,, ..	1		1	481	481	9·7	46		48	94	387
15–16 ,, ..	1		1	364	364	9·2	33		36	69	295
Total ..	9	..	12	..	2,016	..	266	..	199	465	1,551

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest Old Compartment No. I—Area 306 acres, area of the sample plot 164 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Poovathi—											
6–7 feet ..	19	1·8	34	29	986	..	..	..	..	..	..
7–8 ,, ..	14		25	31	775	..	..	..	..	..	..
8–9 ,, ..	6		10	67	670	..	..	..	..	..	..
9–10 ,, ..	6		10	77	770	..	..	..	..	..	..
10–11 ,, ..	1		1	91	91	..	..	..	..	..	..
11–12 ,, ..	7		12	83	996	..	..	..	..	..	..
12–13 ,, ..	1		1	104	104	..	..	..	..	..	..
13–14 ,, ..	2		3	112	336	..	..	..	..	..	..
14–15 ,, ..	1		1	115	115	..	..	..	..	..	..
15–16 ,, ..	1		1	120	120	..	..	..	..	..	..
Total ..	58	..	98	..	4,963	..	..	..	..	..	..
Thadashi—											
6–7 feet ..	15	1·8	27	32	864	..	..	..	..	..	..
7–8 ,, ..	7		12	54	648	..	..	..	..	..	..
8–9 ,, ..	2		3	58	174	..	..	..	..	..	..
9–10 ,, ..	1		1	59	59	..	..	..	..	..	..
Total ..	25	..	43	..	1,745	..	..	..	..	..	..
Vagai—											
6–7 feet ..	15	1·8	27	45	1,215	..	..	..	..	..	..
7–8 ,, ..	8		14	83	882	..	..	..	..	..	..
8–9 ,, ..	4		7	89	623	..	..	..	..	..	..
9–10 ,, ..	4		7	110	770	..	..	..	..	..	..
10–11 ,, ..	1		1	98	98	..	..	..	..	..	..
11–12 ,, ..	1		1	120	120	..	..	..	..	..	..
Total ..	33	..	54	..	3,708	..	..	..	..	..	..
Nirkadambai—											
6–7 feet ..	14	1·8	25	49	1,225	..	..	..	..	..	..
7–8 ,, ..	14		25	62	1,550	..	..	..	..	..	..
8–9 ,, ..	14		25	84	2,100	..	..	..	..	..	..
9–10 ,, ..	4		7	125	875	..	..	..	..	..	..
10–11 ,, ..	5		9	147	1,323	..	..	..	..	..	..
11–12 ,, ..	7		12	157	1,884	..	..	..	..	..	..
12–13 ,, ..	2		3	234	702	..	..	..	..	..	..
Total ..	60	..	106	..	9,659	..	..	..	..	..	..

Old Compartment No. I.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over, mature timber.	Total volumes of mature and saleable timber.	
	C. FT.	C. FT.		C. FT.
A. Saleable species—				
Teak	17,219	61,235	Teak	61,235
Rosewood	1,396	8,246	Rosewood	8,246
Venteak	8,921	23,377	Other superior species..	1,49,840
Pillamarudu	13,401	46,462		
Karumarudu	4,673	78,722	Total ..	2,19,321
Manjakadambai	272	1,279		
Total ..	45,882	21,921		
B. Species at present saleable—				
Vagai	1,215	2,493	With bark.	
Poovathi	986	3,977		
Thadashi	864	881		
Nirkadambai	1,225	8,434		
Total ..	4,290	75,785		

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. II—Area 419 acres, area of the sample plot 169 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		
						Percentage.	Quantity.	Percentage.	Quantity.	
Teak—										
6– 7 feet ..	142	2·5	355	5,874	20,590	10·2	2,100	10	2,059	4,159	16,431
7– 8 ,, ..	146		365	74	27,010	10·0	2,701		2,701	5,402	21,608
8– 9 ,, ..	58		145	94	13,630	8·4	1,144		1,363	2,507	11,123
9–10 ,, ..	35		87	123	10,701	7·5	802		1,070	1,872	8,829
10–11 ,, ..	16		40	99	3,960	6·6	261		396	657	3,303
11–12 ,, ..	14		35	183	6,405	6·1	390		640	1,030	5,375
12–13 ,, ..	1		2	157	314	5·6	17		31	48	266
13–14 ,, ..	3		7	261	1,827	5·2	95		182	277	1,550
14–15 ,, ..	1		2	289	578	4·9	28		57	85	493
15–16 ,, ..	4		10	183	1,830	4·6	84		183	267	1,563
Total ..	420	..	1,048	..	86,845	..	7,622	..	8,682	16,304	70,541
Rosewood—										
6–7 feet ..	11	2·5	27	44	1,188	19·5	231	10	118	349	839
7–8 ,, ..	1		2	61	122	17·8	21		12	33	89
Total ..	12	..	29	..	1,310	..	252	..	130	382	928
Venteak—										
6–7 feet ..	27	2·5	67	48	3,216	7·4	237	10	321	558	2,658
7–8 ,, ..	4		10	67	670	6·6	44		67	111	559
8–9 ,, ..	3		7	88	616	5·8	35		61	96	520
Total ..	34	..	84	..	4,502	..	316	..	449	765	3,737
Thadashi—										
6–7 feet ..	13	2·5	32	32	1,024	..	..	..	..	..	..
7–8 ,, ..	2		5	54	108	..	..	..	..	..	..
8–9 ,, ..	1		2	58	116	..	..	..	..	..	..
Total ..	16	..	39	..	1,248	..	..	..	..	..	..
Pillamarudu—										
6– 7 feet ..	82	2·5	205	58	11,890	14·5	1,724	10	1,189	2,913	8,977
7– 8 ,, ..	62		155	67	10,385	12·9	1,339		1,038	2,377	8,008
8– 9 ,, ..	23		57	94	5,358	7·5	616		535	1,151	4,207
9–10 ,, ..	13		32	110	3,520	10·2	359		352	711	2,809
10–11 ,, ..	10		25	124	3,100	9·3	288		310	598	2,502
11–12 ,, ..	5		12	188	2,256	8·6	194		225	419	1,837
12–13 ,, ..	4		10	238	2,380	8·0	190		238	428	1,952
Total ..	199	..	496	..	38,889	..	4,710	..	3,887	8,597	30,292
Karumarudu—										
6– 7 feet ..	167	2·5	417	59	24,603	24·0	5,904	10	2,460	8,364	16,239
7– 8 ,, ..	94		235	82	19,270	21·4	4,123		1,927	6,050	13,220
8– 9 ,, ..	49		122	119	14,518	19·2	2,787		1,451	4,238	10,280
9–10 ,, ..	32		80	122	9,760	17·1	1,668		976	2,644	7,116
10–11 ,, ..	20		50	138	6,900	15 2	1,048		690	1,738	5,162
11–12 ,, ..	20		50	213	10,650	14·3	1,522		1,065	2,587	8,063
12–13 ,, ..	5		12	254	3,048	13·4	408		304	712	2,336
13–14 ,, ..	4		10	285	2,850	12·5	356		285	641	2,209
15–16 ,, ..	4		10	409	4,090	11·1	453		409	862	3,228
Total ..	395	..	986	..	95,689	..	18,269	..	9,567	27,836	67,853
Manjakadanbai—										
6– 7 feet ..	2	2·5	5	77	385	19·5	75	10	38	113	272
7– 8 ,, ..	1		2	118	236	17·8	42		23	65	171
9–10 ,, ..	1		2	153	306	14·2	43		30	73	233
10–11 ,, ..	1		2	175	350	12·9	45		35	80	270
11–12 ,, ..	1		2	197	394	12·0	47		39	86	308
12–13 ,, ..	1		2	297	594	11·1	65		59	124	470
19–20 ,, ..	1		2	500	1,000	7·3	73		100	173	827
Total ..	8	..	17	..	3,265	..	390	..	324	714	2,551
Nirkadambai—										
6– 7 feet ..	8	2·5	20	49	980	..	..	..	..	..	..
7– 8 ,, ..	7		17	62	1,054	..	..	..	..	..	..
8– 9 ,, ..	6		15	84	1,260	..	..	..	..	..	..
9–10 ,, ..	2		5	125	625	..	..	..	..	..	..
11–12 ,, ..	1		2	157	314	..	..	..	..	..	..
12–13 ,, ..	1		2	234	468	..	..	..	..	..	..
Total ..	25	..	61	..	4,701	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. II—Area 419 acres, area of the sample plot 169 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Vengai—											
6– 7 feet ..	10	2·5	25	48	1,200	14·5	174	10	120	294	906
7– 8 ,, ..	7		17	82	1,394	12·9	179		139	318	1,076
8– 9 ,, ..	3		7	92	644	11·5	74		64	138	506
9–10 ,, ..	1		2	131	262	10·2	26		26	52	210
11–12 ,, ..	1		2	171	342	8·6	29		34	63	279
Total ..	22	..	53	..	3,842	..	482	..	383	865	2,977
Vagai—											
6– 7 feet ..	11	2·5	27	45	1,215	..	..	..	..	..	..
7– 8 ,, ..	5		12	63	756	..	..	..	..	..	..
8– 9 ,, ..	2		5	89	445	..	..	..	..	..	..
9–10 ,, ..	1		2	110	220	..	..	..	..	..	..
12–13 ,, ..	1		2	120	240	..	..	..	..	..	..
Total ..	20	..	48	.	2,876	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	5	2·5	12	29	348	..	..	..	..	..	..
7– 8 ,, ..	4		10	31	310	..	..	..	..	..	..
8– 9 ,, ..	4		10	67	670	..	..	..	..	..	..
9–10 ,, ..	3		7	77	539	..	..	..	..	..	..
10–11 ,, ..	1		2	91	182	..	..	..	..	..	..
11–12 ,, ..	1		2	83	166	..	..	..	..	..	..
12–13 ,, ..	2		5	104	520	..	..	..	..	..	..
Total ..	20	..	48	..	2,735	..	..	..	..	..	..

Old Compartment No. II.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber in cubic feet.	Total volumes of mature and saleable timber.	C. FT.
A. Saleable species—	C. FT.	C. FT.		
Teak	16,431	54,110	Teak	54,110
Rosewood	839	89	Rosewood	89
Venteak	2,658	1,079	Other superior species	78,358
Pillamarudu	8,977	21,315		
Karumarudu	16,239	51,614	Grand total ..	1,32,557
Vengai	906	2,071		
Manjakadambai	272	2,279		
Total ..	46,322	1,32,557		
B. Species at present unsaleable—				
Vagai	1,215	1,661	With bark.	
Poovathi	348	2,387		
Thadashi	1,024	224		
Nirkadambai	980	3,721		
Total ..	3,567	7,993		

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. III—Area 380 acres, area of the sample plot 182 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		
						Percentage.	Quantity.	Percentage.	Quantity.	Total deductions.
Teak—										
6– 7 feet ..	239	2	478	58	27,724	10·2	2,827	10	2,772	5,599	22,125
7– 8 ,, ..	175		350	74	25,900	10·0	2,590		2,590	5,180	20,720
8– 9 ,, ..	47		94	94	8,648	8·4	726		864	1,590	7,058
9–10 ,, ..	23		46	123	5,658	7·5	424		565	989	4,669
10–11 ,, ..	16		32	99	3,168	6 6	209		316	525	2,643
11–12 ,, ..	15		30	187	5,610	6·1	342		561	903	4,707
12–13 ,, ..	4		8	157	1,256	5·6	70		125	195	1,061
13–14 ,, ..	10		20	261	5,220	5·2	271		522	793	4,427
14–15 ,, ..	2		4	289	1,156	4·9	56		115	171	985
15–16 ,, ..	3		6	183	1,098	4·6	50		109	159	939
16–17 ,, ..	4		8	320	2,560	4·3	110		256	366	2,194
17–18 ,, ..	..		..	..	..	..	..		..	..	..
18–19 ,, ..	2		4	495	1,980	3·9	77		198	275	1,705
19–20 ,, ..	6		12	532	6,384	3·7	236		638	874	5,510
Total ..	545	..	1,090	..	96,362	..	7,988	..	9,631	17,619	78,743
Rosewood—										
6–7 feet ..	7	2	14	44	616	19·5	120	10	61	181	435
7–8 ,, ..	4		8	61	488	17·8	86		48	134	354
Total ..	11	..	22	..	1,104	..	206	..	109	315	789
Venteak—										
6– 7 feet ..	39	2	78	48	3,744	7·4	277	10	374	651	3,093
7– 8 ,, ..	25		50	67	3,350	6·6	221		335	556	2,794
8– 9 ,, ..	3		6	88	528	5·8	30		52	82	446
10–11 ,, ..	1		2	129	258	4·8	13		25	38	220
11–12 ,, ..	1		2	130	260	4·4	11		26	37	223
Total ..	69	..	138	..	8,140	..	552	..	812	1,364	6,776
Pillamarudu—										
6– 7 feet ..	76	2	152	58	8,816	14·5	1,278	10	881	2,159	6,657
7– 8 ,, ..	54		108	67	7,236	12·9	933		723	1,656	5,580
8– 9 ,, ..	6		12	94	1,128	11·5	129		112	241	887
9–10 ,, ..	7		14	110	1,540	10·2	157		154	311	1,229
10–11 ,, ..	4		8	124	992	9·3	92		99	191	801
11–12 ,, ..	3		6	188	1,128	8·6	97		112	209	919
12–13 ,, ..	1		2	238	476	8·0	38		47	85	391
13–14 ,, ..	1		2	234	468	7·5	35		46	81	387
14–15 ,, ..	1		2	241	482	7·0	33		48	81	401
Total ..	153	..	306	..	22,266	..	2,792	..	2,222	5,014	17,252
Irul—										
6–7 feet ..	5	2	10	38	380	10·2	38	10	38	76	304
7–8 ,, ..	1		2	67	134	10·0	13		13	26	108
8–9 ,, ..	3		6	75	450	8 4	37		45	82	368
Total ..	9	..	18	..	964	..	88	..	96	184	780
Karumarudu—										
6– 7 feet ..	123	2	246	59	14,514	24·0	3,483	10	1,451	4,934	9,580
7– 8 ,, ..	85		170	82	13,940	21·4	2,983		1,394	4,377	9,563
8– 9 ,, ..	36		72	119	8,568	19·2	1,645		856	2,501	6,067
9–10 ,, ..	10		20	122	2,440	17·1	417		244	661	1,779
10–11 ,, ..	4		8	138	1,104	15·2	167		110	277	827
11–12 ,, ..	7		14	213	2,982	14·3	426		298	724	2,258
12–13 ,, ..	2		4	254	1,016	13·4	136		101	237	779
13–14 ,, ..	1		2	285	570	12·5	71		57	128	442
15–16 ,, ..	3		6	409	2,454	11·1	272		245	517	1,937
16–17 ,, ..	1		2	405	810	10·3	83		81	164	646
Total ..	272	..	544	..	48,398	..	9,683	..	4,837	14,520	33,878
oovathi—										
6– 7 feet ..	3	2	6	29	174	..	..	..	..	..	..
7– 8 ,, ..	4		8	31	248	..	..	..	..	..	..
8– 9 ,, ..	9		18	67	1,206	..	..	..	..	..	..
9–10 ,, ..	4		8	77	616	..	..	..	..	..	..
10–11 ,, ..	2		4	91	364	..	..	..	..	..	..
11–12 ,, ..	3		6	83	498	..	..	..	..	..	..
13–14 ,, ..	1		2	112	224	..	..	..	..	..	..
15–16 ,, ..	1		2	122	244	..	..	..	..	..	..
Total ..	27	..	54	..	3,574	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. III—Area 380 acres, area of the sample plot 182 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Thadashi—											
6–7 feet ..	3	2	6	32	192	..	..	..	..	..	..
7–8 ,, ..	3		6	54	324	..	..	..	..	..	..
Total ..	6	..	12	..	516	..	..	..	..	..	..
Vagai—											
6– 7 feet ..	18	2	36	45	1,620	..	..	..	..	..	..
7– 8 ,, ..	12		24	63	1,512	..	..	..	..	..	..
8– 9 ,, ..	5		10	89	890	..	..	..	..	..	..
9–10 ,, ..	1		2	110	220	..	..	..	..	..	..
11–12 ,, ..	1		2	120	240	..	..	..	..	..	..
Total ..	37	..	74	..	4,482	..		..	..	..	..
Nirkadambai—											
6– 7 feet ..	5	2	10	49	490	..	..	..	..	..	..
7– 8 ,, ..	11		22	62	1,364	..	..	..	..	..	..
8– 9 ,, ..	7		14	84	1,176	..	..	..	..	..	..
9–10 ,, ..	6		12	125	1,500	..	..	..	..	..	..
10–11 ,, ..	1		2	147	294	..	..	..	..	..	..
11–12 ,, ..	5		10	157	1,570	..	..	..	..	..	..
12–13 ,, ..	1		2	234	468	..	..	..	..	..	..
14–15 ,, ..	1		2	275	550	..	..	..	..	..	..
Total ..	37	..	74	..	7,412	..	..	..	..	..	..
Vengai—											
6–7 feet ..	7	2	14	48	672	14·5	97	10	67	164	508
7–8 ,, ..	1		2	82	164	12·9	21		16	37	127
Total ..	8	..	16	..	836	..	118	..	83	201	635
Manjakadambai— 8–9 feet ..	2	2	4	128	512	16	81	10	51	132	380

Old Compartment No. III.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	22,125	56,618
Rosewood	435	354
Venteak	3,093	3,683
Irul	304	476
Pillamarudu	6,657	10,595
Karumarudu	9,580	24,298
Vengai	508	127
Manjakadambai	..	380
Total ..	42,702	96,531
B. Species at present unsaleable—		
Vagai	1,620	2,862
Poovathi	174	3,400
Thadashi	192	324
Nirkadambai	490	6,922
Total ..	2,476	13,508

Total volume of mature and saleable timber. With bark.

	C. FT.
Teak	56,618
Rosewood	354
Other superior species ..	39,559
Total ..	96,531

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. IV—Area 302 acres, area of the sample plot 302 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	344	1	344	58	19,952	10·2	2,035	10	1,995	4,030	15,922
7– 8 ,, ..	143		143	74	10,582	10·0	1,058		1,058	2,116	8,466
8– 9 ,, ..	47		47	94	4,418	8·4	371		441	812	3,606
9–10 ,, ..	25		25	123	3,075	7·5	230		307	537	2,538
10–11 ,, ..	7		7	99	693	6·6	45		69	114	579
11–12 ,, ..	6		6	187	1,122	6·1	68		112	180	942
12–13 ,, ..	2		2	157	314	5·6	17		31	48	266
13–14 ,, ..	3		3	261	783	5·2	40		78	118	665
14–15 ,, ..	1		9	289	289	4·9	14		28	42	247
15–16 ,, ..	4		4	183	732	4·6	33		73	106	626
16–17 ,, ..	2		2	320	640	4·3	27		64	91	549
17–18 ,, ..	1		1	458	458	4·1	18		45	63	395
18–19 ,, ..	1		1	495	495	3·9	19		49	68	427
19–20 ,, ..	4		4	432	2,128	3·7	78		212	290	1,838
Total ..	590	..	590	..	45,681	..	4,053	..	4,562	..	37,066
Venteak—											
6– 7 feet ..	103	1	103	48	4,944	7·4	365	10	494	859	4,085
7– 8 ,, ..	29		29	67	1,943	6·6	128		194	322	1,621
8– 9 ,, ..	5		5	88	440	5·8	25		44	69	371
9–10 ,, ..	2		2	128	256	5·2	13		25	38	218
10–11 ,, ..	2		2	129	258	4·8	12		25	37	221
Total ..	141	..	141	..	7,841	..	543	..	782	1,325	6,516
Rosewood—											
6–7 feet ..	25	1	25	44	1,100	19·5	214	10	110	324	776
7–8 ,, ..	13		13	61	793	17·8	141		79	220	573
8–9 ,, ..	4		4	98	392	16·0	62		39	101	291
Total ..	42	..	42	..	2,285	..	417	..	228	645	1,640
Irul—											
6– 7 feet ..	25	1	25	38	950	10·2	96	10	95	191	759
7– 8 ,, ..	11		11	67	737	10·0	73		73	146	591
8– 9 ,, ..	4		4	75	300	8·4	25		30	55	245
9–10 ,, ..	3		3	115	345	7·5	25		34	59	286
Total ..	43	..	43	..	2,332	..	219	..	232	451	1,881
Pillamarudu—											
6– 7 feet ..	180	1	180	58	10,440	14·5	1,513	10	1,044	2,557	7,883
7– 8 ,, ..	85		85	67	5,695	12·9	734		569	1,303	4,392
8– 9 ,, ..	42		42	94	3,948	11·5	454		394	848	3,100
9–10 ,, ..	30		30	110	3,300	10·2	336		330	666	2,634
10–11 ,, ..	15		15	124	1,860	9·3	172		186	358	1,502
11–12 ,, ..	10		10	188	1,880	8·6	161		188	349	1,531
12–13 ,, ..	6		6	238	1,428	8·0	114		142	256	1,172
13–14 ,, ..	3		3	234	702	7·5	52		70	122	580
14–15 ,, ..	2		2	241	482	7·0	33		48	81	401
15–16 ,, ..	1		1	404	404	6·5	26		40	66	338
17–18 ,, ..	2		2	272	544	5·5	29		54	83	461
Total ..	376	..	376	..	30,683	..	3,624	..	3,065	6,689	23,994
Karumarudu—											
6– 7 feet ..	176	1	176	59	10,384	2·4	2,492	10	1,038	3,530	6,854
7– 8 ,, ..	93		93	82	7,626	21·4	1,631		762	2,393	5,233
8– 9 ,, ..	36		36	119	4,284	19·2	822		428	1,250	3,034
9–10 ,, ..	21		21	122	2,562	17·1	438		256	694	1,868
10–11 ,, ..	18		18	138	2,484	15·2	377		248	625	1,859
11–12 ,, ..	11		11	213	2,343	14·3	335		234	569	1,774
12–13 ,, ..	3		3	254	762	13·4	102		76	178	584
13–14 ,, ..	7		7	285	1,995	12·5	249		199	448	1,547
14–15 ,, ..	2		2	293	586	11·7	68		58	136	460
15–16 ,, ..	5		5	409	2,045	11·1	226		204	430	1,615
16–17 ,, ..	2		2	405	810	10 3	83		81	164	646
17–18 ,, ..	1		1	419	419	9·7	40		41	81	338
Total ..	375	..	375	..	36,300	..	6,863	..	3,625	10,488	25,812
Vengai—											
6– 7 feet ..	2	1	2	48	96	14·5	13	10	9	22	74
7– 8 ,, ..	3		3	82	246	12·9	31		24	55	191
8– 9 ,, ..	1		1	92	92	11·5	10		9	19	73
9–10 ,, ..	1		1	131	131	10·2	13		13	26	105
Total ..	7	..	7	..	565	..	67	..	55	122	443

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. IV—Area 302 acres, area of the sample plot 302 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet	Deductions to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Vengai—											
6-7 feet ..	14	1	14	45	630	..	..	..	..	..	..
7-8 ,, ..	6		6	63	378		..	..	..	..	..
Total ..	20	..	20	..	1,008	.	..	..	..	..	..
Poovathi—											
6- 7 feet ..	13	1	13	29	377	..	..	..	..	..	..
7- 8 ,, ..	12		12	31	372	..	..	..	..	..	..
8- 9 ,, ..	12		12	67	804	..	..	..	..	..	..
9-10 ,, ..	13		13	77	1,001	..	..	..	..	..	..
10-11 ,, ..	11		11	91	1,001	..	..	..	..	..	..
11-12 ,, ..	8		8	83	664	..	..	..	..	..	..
12-13 ,, ..	4		4	104	416	..	..	..	..	..	..
13-14 ,, ..	6		6	112	672	..	..	..	..	..	..
14-15 ,, ..	2		2	115	230	..	..	..	..	..	..
16-17 ,, ..	1		1	150	150	..	..	..	..	..	..
18-19 ,, ..	1		1	155	155	..	..	..	..	..	..
Total ..	83	..	83	..	5,842	..	..	..	..	..	..
Nirkadambai—											
6- 7 feet ..	23	1	23	49	1,127	..	..	..	..	..	..
7- 8 ,, ..	11		11	62	682	..	..	..	..	..	..
8- 9 ,, ..	10		10	84	840	..	..	..	..	..	..
9-10 ,, ..	7		7	125	875	..	..	..	..	..	..
10-11 ,, ..	4		4	147	588	..	..	..	..	..	..
11-12 ,, ..	8		8	157	1,256	..	..	..	..	..	..
12-13 ,, ..	3		3	234	702	..	..	..	..	..	..
13-14 ,, ..	2		2	261	522	..	..	..	..	..	..
14-15 ,, ..	3		3	261	783	..	..	..	..	..	..
Total ..	71	..	71	..	7,375	..	..	..	..	..	..
Thadashi—											
6- 7 feet ..	90	1	90	32	2,880	..	..	..	..	..	..
7- 8 ,, ..	28		28	54	1,512	..	..	..	..	..	..
8- 9 ,, ..	4		4	58	232	..	..	..	..	..	..
9-10 ,, ..	2		2	59	118	..	..	..	..	..	..
Total ..	124	..	124	..	4,742	..	..	..	..	..	..
Manjakadambai—											
6- 7 feet ..	8	1	8	77	616	19·5	120	10	61	181	435
7- 8 ,, ..	6		6	118	708	17·8	126		70	196	512
8- 9 ,, ..	7		7	128	896	16·0	143		89	232	664
9-10 ,, ..	5		5	153	765	14·2	108		76	184	581
10-11 ,, ..	5		5	175	875	12·9	112		87	199	676
11-12 ,, ..	6		6	197	1,182	12·0	141		118	259	923
12-13 ,, ..	6		6	297	1,782	11·1	197		178	375	1,407
13-14 ,, ..	7		7	279	1,953	10·3	201		195	396	1,557
14-15 ,, ..	4		4	481	1,924	9·7	186		192	378	1,546
15-16 ,, ..	13		13	364	4,732	9·2	435		473	908	3,824
16-17 ,, ..	5		5	290	1,450	8·5	123		145	268	1,182
17-18 ,, ..	3		3	367	1,101	8·1	89		110	199	902
18-19 ,, ..	1		1	500	500	7·7	38		50	88	412
19-20 ,, ..	5		5	500	2,500	7·3	182		250	432	2,068
Total ..	81	..	81	..	20,984	..	2,201	..	2,094	4,295	16,689

Old Compartment No. IV.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	15,922	21,144
Rosewood	776	864
Venteak	4,085	2,431
Irul	759	1,122
Pillamarudu	7,883	16,111
Karumarudu	6,854	18,958
Vengai	74	369
Manjakadambai	435	16,254
Total ..	36,788	77,253
B Species at present unsaleable —		
Vagai	630	378
Poovathi	377	5,465
Thadashi	2,880	1,862
Nirkadambai	1,127	6,248
Total ..	5,014	13,953

Total volume of mature and saleable timber.

	C. FT.
Teak	21,144
Rosewood	864
Other superior species ..	55,245
Total ..	77,253

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. V—Area 255 acres, area of the sample plot 156 acres.

Girth, class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net value in cubic feet.
Teak—											
6– 7 feet ..	47	1·6	75	78	5,850	10·2	596	10	585	1,181	4,669
7– 8 ,, ..	30		48	93	4,464	10 0	446		446	882	3,572
8– 9 ,, ..	12		19	112	2,128	8·4	178		212	390	1,738
9–10 ,, ..	6		9	119	1,071	7·5	80		107	187	884
10–11 ,, ..	5		8	113	904	6·6	59		90	149	755
11–12 ,, ..	2		3	171	513	6·1	31		51	82	431
12–13 ,, ..	1		1	98	98	5·6	5		9	14	84
13–14 ,, ..	1		1	281	281	5·2	14		28	42	239
14–15 ,, ..	1		1	281	281	4·9	13		28	41	240
17–18 ,, ..	1		1	294	294	4·1	12		29	41	253
Total ..	106	..	166	..	15,884	..	1,434	10	1,585	3,019	12,865
Rosewood—											
6–7 feet ..	4	1·6	6	44	264	19·5	51	..	26	77	187
Venteak—											
6–7 feet ..	3	1·6	4	78	312	7·4	23	10	31	54	258
7–8 ,, ..	2		3	80	240	6·6	15		24	39	201
8–9 ,, ..	1		1	82	82	5·8	4		8	12	70
Total ..	6	..	8	..	634	..	42	..	63	105	529
Pillamarudu—											
6– 7 feet ..	19	1·6	30	72	2,160	14·5	313	10	216	529	1,631
7– 8 ,, ..	13		20	80	1,600	12·9	206		160	366	1,234
8– 9 ,, ..	9		14	116	1,624	11·5	186		162	348	1,276
9–10 ,, ..	3		4	132	528	10·2	53		52	105	423
10–11 ,, ..	1		1	183	183	9·3	17		18	35	148
11–12 ,, ..	2		3	224	672	8·6	57		67	124	548
Total ..	47	..	72	..	6,767	..	832	..	675	1,507	5,260
Karumarudu—											
6– 7 feet ..	53	1·6	84	71	5,964	24·0	1,431	10	596	2,027	3,937
7– 8 ,, ..	34		54	91	4,914	21·4	1,051		491	1,542	3,372
8– 9 ,, ..	11		17	122	2,074	19·2	398		207	605	1,469
9–10 ,, ..	3		4	121	484	17·1	82		48	130	354
10–11 ,, ..	6		9	237	2,133	15·2	324		213	537	1,596
11–12 ,, ..	2		3	276	828	14·3	118		82	200	628
Total ..	109	..	171	..	16,397	..	3,404	..	1,637	5,041	11,356
Manjakadambai—											
6– 7 feet ..	2	1·6	3	77	231	19·5	45	10	23	68	163
10–11 ,, ..	1		1	160	160	12·9	20		16	36	124
Total ..	3	..	4	..	391	..	65	..	39	104	287
Vengai—											
6– 7 feet ..	25	1·6	40	55	2,200	14·5	319	10	220	539	1,661
7– 8 ,, ..	16		25	76	1,900	12·9	245		190	435	1,465
8– 9 ,, ..	4		6	92	552	11·5	63		55	118	434
10–11 ,, ..	3		4	120	480	9·3	44		48	92	388
12–13 ,, ..	1		1	120	120	8·0	9		12	21	99
13–14 ,, ..	1		1	120	120	7·5	9		12	21	99
Total ..	50	..	77	..	5,372	..	689	..	537	1,226	4,146

Old Compartment No. V.

Names of species.	Volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	4,669	8,196
Rosewood	187	..
Venteak	258	271
Pillamarudu	1,631	3,629
Karumarudu	3,937	7,419
Manjakadamai	163	124
Vengai	1,661	2,485
Total ..	12,506	22,124

Total volume of mature and saleable timber.

	C. FT.
Teak	8,196
Rosewood	..
Other superior species ..	13,928
Grand total ..	22,124

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. VI—Area 321 acres, area of the sample plot 176 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	153	1·8	275	78	21,450	10·2	2,187	10	2,145	4,332	17,118
7– 8 ,, ..	104		187	93	17,391	10	1,739		1,739	3,478	13,913
8– 9 ,, ..	37		66	112	7,392	8·4	620		739	1,359	6,033
9–10 ,, ..	21		37	119	4,403	7·5	330		440	770	3,633
10–11 ,, ..	15		27	113	3,051	6·6	201		305	506	2,545
11–12 ,, ..	5		9	171	1,539	6.1	93		153	246	1,293
12–13 ,, ..	1		1	98	98	5·6	5		9	14	84
13–14 ,, ..	4		7	281	1,967	5·2	102		196	298	1,669
20–21 ,, ..	1		1	544	544	3·5	19		54	73	471
Total ..	341	..	610	..	57,835	..	5,296	..	5,780	11,076	46,759
Rosewood—											
6– 7 feet ..	5	1·8	9	44	396	19·5	77	10	39	116	280
7– 8 ,, ..	3		5	101	505	17·8	89		50	139	366
Total ..	8	..	14	..	901	..	166	..	89	255	646
Venteak—											
6– 7 feet ..	25	1·8	45	78	3,510	7·4	259	10	351	610	2,900
7– 8 ,, ..	6		10	80	800	6·6	52		80	132	668
8– 9 ,, ..	4		7	82	574	8·8	33		57	90	484
9–10 ,, ..	3		5	117	585	5·2	30		58	88	497
Total ..	38	..	67	..	5,469	..	374	..	546	920	4,549
Pillamarudu—											
6– 7 feet ..	47	1·8	84	72	6,048	14·5	876	10	604	1,480	4,568
7– 8 ,, ..	33		59	80	4,720	12·9	608		472	1,080	3,640
8– 9 ,, ..	9		16	116	1,856	11·5	213		185	398	1,458
9–10 ,, ..	4		7	132	924	10·2	94		92	186	738
10–11 ,, ..	4		7	183	1,281	9·3	119		128	247	1,034
11–12 ,, ..	4		7	224	1,568	8·6	134		156	290	1,278
Total ..	101	..	180	..	16,397	..	2,044	..	1,637	3,681	12,716
Irul—											
7– 8 feet ..	1	1·8	1	67	67	10	6	10	6	12	55
Karumarudu—											
6– 7 feet ..	90	1·8	162	71	11,502	24	2,760	10	1,150	3,910	7,592
7– 8 ,, ..	62		111	91	10,101	21·4	2,161		1,010	3,171	6,930
8– 9 ,, ..	13		23	122	2,806	19·2	538		280	818	1,988
9–10 ,, ..	13		23	121	2,783	17·1	475		278	753	2,030
10–11 ,, ..	11		19	237	4,503	15·2	684		450	1,134	3,369
11–12 ,, ..	5		9	276	2,484	14·3	355		248	603	1,881
16–17 ,, ..	1		1	405	405	10·3	41		40	81	324
Total ..	195	..	348	..	34,584	..	7,014	..	3,456	10,470	24,114
Manjakadambai—											
6– 7 feet ..	1	1·8	1	77	77	19·5	15	10	7	22	55
7– 8 ,, ..	2		3	118	354	17·8	63		35	98	256
Total ..	3	..	4	..	431	..	78	..	42	120	311
Thadashi—											
6– 7 feet ..	7	1·8	12	32	384	..	..	..	..	..	..
7– 8 ,, ..	2		3	54	162	..	..	..	..	..	..
Total ..	9	..	15	..	546	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	5	1·8	9	49	441	..	..	..	..	..	..
7– 8 ,, ..	6		10	62	620	..	..	..	..	..	..
8– 9 ,, ..	9		16	84	1,344	..	..	..	..	..	..
13-14 ,, ..	2		3	261	783	..	..	..	..	..	..
Total ..	22	..	38	..	3,188	..	..	..	..	..	..
Vengai—											
6– 7 feet ..	12	1·8	21	55	1,155	14·5	167	10	115	282	873
7– 8 ,, ..	10		18	76	1,368	12·9	176		136	312	1,056
8– 9 ,, ..	1		1	92	92	11·5	10		9	19	73
9–10 ,, ..	1		1	106	106	10·2	10		10	20	86
13–14 ,, ..	1			120	120	7·5	9		12	21	99
Total ..	25	..	42	..	2,841	..	372	..	282	654	2,187

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. VI, area 321 acres, area of the sample plot 176 acres—*cont.*

Girth class and species.	Number of trees on the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Vagai—											
6– 7 feet ..	9	1·8	16	69	1,104	..	..	..	..	..	..
7– 8 ,, ..	4		7	120	840	..	..	..	..	..	..
8– 9 ,, ..	1		1	105	105	..	..	..	..	..	..
10–11 ,, ..	1		1	176	176	..	..	..	..	..	..
Total ..	15	..	25	..	2,225	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	6	1·8	10	29	290	..	..	..	..	..	..
7– 8 ,, ..	11		19	31	589	..	..	..	..	..	..
8– 9 ,, ..	3		5	67	335	..	..	..	..	..	..
9–10 ,, ..	2		3	77	231	..	..	..	..	..	..
11–12 ,, ..	1		1	83	83	..	..	..	..	..	..
Total ..	23	..	38	..	1,528	..	..	..	..	..	..

Old Compartment No. VI.

Names of species.	Volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	17,118	29,641
Rosewood	280	366
Venteak	2,900	1,649
Irul	..	55
Pillamarudu	4,568	8,148
Karumarudu	7,592	16,522
Vengai	873	1,314
Manjakadambai	55	256
Total ..	33,386	57,951
B. Species at present unsaleable—		
Nirkadambai	441	2,747
Vagai	1,104	1,121
Thadashi	384	162
Poovathi	290	1,238
Total ..	2,219	5,268

Total volume of mature and saleable timber.	C. FT.
Teak	29,641
Rosewood	366
Other superior species ..	27,944
Total ..	57,951

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. VII, area 394 acres, area of the sample plot 225 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductiions to be made from the gross total.					Net value in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6- 7 feet ..	218	1·7	370	58	21,460	10·2	2,188	10	2,146	4,334	17,126
7- 8 ,, ..	193		328	74	24,272	10.	2,427		2,427	4,854	19,418
8- 9 ,, ..	88		149	94	14,006	8·4	1,176		1,400	2,576	11,430
9-10 ,, ..	69		117	123	14,391	7·5	1,079		1,439	2,518	11,873
10-11 ,, ..	41		69	99	6,831	6·6	450		683	1,133	5,698
11-12 ,, ..	34		57	187	10,659	6·1	650		1,065	1,715	8,944
12-13 ,, ..	13		22	157	3,454	5·6	193		345	538	2,916
13-14 ,, ..	8		13	261	3,393	5·2	176		339	515	2,878
14-15 ,, ..	8		13	289	3,757	4·9	184		375	559	3,198
15-16 ,, ..	11		18	183	3,294	4·6	151		329	480	2,814
16-17 ,, ..	6		10	320	3,200	4·3	137		320	457	2,743
17-18 ,, ..	4		6	458	2,748	4·1	113		274	386	2,362
18-19 ,, ..	4		6	495	2,970	3·9	115		297	412	2,558
19-20 ,, ..	4		6	532	3,192	3·7	118		319	437	2,755
Total ..	701	..	1,184	..	1,17,627	..	9,156	..	11,758	20,914	96,713
Rosewood—											
6- 7 feet ..	20	1·7	34	44	1,496	19·5	291	10	149	440	1,056
7- 8 ,, ..	8		13	61	793	17·8	141		79	220	573
8- 9 ,, ..	8		13	98	1,274	16·	203		127	330	944
9-10 ,, ..	3		5	121	605	14·2	85		60	145	460
12-13 ,, ..	2		3	187	561	11·1	62		56	118	443
15-16 ,, ..	1		1	306	306	9·2	28		30	58	248
Total ..	42	..	69	..	5,035	..	810	..	501	1,311	3,724
Venteak—											
6- 7 feet ..	89	1·7	151	48	7,248	7·4	536	10	724	1,260	5,988
7- 8 ,, ..	39		66	57	4,422	6·6	291		442	733	3,689
8- 9 ,, ..	9		15	38	1,320	5·8	76		132	208	1,112
9-10 ,, ..	3		5	128	640	5·2	33		64	97	543
Total ..	140	..	237	..	13,630	..	936	..	1,362	2,298	11,332
Irul—											
6-7 feet ..	3	1·7	5	38	190	10·2	19	10	19	38	152
7-8 ,, ..	1		1	67	67	10·	6		6	12	55
8-9 ,, ..	4		6	75	450	8·4	37		45	82	368
Total ..	8	..	12	..	707	..	62	..	70	132	575
Karumarudu—											
6- 7 feet ..	126	1·7	214	59	12,626	24·	3,030	10	1,262	4,292	8,334
7- 8 ,, ..	102		173	82	14,186	21·4	3,035		1,418	4,453	9,733
8- 9 ,, ..	61		103	119	12,257	19·2	2,353		1,225	3,578	8,679
9-10 ,, ..	39		66	122	8,052	17·1	1,376		805	2,181	5,871
10-11 ,, ..	21		35	138	4,830	15·2	734		483	1,217	3,613
11-12 ,, ..	20		34	213	7,242	14·3	1,035		724	1,759	5,483
12-13 ,, ..	5		8	254	2,032	13·4	272		203	475	1,557
13-14 ,, ..	12		20	285	5,700	12·5	712		570	1,282	4,418
14-15 ,, ..	5		8	293	2,344	11·7	274		234	508	1,836
15-16 ,, ..	2		3	428	1,284	11·1	142		128	270	1,014
17-18 ,, ..	1		1	419	419	9·7	40		41	81	338
Total ..	394	..	665	..	70,972	..	13,003	..	7,093	20,096	50,876
Pillamarudu—											
6- 7 feet ..	105	1·7	178	58	10,324	14·5	1,496	10	1,032	2,528	7,796
7- 8 ,, ..	77		130	67	8,710	12·9	1,123		871	1,994	6,716
8- 9 ,, ..	43		73	94	6,862	11·5	789		686	1,475	5,387
9-10 ,, ..	31		52	110	5,720	10·2	583		572	1,155	4,565
10-11 ,, ..	23		39	124	4,836	9 3	419		483	932	3,904
11-12 ,, ..	6		10	188	1,880	8·6	161		188	349	1,531
12-13 ,, ..	3		5	238	1,190	8	95		119	214	976
13-14 ,, ..	5		8	234	1,872	7·5	140		187	327	1,545
14-15 ,, ..	2		3	241	723	7	50		72	122	601
15-16 ,, ..	2		3	404	1,212	6·6	79		121	200	1,012
16-17 ,, ..	2		3	234	702	6·1	42		70	112	590
18-19 ,, ..	1		1	272	272	5·5	14		27	41	231
Total ..	300	..	505	..	44,303	..	5,021	..	4,428	9,449	34,854
Vengai—											
6-7 feet ..	1	1·7	1	48	48	14·5	6	10	4	10	38
8-9 ,, ..	1		1	92	92	11·5	10		9	19	73
Total ..	2	..	2	..	140	..	16	..	13	29	111

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest Old Compartment No. VII, area 394 acres, area of the sample plot 225 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree on cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantiyt.		
Vagai—											
6– 7 feet	11	1·7	18	45	810	..	..	..	..	..	..
7– 8 ,, ..	7		11	63	693	..	..	..	..	..	..
8– 9 ,, ..	3		5	89	445	..	..	..	..	..	..
9–10 ,, ..	1		1	110	110	..	..	..	..	..	..
Total ..	22	..	35	..	2,058	..	..	..	..	..	..
Manjakadambai—											
6– 7 feet ..	4	1·7	6	77	462	19·5	90	10	46	136	326
7– 8 ,, ..	6		10	118	1,180	17·8	210		118	328	852
8– 9 ,, ..	9		15	128	1,920	16	307		192	499	1,421
9–10 ,, ..	5		8	153	1,224	14·2	173		122	295	929
10–11 ,, ..	6		10	175	1,750	12·9	225		175	400	1,350
11–12 ,, ..	10		17	197	3,349	12.	401		334	735	2,614
12–13 ,, ..	2		3	297	891	11·1	98		89	187	704
13–14 ,, ..	5		8	279	2,232	10·3	229		223	452	1,780
14–15 ,, ..	3		5	481	2,405	9·7	233		240	473	1,932
15–16 ,, ..	5		8	364	2,912	9·2	267		291	558	2,354
16–17 ,, ..	5		8	290	2,320	8·5	197		232	429	1,891
17–18 ,, ..	2		3	367	1,101	8·1	89		110	199	902
18–19 ,, ..	1		1	500	500	7·7	38		50	88	412
19–20 ,, ..	1		1	500	500	7·3	36		50	86	414
Total ..	64	..	103	..	22,746	..	2,593	..	2,272	4,865	17,881
Thadashi— ..											
6– 7 feet ..	50	1·7	85	32	2,720	..	..	..	..	..	..
7– 8 ,, ..	17		28	54	1,512	..	..	..	..	..	..
8– 9 ,, ..	4		6	58	348	..	..	..	..	..	..
9–10 ,, ..	2		3	57	171	..	..	..	..	..	..
10–11 ,, ..	1		1	57	57	..	..	..	..	..	..
Total ..	74	..	123	..	4,808	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	6	1·7	10	29	290	..	..	..	..	..	..
7– 8 ,, ..	14		23	31	713	..	..	..	..	..	..
8– 9 ,, ..	9		15	67	1,005	..	..	..	..	..	..
9–10 ,, ..	9		15	77	1,155	..	..	..	..	..	..
10–11 ,, ..	7		11	91	1,001	..	..	..	..	..	..
11–12 ,, ..	4		6	83	498	..	..	..	..	..	..
13–14 ,, ..	1		1	112	112	..	..	..	..	..	..
14–15 ,, ..	1		1	115	115	..	..	..	..	..	..
Total ..	51	..	82	..	4,889	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	15	1·7	25	49	1,225	..	..	..	..	..	..
7– 8 ,, ..	9		15	62	930	..	..	..	..	..	..
8– 9 ,, ..	12		20	84	1,680	..	..	..	..	..	..
9–10 ,, ..	7		11	125	1,375	..	..	..	..	..	..
10–11 ,, ..	5		8	147	1,176	..	..	..	..	..	..
13–14 ,, ..	1		1	261	261	..	..	..	..	..	..
14–15 ,, ..	2		3	275	825	..	..	..	..	..	..
15–16 ,, ..	1		1	275	275	..	..	..	..	..	..
Total ..	52	..	84	..	7,747	..	..	..	..	..	..

Old Compartment No. VII.

Names of species.	Volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class and over mature timber.
	C. FT.	C FT.
A. Saleable species—		
Teak	17,126	79,587
Rosewood	1,056	2,668
Venteak	5,988	5,344
Irul	152	423
Pillamarudu	7,796	27,058
Karumarudu	8,334	42,542
Vengai	38	73
Manjakadambai	326	17,555
Total ..	40,816	175,250
B. Species at present unsaleable—		
Vagai	310	1,248
Poovathi	290	4,599
Thadashi	2,720	2,088
Nirkadambai	1,225	6,522
Total ..	5,045	14,457

Total volume of mature and saleable timber.

	C. FT.
Teak	79,587
Rosewood	2,668
Other superior species ..	92,995
Grand total ..	175,250

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. VIII, area 288 acres, area of the sample plot 162 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	135	1·7	229	58	13,282	10·2	1,354	10	1,328	2,682	10,600
7– 8 ,, ..	146		248	74	18,352	10·	1,835		1,835	3,670	14,682
8– 9 ,, ..	74		125	94	11,750	8·4	987		1,175	2,162	9,588
9–10 ,, ..	36		61	123	7,503	7·5	562		750	1,312	6,191
10–11 ,, ..	18		30	99	2,970	6·6	196		297	493	2,477
11–12 ,, ..	15		25	187	4,675	6·1	285		467	752	3,923
12–13 ,, ..	12		20	157	3,140	5·6	175		314	489	2,651
13–14 ,, ..	3		5	261	1,305	5·2	67		130	197	1,108
14–15 ,, ..	1		1	289	289	4·9	14		28	42	247
15–16 ,, ..	7		11	183	2,013	4·6	92		201	293	1,720
16–17 ,, ..	2		3	320	960	4·3	41		96	137	823
19–20 ,, ..	7		11	532	5,852	3·7	216		585	801	5,051
Total ..	456	..	769	..	72,091	..	5,824	..	7,206	13,030	59,061
Rosewood—											
6– 7 feet ..	7	1·7	11	44	484	19·5	94	10	48	142	342
7– 8 ,, ..	7		11	61	671	17·8	119		67	186	485
8– 9 ,, ..	3		5	98	490	16·	78		49	127	363
9–10 ,, ..	1		1	121	121	14·2	17		12	29	92
10–11 ,, ..	1		1	118	118	12·9	15		11	26	92
11–12 ,, ..	1		1	146	146	1·2	17		14	31	115
Total ..	20	..	..	30	2,030	..	340	..	201	541	1,489
Venteak—											
6– 7 feet ..	53	1·7	90	48	4,320	7·4	319	10	432	751	3,569
7– 8 ,, ..	26		44	67	2,948	6·6	194		294	488	2,460
8– 9 ,, ..	6		10	88	880	5·8	51		88	139	741
9–10 ,, ..	2		3	128	384	5·2	19		38	57	327
12–13 ,, ..	1		1	130	130	4·	5		13	18	112
Total ..	88	..	148	..	8,662	..	588	..	865	1,453	7,209
Irul—											
6– 7 feet ..	26	1·7	44	38	1,672	10·2	170	10	167	337	1,335
7– 8 ,, ..	11		18	67	1,206	10·	120		120	240	966
8– 9 ,, ..	4		6	75	450	8·4	37		45	82	368
9–10 ,, ..	1		1	115	115	7·5	8		11	19	96
10–11 ,, ..	1		1	126	126	6·6	8		12	20	106
12–13 ,, ..	1		1	154	154	5·6	8		15	23	131
Total ..	44	..	71	..	3,723	..	351	..	370	721	3,002
Vagai—											
7– 8 feet ..	3	1·7	5	63	315	..	..	10	..	..	..
9–10 ,, ..	1		1	110	110	..	..		..	..	..
11–12 ,, ..	1		1	171	171	..	..		..	..	..
Total ..	5	..	7	..	596	..	..	..	..	..	..
Pillamarudu—											
6– 7 feet ..	91	1·7	154	58	8,932	14·5	1,295	10	893	2,188	6,744
7– 8 ,, ..	51		86	67	5,762	12·9	743		576	1,319	4,443
8– 9 ,, ..	34		57	94	5,358	11·5	616		535	1,151	4,207
9–10 ,, ..	18		30	110	3,300	10·2	336		330	666	2,634
10–11 ,, ..	4		6	124	744	9·3	69		74	143	601
11–12 ,, ..	3		5	188	940	8·6	80		94	174	766
12–13 ,, ..	3		5	238	1,190	8·0	95		119	214	976
13–14 ,, ..	1		1	234	234	7·5	17		23	40	194
17–18 ,, ..	1		1	272	272	5·5	14		27	41	231
Total ..	206	..	345	..	26,732	..	3,265	..	2,671	5,936	20,796
Karumarudu—											
6– 7 feet ..	44	1·7	74	59	4,366	2·4	1,047	10	436	1,483	2,883
7– 8 ,, ..	38		64	82	5,248	21·4	1,123		524	1,647	3,601
8– 9 ,, ..	25		42	119	4,998	19·2	959		499	1,458	3,540
9–10 ,, ..	16		27	122	3,294	17·1	563		329	892	2,402
10–11 ,, ..	6		10	138	1,380	15·2	209		138	347	1,033
11–12 ,, ..	6		10	213	2,130	14·3	304		213	517	1,613
12–13 ,, ..	1		1	254	254	13·4	34		25	59	195
13–14 ,, ..	2		3	285	855	12·5	106		85	191	664
14–15 ,, ..	2		3	293	879	11·7	102		87	189	690
Total ..	140	..	234	..	23,404	..	4,447	..	2,336	6,783	16,621

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekkadi leased forest, Old Compartment No. VIII—Area 288 acres, area of the sample plot 162 acres—*cont*

Girth class and species.	Number of trees on the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Vengai—											
7– 8 feet ..	1	1·7	1	48	48	12·9	6	10	4	10	38
Poovathi—											
6– 7 feet ..	5	1·7	8	29	232	..	..	..	..	..	..
7– 8 ,, ..	2		3	31	93	..	..	..	..	..	..
8– 9 ,, ..	1		1	67	67	..	..	..	..	..	..
9–10 ,, ..	5		8	77	616	..	..	..	..	..	..
10–11 ,, ..	4		6	91	546	..	..	..	..	..	..
11–12 ,, ..	1		1	83	83	..	..	..	..	..	..
12–13 ,, ..	3		5	104	520	..	..	..	..	..	..
14–15 ,, ..	1		1	115	115	..	..	..	..	..	..
15–16 ,, ..	2		3	120	360	..	..	..	..	..	..
Total ..	24	..	36	..	2,632	..	..	..	..	..	..
Thadashi—											
6– 7 feet ..	41	1·7	69	34	2,346	..	..	..	..	..	..
7– 8 ,, ..	13		22	54	1,188	..	..	..	..	..	..
8– 9 ,, ..	3		5	58	290	..	..	..	..	..	..
9–10 ,, ..	1		1	57	57	..	..	..	..	..	..
12–13 ,, ..	1		1	57	57	..	..	..	..	..	..
Total ..	59	..	98	..	3,938	..	..	..	..	..	..
Manjakadambai—											
6—7 feet ..	2	1·7	3	77	231	19·5	45	10	23	68	163
7—8 ,, ..	9		15	118	1,770	17·8	315		177	492	1,278
8—9 ,, ..	4		6	128	768	16·	122		76	198	570
9–10 ,, ..	7		11	153	1,683	14·2	238		168	406	1,277
10–11 ,, ..	3		5	175	875	12·9	112		87	199	676
11–12 ,, ..	7		11	197	2,167	12·	260		216	476	1,691
12–13 ,, ..	2		3	227	594	11·1	65		59	124	470
13–14 ,, ..	3		5	279	1,395	10·3	143		139	282	1,113
14–15 ,, ..	2		3	481	1,443	9·7	139		144	283	1,160
15–16 ,, ..	1		1	364	364	9·2	33		36	69	295
16–17 ,, ..	2		3	290	870	8·5	73		87	160	710
18–19 ,, ..	4		6	500	3,000	7·7	231		300	531	2,469
Total ..	46	..	72	..	15,160	..	1,776	..	1,512	3,288	11,872
Nirkadambai—											
6– 7 feet ..	3	1·7	5	49	245	..	..	..	..	..	..
7– 8 ,, ..	4		6	62	372	..	..	..	..	..	..
8– 9 ,, ..	6		10	84	840	..	..	..	..	..	..
9–10 ,, ..	1		1	125	125	..	..	..	..	..	..
10–11 ,, ..	1		1	147	147	..	..	..	..	..	..
11–12 ,, ..	2		3	157	471	..	..	..	..	..	..
12–13 ,, ..	1		1	234	234	..	..	..	..	..	..
13–14 ,, ..	2		3	261	783	..	..	..	..	..	..
16–17 ,, ..	1		1	275	275	..	..	..	..	..	..
17–18 ,, ..	1		1	275	275	..	..	..	..	..	..
Total ..	22	..	32	..	3,767	..	..	..	..	..	..

Old Compartment No. VIII.

Names of species.	Volumes of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	10,600	48,461
Rosewood	342	1,147
Venteak	3,569	3,640
Irul	1,335	1,667
Pillamarudu	6,744	14,052
Karumarudu	2,883	13,738
Vengai	..	38
Manjakadambai	163	11,709
Total ..	25,636	94,452
B. Species at present unsaleable—		
Vagai	315	281
Poovathi	232	2,400
Thadashi	2,346	1,592
Nirkadambai	245	3,522
Total ..	3,138	7,795

Total volume of mature and saleable timber.

	C. FT.
Teak	48,461
Rosewood	1,147
Other superior species ..	44,844
Total ..	94,452

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekkadi leased forest, Old Compartment No. IX—Area 290 acres, area of the sample plot 146 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Total deductions.	Net value in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	77	2	154	58	8,932	10·2	911	10	893	1,804	7,128
7– 8 ,, ..	81		162	74	11,988	10·	1,198		1,198	2,396	9,592
8– 9 ,, ..	43		86	94	8,084	8·4	679		808	1,487	6,597
9–10 ,, ..	19		38	123	4,674	7·5	350		467	817	3,857
10–11 ,, ..	14		28	99	2,772	6·6	182		277	459	2,313
11–12 ,, ..	10		20	187	3,740	6·1	228		374	602	3,138
12–13 ,, ..	5		10	157	1,570	5·6	87		157	244	1,326
13–14 ,, ..	4		8	261	2,088	5·2	108		208	316	1,772
14–15 ,, ..	3		6	289	1,734	4·9	84		173	257	1,477
15–16 ,, ..	1		2	183	366	4·6	16		36	52	314
19–20 ,, ..	1		2	532	1,064	5·7	39		106	145	919
Total ..	258	..	516	..	47,012	..	3,882	..	4,697	8,579	38,433
Rosewood—											
6– 7 feet ..	8	2	16	44	704	19·5	135	10	70	207	497
7– 8 ,, ..	3		6	61	366	17·8	65		36	101	265
8– 9 ,, ..	2		4	98	392	16·	62		39	101	291
9–10 ,, ..	..		..	..	..	..	..		..	..	..
10–11 ,, ..	2		4	118	472	12·9	60		47	107	365
11–12 ,, ..	1		2	146	292	12·	35		29	64	228
12–13 ,, ..	1		2	187	374	11·1	41		37	78	296
14–15 ,, ..	1		2	349	698	9·7	67		69	136	562
Total ..	18	..	36	..	3,298	..	467	..	327	794	2,504
Vengai—											
9–10 feet ..	1	2	2	131	262	10·2	26	10	26	52	210
Venteak—											
6– 7 feet	37	2	74	48	3,552	7·4	262	10	355	617	2,935
7– 8 ,, ..	22		44	67	2,948	6·6	194		294	488	2,460
8– 9 ,, ..	6		12	88	1,056	5·8	61		105	166	890
9–10 ,, ..	1		2	128	256	5·2	13		25	38	218
10–11 ,, ..	2		4	129	516	4·8	24		51	75	441
11–12 ,, ..	1		2	130	260	4·4	11		26	37	223
Total ..	69	..	138	..	8,588	..	565	..	856	1,421	7,167
Pillamarudu—											
6– 7 feet	45	2	90	58	5,220	14·5	757	10	522	1,279	3,941
7– 8 ,, ..	56		112	67	7,504	12·9	968		750	1,718	5,786
8– 9 ,, ..	18		36	94	3,384	11·5	389		338	727	2,657
9–10 ,, ..	12		24	110	2,640	10·2	269		264	533	2,107
10–11 ,, .	10		20	124	2,480	9·3	230		248	478	2,002
11–12 ,, ..	1		2	188	376	8·6	32		37	69	307
12–13 ,. ..	3		6	238	1,428	8·	114		142	256	1,172
15–16 ,, ..	1		2	404	808	6·6	53		80	133	675
Total ..	146	..	292	..	23,840	..	2,812	..	2,381	5,193	18,647
Irul—											
6– 7 feet	11	2	22	38	836	10·2	85	18	83	168	668
7– 8 ,, ..	6		12	67	804	10·	80		80	160	644
8– 9 ,, ..	2		4	75	300	8·4	25		30	55	245
9–10 ,, ..	1		2	115	230	7·5	17		23	40	190
Total ..	20	..	40	..	2,170	..	207	..	216	423	1,747
Karumarudu—											
6– 7 feet	10	2	20	59	1,180	24·	283	10	118	401	779
7– 8 ,, ..	10		20	82	1,640	21·4	350		164	514	1,126
8– 9 ,, ..	8		16	119	1,904	19·2	365		190	555	1,349
9–10 ,, ..	8		16	122	1,952	17·1	333		195	528	1,424
10–11 ,, ..	3		6	138	828	15·2	125		82	207	621
11–12 ,, ..	2		4	213	852	14·3	121		85	206	646
13–14 ,, ..	1		2	285	570	12·5	71		57	128	442
14–15 ,, ..	1		2	293	586	11·7	68		58	126	460
16–17 ,, ..	1		2	405	810	10·3	83		81	164	646
18–19 ,, ..	1		2	419	838	9·3	77		83	160	678
Total ..	45	..	90	..	11,160	..	1,876	..	1,113	2,989	8,171

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. IX—Area 290 acres, area of the sample plot 146 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Total deductions.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Manjakadambai—											
6– 7 feet	5	2	10	77	770	19·5	150	10	77	227	543
7– 8 ,, ..	4		8	118	944	17·8	168		94	262	682
8– 9 ,, ..	3		6	128	768	16·	122		76	198	570
9–10 ,, ..	5		10	153	1,530	14·2	217		153	370	1,160
13–14 ,, ..	2		4	279	1,116	10·3	114		111	225	891
14–15 ,, ..	1		2	481	962	9·7	93		96	189	773
15–16 ,, ..	1		2	364	728	9·2	66		72	138	590
16–17 ,, ..	1		2	290	580	8·5	49		58	107	473
17–18 ,, ..	1		2	367	734	8·1	59		73	132	602
19–20 ,, ..	1		2	500	1,000	7·3	73		100	173	827
Total ..	24	..	48	..	9,132	..	1,111	..	910	2,021	7,111
Vagai—											
6– 7 feet	5	2	10	45	450	..	..	..	..	..	..
7– 8 ,,	4		8	63	504	..	..	..	..	..	..
8– 9 ,, ..	1		2	89	178	..	..	..	..	..	..
9–10 ,, ..	1		2	110	220	..	..	..	..	..	..
Total ..	11	..	22	..	1,352	..	..	..	..	..	..
Poovathi—											
6– 7 feet	3	2	6	29	174	..	..	..	..	..	..
7– 8 ,, ..	2		4	31	124	..	..	..	..	..	..
8– 9 ,, ..	7		14	67	938	..	..	..	..	..	..
9–10 ,, ..	2		4	77	308	..	..	..	..	..	..
10–11 ,, ..	1		2	91	182	..	..	..	..	..	..
12–13 ,, ..	2		4	104	416	..	..	..	..	..	..
13–14 ,, ..	1		2	112	224	..	..	..	..	..	..
Total ..	18	..	36	..	2,366	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet	7	2	14	49	686	..	..	..	..	..	..
7– 8 ,, ..	10		20	62	1,240	..	..	..	..	..	..
8– 9 ,, ..	7		14	84	1,176	..	..	..	..	..	..
9–10 ,, ..	4		8	125	1,000	..	..	..	..	..	..
11–12 ,, ..	2		4	157	628	..	..	..	..	..	..
12–13 ,, ..	1		2	234	468	..	..	..	..	..	..
15–16 ,, ..	1		2	275	550	..	..	..	..	..	..
Total ..	32	..	64	..	5,748	..	..	..	..	..	..
Thadashi—											
6– 7 feet	18	2	36	32	1,152	..	..	..	..	..	..
7– 8 ,, ..	9		18	54	972	..	..	..	..	..	..
8– 9 ,, ..	1		2	58	116	..	..	..	..	..	..
Total ..	28	..	56	..	2,240	..	..	..	..	..	..

Old Compartment No. IX.

Names of species.	Volumes of 6—7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	7,128	31,305
Rosewood	497	2,007
Irul	668	1,079
Venteak	2,935	4,232
Pillamarudu	3,941	14,706
Karumarudu	779	7,392
Vengai	..	210
Manjakadambai	543	6,568
Total ..	16,491	67,499
B. Species at present unsaleable—		
Vagai	450	902
Poovathi	174	2,192
Thadashi	1,152	1,088
Nirkadambai	686	5,062
Total ..	**2,462**	**9,244**

Total volumes of mature and saleable timber.

	C. FT.
Teak	31,305
Rosewood	2,007
Other superior species ..	34,187
Total ..	67,499

Calculations of the value of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. X—Area 437 acres, area of the sample plot 190 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		
						Percentage.	Quantity.	Percentage	Quantity.	Total deductions.
Teak—										
6- 7 feet ..	63	2·3	144	58	8,352	10·2	851	10	835	1,686	6,666
7- 8 ,, ..	88		202	74	14,948	10·	1,494		1,494	2,988	11,960
8- 9 ,, ..	33		75	94	7,050	8·4	592		705	1,297	5,753
9-10 ,, ..	24		55	123	6,765	7·5	507		676	1,183	5,582
10-11 ,, ..	15		34	99	3,366	6·6	222		336	558	2,803
11-12 ,, ..	20		46	187	8,602	6·1	524		860	1,384	7,218
12-13 ,, ..	14		32	157	5,024	5·6	281		502	783	4,241
13-14 ,, ..	8		18	261	4,698	5·2	244		469	713	3,985
14-15 ,, ..	6		13	289	3,757	4·9	184		375	559	3,198
15-16 ,, ..	6		13	183	2,379	4·6	109		237	346	2,033
16-17 ,, ..	1		2	320	640	4·3	27		64	91	549
17-18 ,, ..	2		4	458	1,832	4·1	75		183	258	1,574
18-19 ,, ..	1		2	495	990	3·9	38		99	137	853
19-20 ,, ..	2		4	532	2,128	3·7	78		212	290	1,838
20-21 ,, ..	1		2	491	982	3·5	34		98	132	850
Total ..	284	..	646	..	71,513	..	5,260	..	7,145	12,405	59,108
Rosewood—										
6- 7 feet ..	15	2·3	34	44	1,496	19·5	291	10	149	440	1,056
7- 8 ,, ..	15		34	61	2,074	17·8	369		207	576	1,498
8- 9 ,, ..	5		11	98	1,078	16·	172		107	279	799
9-10 ,, ..	4		9	121	1,089	14·2	154		108	262	827
11-12 ,, ..	2		4	146	584	12·	70		58	128	456
12-13 ,, ..	2		4	187	748	11·1	83		74	157	591
13-14 ,, ..	1		2	279	558	10·3	57		55	112	446
14-15 ,, ..	1		2	349	698	9·7	67		69	136	562
15-16 ,, ..	1		2	306	612	9·2	56		61	117	495
Total ..	46	..	102	..	8,937	..	1,319	..	888	2,207	6,730
Vangai—										
6- 7 feet ..	1	2·3	2	48	96	14·5	13	10	9	22	74
7- 8 ,, ..	..		..	..	..	..	..		..	..	..
8- 9 ,, ..	..		..	..	..	..	..		..	..	..
9-10 ,, ..	1		2	100	200	10·2	20		20	40	160
10-11 ,, ..	..		..	..	..	..	..		..	..	..
11-12 ,, ..	1		2	120	240	8·6	20		24	44	196
Total ..	3	..	6	..	536	..	53	..	53	106	430
Venteak—										
6- 7 feet ..	100	2·3	230	48	11,040	7·4	816	10	1,104	1,920	9,120
7- 8 ,, ..	90		207	67	13,869	6·6	915		1,386	2,301	11,568
8- 9 ,, ..	18		41	88	3,608	5·8	209		360	569	3,039
9-10 ,, ..	19		43	128	5,504	5·2	286		550	836	4,668
10-11 ,, ..	6		13	129	1,677	4·8	80		167	247	1,430
11-12 ,, ..	3		6	130	780	4·4	34		78	112	668
12-13 ,, ..	2		4	130	520	4·0	20		52	72	448
13-14 ,, ..	1		2	130	260	3·8	9		26	35	225
Total ..	239	..	546	..	37,258	..	2,369	..	3,723	6,092	31,166
Irul—										
6- 7 feet ..	25	2·3	57	38	2,166	10·2	220	10	216	436	1,730
7- 8 ,, ..	20		46	67	3,082	10·	308		308	616	2,466
8- 9 ,, ..	8		18	75	1,350	8·4	113		135	248	1,102
9-10 ,, ..	4		9	115	1,035	7·5	77		103	180	855
10-11 ,, ..	2		4	126	504	6·6	33		50	83	421
11-12 ,, ..	5		11	116	1,276	6·1	77		127	204	1,072
12-13 ,, ..	1		2	154	308	5·6	17		30	47	261
Total ..	65	..	147	..	9,721	..	845	..	969	1,814	7,907
Pillamarudu—										
6- 7 feet ..	116	2·3	266	58	15,428	14·5	2,237	10	1,542	3,779	11,649
7- 8 ,, ..	125		287	67	19,229	12·9	2,480		1,922	4,402	14,827
8- 9 ,, ..	49		112	94	10,528	11·5	1,210		1,052	2,262	8,266
9-10 ,, ..	25		57	110	6,270	10·2	639		627	1,266	5,004
10-11 ,, ..	13		29	124	3,596	9·3	334		359	693	2,903
11-12 ,, ..	26		59	188	11,092	8·6	953		1,109	2,062	9,030
12-13 ,, ..	15		34	238	8,092	8·	647		809	1,456	6,636
13-14 ,, ..	11		25	234	5,850	7·5	438		585	1,023	4,827
14-15 ,, ..	10		23	241	5,543	7·	388		554	942	4,601
15-16 ,, ..	12		27	237	6,399	6·6	422		639	1,061	5,338
16-17 ,, ..	4		9	234	2,106	6·1	128		210	338	1,768
17-18 ,, ..	1		2	272	544	5·8	31		54	85	459
18-19 ,, ..	1		2	310	620	5·5	34		62	96	524
19-20 ,, ..	1		2	310	620	5·	31		62	93	527
Total ..	**409**	..	**934**	..	**95,917**	..	**9,972**	..	**9,586**	**19,558**	**76,359**

16746

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. X—Area 437 acres, area of the sample plot 190 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Total deductions.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Manjakadambai—											
6–7 feet ..	2	2·3	4	77	308	19·5	60	10	30	90	218
10–11 ,, ..	1		2	175	350	12·9	45		35	80	270
15–16 ,, ..	2		4	364	1,456	9·2	133		145	278	1,178
Total ..	5	..	10	..	2,114	..	238	..	210	448	1,666
Vagai—											
6–7 feet ..	5	2·3	11	45	495	..	..	..	..	..	..
7–8 ,, ..	8		18	63	1,134	..	..	..	..	..	..
8–9 ,, ..	1		2	89	178	..	..	..	..	..	..
Total ..	14	..	31	..	1,807	..	..	..	..	..	
Karumarudu—											
6–7 feet ..	29	2·3	66	59	3,894	24	934	10	389	1,323	2,571
7–8 ,, ..	56		128	82	10,496	21·4	2,246		1,049	3,295	7,201
8–9 ,, ..	25		57	119	6,783	19·2	1,302		678	1,980	4,803
9–10 ,, ..	15		34	122	4,148	17·1	709		414	1,123	3,025
10–11 ,, ..	10		23	138	3,174	15·2	482		317	799	2,375
11–12 ,, ..	17		39	213	8,307	14·3	1,187		830	2,017	6,290
12–13 ,, ..	10		23	254	5,842	13·4	782		584	1,366	4,476
13–14 ,, ..	7		16	285	4,560	12·5	570		456	1,026	3,534
14–15 ,, ..	1		2	293	586	11·7	68		58	126	460
15–16 ,, ..	9		20	409	8,180	11·1	907		818	725	6,455
16–17 ,, ..	1		2	405	810	10·3	83		81	164	646
17–18 ,, ..	1		2	419	838	9·7	81		83	164	674
Total ..	181	..	412	..	57,618	..	9,351	..	5,757	15,108	42,510
Nirkadambai—											
6–7 feet ..	6	2·3	13	49	637	..	..	..	..	..	..
7–8 ,, ..	8		18	62	1,116	..	..	..	..	..	..
8–9 ,, ..	8		18	84	1,512	..	..	..	..	..	..
9–10 ,, ..	5		11	125	1,375	..	..	..	..	..	..
11–12 ,, ..	3		6	157	942	..	..	..	..	..	..
12–13 ,, ..	2		4	234	936	..	..	..	..	..	..
15–16 ,, ..	1		2	275	550	..	..	..	..	..	..
Total ..	33	..	72	..	7,068	..	..	..	..	..	..
Poovathi—											
6–7 feet ..	6	2·3	13	29	377	..	..	..	..	..	..
7–8 ,, ..	14		32	31	992	..	..	..	..	..	..
8–9 ,, ..	11		25	67	1,675	..	..	..	..	..	..
9–10 ,, ..	7		16	77	1,232	..	..	..	..	..	..
10–11 ,, ..	5		11	91	1,001	..	..	..	..	..	..
11–12 ,, ..	7		16	83	1,328	..	..	..	..	..	..
12–13 ,, ..	4		9	104	936	..	..	..	..	..	..
13–14 ,, ..	3		6	112	672	..	..	..	..	..	..
14–15 ,, ..	2		4	115	460	..	..	..	..	..	..
15–16 ,, ..	4		9	120	1,080	..	..	..	..	..	..
16–17 ,, ..	2		4	150	600	..	..	..	..	..	..
18–19 ,, ..	1		2	160	320	..	..	..	..	..	..
Total ..	66	..	147	..	10,673	..	..	..	..	..	..
Thadashi—											
6–7 feet ..	86	2·3	197	32	6,304	..	..	..	..	..	..
8 ,, ..	33		75	54	4,050	..	..	..	..	..	..
9 ,, ..	2		4	58	232	..	..	..	..	..	..
10 ,, ..	3		6	57	342	..	..	..	..	..	..
Total ..	124	..	282	..	10,928	..	..	..	..	..	..

Old Compartment No. X.

Names of species.	Some volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	6,666	52,442
Rosewood	1,056	5,674
Vengai	74	356
Venteak	9,120	22,046
Karumarudu	2,571	39,939
Pillamarudu	11,649	64,710
Irul	1,730	6,177
Manjakadambai	218	1,448
Total ..	33,084	192,792
B. Species at present unsaleable—		
Nirkadambai	637	6,431
Vagai	495	1,312
Poovathi	377	10,296
Thadashi	6,304	4,624
Total ..	7,813	22,663

Total volumes of mature and saleable timber.

	C. FT.
Teak	52,442
Rosewood	5,674
Other superior species ..	134,676
Grand total ..	192,792

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XI—Area 540 acres, area of the sample plot 225 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage	Quantity.		
Teak—											
6– 7 feet ..	178	2·4	427	58	24,766	10·2	2,526	10	2,476	5,002	19,764
7– 8 ,, ..	191		458	106	48,548	12·	4,854		4,854	9,708	38,840
8– 9 ,, ..	132		316	112	35,392	8·4	2,972		3,539	6,511	28,881
9–10 ,, ..	79		189	141	26,649	7·5	1,998		2,664	4,662	21,987
10–11 ,, ..	58		139	176	24,464	6·6	1,614		2,446	4,060	20,404
11–12 ,, ..	39		93	205	19,065	6·1	1,162		1,906	3,068	15,997
12–13 ,, ..	21		50	199	9,950	5·6	557		995	1,552	8,398
13–14 ,, ..	10		24	284	6,816	5 2	354		681	1,035	5,781
14–15 ,, ..	8		19	280	5,320	4·9	260		532	792	4,528
15–16 ,, ..	12		28	388	10,864	4·6	499		1,086	1,585	9,279
16–17 ,, ..	3		7	492	3,444	4 3	148		344	492	2,952
17–18 ,, ..	2		4	547	2,188	4·1	89		218	307	1,881
18–19 ,, ..	2		4	536	2,144	3·9	83		214	297	1,847
19–20 ,, ..	5		12	612	7,344	3·7	271		734	1,005	6,339
Total ..	740	..	1,770	..	226,954	..	17,387	..	22,689	40,076	1,86,878
Venteak—											
6– 7 feet ..	134	2·4	321	76	24,396	7·4	1,805	10	2,439	4,244	20,152
7– 8 ,, ..	88		211	79	16,669	6·6	1,100		1,666	2,766	13,903
8– 9 ,, ..	29		69	118	8,142	5 8	472		814	1,286	6,856
9–10 ,, ..	17		40	135	5,400	5·2	280		540	820	4,580
10–11 ,, ..	5		12	140	1,680	4·8	80		168	248	1,432
11–12 ,, ..	5		12	150	1,800	4·4	79		180	259	1,541
15–16 ,, ..	1		2	150	300	3·4	10		30	40	260
Total ..	279	..	667	..	58,387	..	3,826	..	5,837	9,663	48,724
Rosewood—											
6– 7 feet ..	11	2·4	26	60	1,560	19·5	304	10	156	460	1,100
7– 8 ,, ..	11		26	93	2,418	17·8	430		241	671	1,747
8– 9 ,, ..	3		7	111	777	16	124		77	201	576
9–10 ,, ..	8		19	158	3,002	14·2	426		300	726	2,276
10–11 ,, ..	4		9	172	1,548	12·9	199		154	353	1,195
11–12 ,, ..	3		7	186	1,302	12	156		130	286	1,016
13–14 ,, ..	1		2	279	558	10·3	57		55	112	446
14–15 ,, ..	1		2	349	698	9·7	67		69	136	562
18–19 ,, ..	1		2	306	612	7.6	47		61	108	504
Total ..	43	..	100	..	12,475	..	1,810	..	1,243	3,053	9,422
Karimarudu—											
6– 7 feet ..	62	2·4	148	66	9,768	24	2,344	10	976	3,320	6,448
7– 8 ,, ..	66		158	94	14,852	21·4	3,178		1,485	4,663	10,189
8– 9 ,, ..	50		120	131	15,720	19·2	3,018		1,572	4,590	11,130
9–10 ,, ..	41		98	131	12,838	17·1	2,195		1,283	3,478	9,360
10–11 ,, ..	24		57	177	10,089	15·2	1,533		1,008	2,541	7,548
11–12 ,, ..	29		69	188	12,972	14·3	1,854		1,297	3,151	9,821
12–13 ,, ..	5		12	339	4,068	13·4	545		406	951	3,117
13–14 ,, ..	5		12	248	2,976	12·5	372		297	669	2,307
14–15 ,, ..	4		9	319	2,871	11·7	335		287	622	2,249
15–16 ,, ..	3		7	400	2,800	11 1	310		280	590	2,210
17–18 ,, ..	1		2	500	1,000	9·7	97		100	197	803
18-19 ,, ..	1		2	500	1,000	9·3	93		100	193	807
Total ..	291	..	694	..	90,954	..	15,874	..	9,091	24,965	65,989
Pillamarudu—											
6– 7 feet ..	105	2·4	252	53	13,356	14·5	1,936	10	1,335	3,271	10,085
7– 8 ,, ..	109		261	75	19,575	12·9	2,525		1,957	4,482	15,093
8– 9 ,, ..	61		146	117	17,082	11·5	1,964		1,708	3,672	13,410
9–10 ,, ..	45		108	141	15,228	10·2	1,553		1,522	3,075	12,153
10–11 ,, ..	28		67	155	10,385	9·3	965		1,038	2,003	8,382
11–12 ,, ..	21		50	150	7,500	8·6	645		750	1,395	6,105
12–13 ,, ..	21		50	146	7,300	8	584		730	1,314	5,986
13–14 ,, ..	11		26	200	5,200	7·5	390		520	910	4,290
14–15 ,, ..	9		21	260	5,460	7	382		546	928	4,532
15–16 ,, ..	6		14	326	4,564	6·6	301		456	757	3,807
16–17 ,, ..	1		2	319	638	6·1	38		63	101	537
17–18 ,, ..	3		7	313	2,191	5·8	127		219	346	1,845
19–20 ,, ..	6		14	391	5,474	5·3	290		547	837	4,637
Total ..	426	..	1,018	..	113,953	..	11,700	..	11,394	23,091	90,862
Nirkadambai—											
6– 7 feet ..	3	2·4	7	67	469	..	..	..	..	..	..
7– 8 ,, ..	7		16	69	1,104	..	..	..	..	..	..
8– 9 ,, ..	5		12	94	1,128	..	..	..	..	..	..
9–10 ,, ..	1		4	134	268	..	..	..	..	..	..
10–11 ,, ..	6		14	176	2,464	..	..	..	..	..	..
11–12 ,, ..	4		9	226	2,034	..	..	..	..	..	..
17–18 ,, ..	1		2	275	550	..	..	..	..	..	..
Total ..	27	..	62	..	8,017	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XI–Area 540 acres, area of the sample plot 225 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deduction.	Net volume in cubic feet.
Manjakadambai—											
6– 7 feet ..	4	2·4	9	64	576	19·5	112	10	57	169	407
7– 8 ,, ..	4		9	94	846	17·8	150		84	234	612
8– 9 ,, ..	2		4	113	452	16	72		45	117	335
9–10 ,, ..	3		7	175	1,225	14·2	173		122	295	930
10–11 ,, ..	5		12	180	2,160	12·9	278		216	494	1,666
11–12 ,, ..	4		9	204	1,836	12	220		183	403	1,433
12–13 ,, ..	1		2	252	504	11·1	55		50	105	399
13–14 ,, ..	3		7	194	1,358	10·3	139		135	274	1,084
15–16 ,, ..	4		9	256	3,204	9·2	294		320	614	2,590
16–17 ,, ..	1		2	400	800	8·5	68		80	148	652
17–18 ,, ..	1		2	400	800	8·1	64		80	144	656
19–20 ,, ..	2		4	600	2,400	7·3	175		240	415	1,985
Total ..	34	..	76	..	16,161	..	1,800	..	1,612	3,412	12,749
Poovathi—											
6– 7 feet ..	5	2·4	12	36	432	..	..	..	..	..	..
7– 8 ,, ..	8		19	31	589	..	..	..	..	..	..
8– 9 ,, ..	12		28	59	1,652	..	..	..	..	..	..
9–10 ,, ..	11		26	67	1,742	..	..	..	..	..	..
10–11 ,, ..	10		24	88	2,112	..	..	..	..	..	..
11–12 ,, ..	9		21	83	1,743	..	..	..	..	..	..
12–13 ,, ..	5		12	104	1,248	..	..	..	..	..	..
13–14 ,, ..	6		14	105	1,460	..	..	..	..	..	..
14–15 ,, ..	1		2	115	230	..	..	..	..	..	..
15–16 ,, ..	3		7	115	805	..	..	..	..	..	..
Total ..	70	..	165	..	12,013	..	..	..	..	..	..
Irul—											
6– 7 feet ..	60	2·4	144	61	8,784	10·2	895	10	878	1,773	7,011
7– 8 ,, ..	43		103	80	8,240	10·	824		824	1,648	6,592
8– 9 ,, ..	20		48	107	5,136	8·4	431		513	944	4,192
9–10 ,, ..	17		40	100	4,000	7·5	300		400	700	3,300
10–11 ,, ..	5		12	147	1,764	6·6	116		176	292	1,472
11–12 ,, ..	4		9	166	1,494	6·1	91		149	240	1,254
Total ..	149	..	356	..	29,418	..	2,557	..	2,940	5,597	23,821
Thadashi—											
6– 7 feet ..	66	2·4	158	61	9,638	..	..	..	..	..	..
7– 8 ,,	39		93	66	6,138	..	..	..	..	..	..
8– 9 ,, ..	8		19	72	1,368	..	..	..	..	..	..
9–10 ,, ..	5		12	135	1,620	..	..	..	..	..	..
11–12 ,, ..	2		4	135	540	..	..	..	..	..	..
Total ..	120	..	286	..	19,304	..	..	..	..	..	..
Vagai—											
6– 7 feet ..	2	2·4	4	65	260	..	..	..	..	..	..
7– 8 ,, ..	3		7	63	441	..	..	..	..	..	..
8– 9 ,, ..	2		4	89	356	..	..	..	..	..	..
Total ..	7	..	15	..	1,057	..	..	..	..	..	..

Old Compartment XI.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	19,764	167,114
Rosewood	1,100	8,322
Venteak	20,152	28,572
Irul	7,011	16,810
Pillamarudu	10,085	80,777
Karumarudu	6,448	59,541
Manjakadambai	407	12,342
Total ..	64,967	373,478
B. Species at present unsaleable—		
Vagai	260	797
Poovathi	432	11,581
Thadashi	9,638	9,666
Nirkadambai	469	7,548
Total ..	10,799	29,592

Total volumes of mature and saleable timber.

	C. FT.
Teak	167,114
Rosewood	8,322
Other superior species	198,042
Grand total ..	373,478

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekkadi leased forest, Old Compartment No. XII—Area 338 acres, area of the sample plot 188 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		
						Percentage.	Quantity.	Percentage.	Quantity.	Total deductions.
Teak—										
6– 7 feet ..	223	1·8	401	58	23,258	10·2	2,372	10	2,325	4,697	18,561
7– 8 ,, ..	205		369	74	27,306	10	2,730		2,730	5,460	21,846
8– 9 ,, ..	75		135	94	12,690	8·4	1,065		1,269	2,334	10,356
9–10 ,, ..	53		95	123	11,685	7·5	876		1,168	2,044	9,641
10–11 ,, ..	23		41	99	4,059	6·6	267		405	672	3,387
11–12 ,, ..	25		45	187	8,415	6·1	513		841	1,354	7,061
12–13 ,, ..	14		25	157	3,925	5·6	219		392	611	3,314
13–14 ,, ..	10		18	261	4,698	5·2	244		469	713	3,985
14–15 ,, ..	3		5	289	1,445	4·9	70		144	214	1,231
15–16 ,, ..	9		16	183	2,928	4·6	134		292	426	2,502
16–17 ,, ..	1		1	320	320	4·3	13		32	45	275
17–18 ,, ..	5		9	458	4,122	4·1	169		412	581	3,541
18–19 ,, ..	2		3	495	1,485	3·9	57		148	205	1,280
19–20 ,, ..	8		14	532	6,448	3 7	238		644	882	5,566
25–26 ,, ..	1		1	532	532	2·9	15		53	68	464
Total ..	657	..	1,178	..	113,316	..	8,982	..	11,324	20,306	93,010
Venteak—										
6– 7 feet ..	64	1·8	115	48	5 520	7·4	408	10	552	960	4,560
7– 8 ,, ..	18		32	67	2,144	6·6	141		214	355	1,789
8– 9 ,, ..	2		3	88	264	5·8	15		26	41	223
9–10 ,, ..	2		3	128	384	5·2	19		38	57	327
11–12 ,, ..	1		1	130	130	4·4	5		13	18	112
Total ..	87	..	154	..	8,442	..	588	..	843	1,431	7,011
Rosewood—										
6-7 feet ..	34	1·8	61	44	2,684	19·5	523	10	268	791	1,893
7-8 ,, ..	13		23	61	1,403	17·8	249		140	389	1,014
8-9 ,, ..	3		5	98	490	16·0	78		49	127	363
Total ..	50	..	89	..	4,577	..	850	..	457	1,307	3,270
Irul—										
6– 7 feet ..	37	1·8	66	38	2,508	10·2	255	10	250	505	2,003
7– 8 ,, ..	19		34	67	2,278	10	227		227	454	1,824
8– 9 ,, ..	8		14	75	1,050	8·4	88		105	193	857
10–11 ,, ..	2		3	126	378	6·6	24		37	61	317
Total ..	66	..	117	..	6,214	..	594	..	619	1,213	5,001
Pillamarudu—										
6– 7 feet ..	99	1·8	178	58	10,324	14·5	1,496	10	1,032	2,528	7,796
7– 8 ,, ..	43		77	67	5,159	12·9	665		515	1,180	3,979
8– 9 ,, ..	22		39	94	3,866	11·5	421		366	787	2,879
9–10 ,, ..	18		32	110	3,520	10·2	359		352	711	2,809
10–11 ,, ..	7		12	124	1,488	9·3	138		148	286	1,202
11–12 ,, ..	4		7	188	1,316	8·6	113		131	244	1,072
12–13 ,, ..	3		5	238	1,190	8	95		119	214	976
13–14 ,, ..	3		5	234	1,170	7·5	87		117	204	966
15–16 ,, ..	2		3	404	1,212	6 6	79		121	200	1,012
Total ..	201	..	358	..	29,045	..	3,453	..	2,901	6,354	22,691
Vengai—										
7-8 feet ..	3	1·8	5	82	410	12·9	52	10	41	93	317
Vagai—										
6– 7 feet ..	5	1·8	9	45	405	..	..	..	..	..	..
7– 8 ,, ..	1		1	63	63	..	..	..	..	..	..
8– 9 ,, ..	3		5	89	445	..	..	..	..	..	..
9–10 ,, ..	1		1	110	110	..	..	..	..	..	..
Total ..	10	..	16	..	1,023	..	..	..	..	..	..
Karumarudu—										
6– 7 feet ..	49	1·8	88	59	5,192	24	1,246	10	519	1,765	3,427
7– 8 ,, ..	22		39	82	3,198	21·4	684		319	1,003	2,195
8– 9 ,, ..	10		18	119	2,142	19·2	411		214	625	1,517
9–10 ,, ..	7		12	122	1,464	17·1	250		146	396	1,068
10–11 ,, ..	4		7	138	966	15·2	146		96	242	724
11–12 ,, ..	2		3	213	639	14·3	91		63	154	485
12–13 ,, ..	3		5	254	1,270	13·4	170		127	297	973
13–14 ,, ..	1		1	285	285	12·5	35		28	63	222
16–17 ,, ..	1		1	405	405	10·3	41		40	81	324
Total ..	99	..	174	..	15,561	..	3,074	..	1,552	4,626	10,935

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekkadi leased forest, Old Compartment No. XII—Area 338 acres, area of the sample plot 188 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.
						Percentage.	Quantity.	Percentage.	Quantity.	
Manjakadambai—										
6- 7 feet ..	5	1·8	9	77	693	19·5	135	10	69	204	489
7- 8 ,, ..	2		3	118	354	17·8	63		35	98	256
8- 9 ,, ..	1		1	128	128	16	20		12	32	96
9-10 ,, ..	3		5	153	765	14·2	108		76	184	581
10-11 ,, ..	1		1	175	175	12·9	22		17	39	136
11-12 ,, ..	2		3	197	591	12	70		59	129	462
12-13 ,, ..	2		3	297	891	11·1	98		89	187	704
13-14 ,, ..	3		5	279	1,395	10·3	143		139	282	1,113
14-15 ,, ..	1		1	481	481	9·7	46		48	94	387
15-16 ,, ..	3		5	364	1,820	9·2	167		182	349	1,471
16-17 ,, ..	1		1	290	290	8·5	24		29	53	237
17-18 ,, ..	1		1	367	367	8·1	29		36	65	302
19-20 ,, ..	3		5	500	2,500	7·3	182		250	432	2,068
Total ..	28	..	43	..	10,450	..	1,107	..	1,041	2,148	8,302
Poovathi—										
6- 7 feet ..	3	1·8	5	29	145	..	..	..	..	..	..
7- 8 ,, ..	1		1	31	31	..	..	..	..	..	..
8- 9 ,, ..	5		9	67	603	..	..	..	..	..	..
9-10 ,, ..	4		7	77	539	..	..	..	..	..	..
10-11 ,, ..	2		3	91	273	..	..	..	..	..	..
14-15 ,, ..	1		1	115	115	..	..	..	..	..	..
Total ..	16	..	26	..	1,706	..	..	..	..	..	..
Thadashi—										
6-7 feet ..	67	1·8	120	32	3,840	..	..	..	..	..	..
7-8 ,, ..	24		43	54	2,322	..	..	..	..	..	..
8-9 ,, ..	1		1	58	58	..	..	..	..	..	..
Total ..	92	..	164	..	6,220	..	..	..	..	..	..
Nirkadambai—										
6- 7 feet ..	4	1·8	7	49	343	..	..	..	..	..	..
7- 8 ,, ..	5		9	62	558	..	..	..	..	..	..
8- 9 ,, ..	7		12	84	1,008	..	..	..	..	..	..
9-10 ,, ..	6		10	125	1,250	..	..	..	..	..	..
10-11 ,, ..	3		5	147	735	..	..	..	..	..	..
11-12 ,, ..	3		5	157	785	..	..	..	..	..	..
13-14 ,, ..	1		1	261	261	..	..	..	..	..	..
15-16 ,, ..	1		1	275	275	..	..	..	..	..	..
Total ..	30	..	50	..	5,215	..	..	..	..	..	..

Old Compartment No. XII.

Names of species.	Total volumes of 6-7 feet girth class trees.	Total volumes of 7-8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	18,561	74,449
Rosewood	1,893	1,377
Venteak	4,560	2,451
Irul	2,003	2,998
Pillamarudu	7,796	14,895
Karumarudu	3,427	7,508
Vengai	..	317
Manjakadambai	489	7,813
Total ..	38,729	111,808
B. Species at present unsaleable—		
Vagai	405	618
Poovathi	145	1,561
Thadashi	3,840	2,380
Nirkadambai	343	4,872
Total ..	4,733	9,431

With bark.

Total volumes of mature and saleable timber.	C. FT.
Teak	74,449
Rosewood	1,377
Other superior species ..	35,982
Grand total ..	111,808

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekkadi leased forest, Old Compartment No. XIII—Area 251 acres, area of the sample plot, 145 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Teak—											
6- 7 feet ..	123	1·7	209	58	12,122	10·2	1,236	10	1,212	2,448	9,674
7- 8 ,, ..	100		170	74	12,580	10	1,258		1,258	2,516	10,064
8- 9 ,, ..	63		107	94	10,058	8·4	844		1,005	1,849	8,209
9-10 ,, ..	37		62	123	7,626	7·5	571		762	1,333	6,293
10-11 ,, ..	25		42	99	4,158	6·6	274		415	689	3,469
11-12 ,, ..	20		34	187	6,358	6·1	387		635	1,022	5,336
12-13 ,, ..	12		20	157	3,140	5·6	175		314	489	2,651
13-14 ,, ..	3		5	261	1,305	5·2	67		130	127	1,108
14-15 ,, ..	4		6	289	1,734	4·9	84		173	257	1,477
15-16 ,, ..	8		13	183	2,379	4·6	109		237	346	2,033
16-17 ,, ..	4		6	320	1,920	4·3	82		192	274	1,646
17-18 ,, ..	3		5	458	2,290	4·1	93		229	322	1,968
18-19 ,, ..	3		5	495	2,475	3·9	96		247	343	2,132
19-20 ,, ..	3		5	532	2,660	3·7	98		266	364	2,296
Total ..	498	..	689	..	70,805	..	5,374	..	7,075	12,449	58,356
Rosewood—											
6- 7 feet ..	21	1·7	35	44	1,540	19·5	300	10	154	454	1,086
7- 8 ,, ..	9		15	61	915	17·8	162		91	253	662
8- 9 ,, ..	6		10	98	980	16	156		98	254	726
9-10 ,, ..	1		1	121	121	14·2	17		13	29	92
Total ..	37	..	61	..	3,556	..	635	..	355	990	2,566
Venteak—											
6-7 feet ..	46	1·7	78	48	3,744	7·4	277	10	374	651	3,093
7-8 ,, ..	22		37	67	2,479	6·6	163		247	410	2,069
8-9 ,, ..	4		6	88	528	5·8	30		52	82	446
Total ..	72	..	121	..	6,751	..	470	..	673	1,143	5,608
Irul—											
6-7 feet ..	23	1·7	39	38	1,482	10·2	151	10	148	299	1,183
7-8 ,, ..	13		22	67	1,474	10	147		147	294	1,180
8-9 ,, ..	4		6	75	450	8·4	37		45	82	368
Total ..	40	..	67	..	3,406	..	335	..	340	675	2,731
Pillamarudu—											
6- 7 feet ..	70	1·7	119	58	6,902	14·5	1,000	10	690	1,690	5,212
7- 8 ,, ..	53		90	67	6,030	12·9	777		603	1,380	4,650
8- 9 ,, ..	28		47	94	4,418	11·5	508		441	949	3,469
9-10 ,, ..	6		10	110	1,100	10·2	112		110	222	878
11-12 ,, ..	7		11	188	2,068	8·6	177		206	383	1,685
12-13 ,, ..	2		3	238	714	8	57		71	128	586
14-15 ,, ..	3		5	241	1,205	7	84		120	204	1,001
15-16 ,, ..	1		1	404	404	6·6	26		40	66	338
Total ..	170	..	286	..	22,841	..	2,741	..	2,281	5,022	17,819
Vengai—											
6- 7 feet ..	4	1·7	6	48	288	14·5	41	10	28	69	219
7- 8 ,, ..	2		3	82	246	12·9	31		24	55	191
9-10 ,, ..	1		1	131	131	10·2	13		13	26	105
Total ..	7	..	10	..	665	..	85	..	65	150	515
Karumarudu—											
6- 7 feet ..	67	1·7	113	59	6,667	24	1,600	10	666	2,266	4,401
7- 8 ,, ..	36		61	82	5,002	21·4	1,070		500	1,570	3,432
8- 9 ,, ..	30		51	119	6,069	19·2	1,165		606	1,771	4,298
9-10 ,, ..	14		23	122	2,806	17·1	479		280	759	2,047
10-11 ,, ..	7		11	138	1,518	15·2	230		151	381	1,137
11-12 ,, ..	10		17	213	3,621	14·3	517		362	879	2,742
12-13 ,, ..	3		5	254	1,270	13·4	170		127	297	973
13-14 ,, ..	2		3	285	855	12·5	106		85	191	664
16-17 ,, ..	2		3	405	1,215	10·3	125		121	246	969
17-18 ,, ..	2		3	419	1,257	9·7	121		125	246	1,011
Total ..	173	..	290	..	30,280	..	5,583	..	3,023	8,606	21,674
Vagai—											
6- 7 feet ..	5	1·7	8	45	360	..	..	..	..	..	..
7- 8 ,, ..	1		1	63	63	..	..	..	..	..	..
8- 9 ,, ..	1		1	89	89	..	..	..	..	..	..
9-10 ,, ..	2		3	110	330	..	..	..	..	..	..
Total ..	9	..	13	..	842	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekkadi leased forest, Old Compartment No. XIII—Area 251 acres, area of the sample plot, 145 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deduction to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Thadashi—											
6- 7 feet ..	29	1·7	49	32	1,568	..	..	..	..	..	..
7- 8 ,, ..	9		15	54	810	..	..	..	..	..	..
8- 9 ,, ..	3		5	58	290	..	..	..	..	..	..
9-10 ,, ..	1		1	59	59	..	..	..	..	..	..
Total ..	42	..	70	..	2,727	..	..	..	..	..	..
Poovathi—											
6- 7 feet ..	9	1·7	15	29	435	..	..	..	..	..	..
7- 8 ,, ..	8		13	31	403	..	..	..	..	..	..
8- 9 ,, ..	5		8	67	536	..	..	..	..	..	..
9-10 ,, ..	5		8	77	616	..	..	..	..	..	..
11-12 ,, ..	1		1	83	83	..	..	..	..	..	..
12-13 ,, ..	4		6	104	624	..	..	..	..	..	..
13-14 ,, ..	2		3	112	336	..	..	..	..	..	..
Total ..	34	..	54	..	3,033	..	..	..	..	..	..
Manjakadambai—											
6- 7 feet ..	2	1·7	3	77	231	19·5	45	10	23	68	163
7- 8 ,, ..	6		10	118	1,180	17·8	210		118	328	852
8- 9 ,, ..	8		13	128	1,664	16	266		166	432	1,232
9-10 ,, ..	1		1	153	153	14·2	21		15	36	117
11-12 ,, ..	1		1	197	197	12	23		19	42	155
12-13 ,, ..	3		5	297	1,485	11·1	164		148	312	1,173
13-14 ,, ..	2		3	279	837	10·3	86		83	169	668
15-16 ,, ..	3		5	364	1,820	9·2	167		182	349	1,471
17-18 ,, ..	2		3	367	1,101	8·1	89		110	199	902
Total ..	28	..	44	..	8,668	..	1,071	..	864	1,935	6,733
Nirkadambai—											
6- 7 feet ..	3	1·7	5	29	145	..	..	..	..	..	..
7- 8 ,, ..	6		10	31	310	..	..	..	..	..	..
8- 9 ,, ..	3		5	67	335	..	..	..	..	..	..
9-10 ,, ..	2		3	77	231	..	..	..	..	..	..
10-11 ,, ..	5		8	91	728	..	..	..	..	..	..
11-12 ,, ..	2		3	83	249	..	..	..	..	..	..
Total ..	21	..	34	..	1,998	..	..	..	..	..	..

Old Compartment No. XIII.

Names of species.	Total volumes of 6-7 feet girth class trees.	Total volumes of 7-8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	9,674	48,682
Rosewood	1,086	1,480
Venteak	3,093	2,515
Irul	1,183	1,548
Pillamarudu	5,212	12,607
Karumarudu	4,401	17,273
Vengai	219	296
Manjakadambai	163	6,570
Total ..	25,031	90,971
B. Species at present unsaleable—		
Vagai	360	482
Poovathi	435	2,598
Thadashi	1,568	1,159
Nirkadambai	145	1,853
Total ..	2,508	6,092

Total volumes of mature and saleable timber.

	C. FT.
Teak	48,682
Rosewood	1,480
Other superior species ..	40,809
Grand total ..	90,971

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekkadi leased forest, Old Compartment No. XIV—Area 300 acres, area of the sample plot 166 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects, as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6- 7 feet ..	150	1·8	270	58	15,660	10·2	1,597	10	1,566	3,163	12,497
7- 8 ,, ..	136		244	106	25,864	10	2,586		2,586	5,172	20,692
8- 9 ,, ..	59		106	112	11,872	8·4	997		1,187	2,184	9,688
9-10 ,, ..	40		72	141	10,152	7·5	761		1,015	1,776	8,376
10-11 ,, ..	15		27	176	4,752	6·6	313		475	788	3,964
11-12 ,, ..	22		39	205	7,995	6·1	487		799	1,286	6,709
12-13 ,, ..	8		14	199	2,786	5·6	156		278	434	2,352
13-14 ,, ..	3		5	284	1,420	5·2	73		142	215	1,205
14-15 ,, ..	3		5	280	1,400	4·9	68		140	208	1,192
15-16 ,, ..	6		10	388	3,880	4·6	178		388	566	3,314
17-18 ,, ..	2		3	547	1,641	4·1	67		164	231	1,410
Total ..	444	..	795	..	87,422	..	7,283	..	8,740	16,023	71,399
Rosewood—											
6- 7 feet ..	18	1·8	32	60	1,920	19·5	374	10	192	566	1,354
7- 8 ,, ..	17		30	93	2,790	17·8	496		279	775	2,015
8- 9 ,, ..	1		1	111	111	16	17		11	28	83
10-11 ,, ..	2		3	172	516	12·9	66		51	117	399
11-12 ,, ..	2		3	186	558	12	66		55	121	437
15-16 ,, ..	1		1	306	306	9·2	28		30	58	248
Total ..	41	..	70	..	6,201	..	1,047	..	618	1,665	4,536
Venteak—											
6- 7 feet ..	68	1·8	122	76	9,272	7·4	686	10	927	1,613	7,659
7- 8 ,, ..	34		61	79	4,819	6·6	318		481	799	4,020
8- 9 ,, ..	6		10	118	1,180	5·8	68		118	186	994
9-10 ,, ..	2		3	135	405	5·2	21		40	61	344
10-11 ,, ..	1		1	140	140	4·8	6		14	20	120
14-15 ,, ..	1		1	150	150	3·6	5		15	20	130
15-16 ,, ..	1		1	150	150	3·4	5		15	20	130
Total ..	113	..	199	..	16,116	..	1,109	..	1,610	2,719	13,397
Pillamaradu—											
6- 7 feet ..	95	1·8	171	53	9,063	14·5	1,314	10	906	2,220	6,843
7- 8 ,, ..	60		108	75	8,100	12·9	1,044		810	1,854	6,246
8- 9 ,, ..	15		27	117	3,159	11·5	363		315	678	2,481
9-10 ,, ..	16		28	141	3,948	10·2	402		394	796	3,152
10-11 ,, ..	8		14	155	2,170	9·3	201		217	418	1,752
11-12 ,, ..	11		19	150	2,850	8·6	245		285	530	2,320
12-13 ,, ..	4		7	146	1,022	8	81		102	183	839
13-14 ,, ..	4		7	200	1,400	7·5	105		140	245	1,155
14-15 ,, ..	1		1	260	260	7	18		26	44	216
15-16 ,, ..	2		3	326	978	6·6	64		97	161	817
16-17 ,, ..	2		3	319	957	6·1	58		95	153	804
17-18 ,, ..	1		1	313	313	5·8	18		31	49	264
18-19 ,, ..	1		1	352	352	5·5	19		35	54	298
19-20 ,, ..	1		1	391	391	5·3	20		39	59	332
Total ..	221	..	391	..	34,963	..	3,952	..	3,492	7,444	27,519
Vagai—						Nil.					
6-7 feet ..											
7-8 ,, ..	5	1·8	9	63	567	..	..	..	..	..	..
8-9 ,, ..	1		1	89	89	..	..	..	..	..	..
Total ..	6	..	10	..	656	..	..	..	..	..	..
Poovatbi—											
6- 7 feet ..	3	1·8	5	36	180		..	..	..	..	..
7- 8 ,, ..	4		7	31	217	..	..	..	..	..	..
8- 9 ,, ..	3		5	59	295	..	..	..	..	..	..
9-10 ,, ..	1		1	67	67	..	..	..	..	..	..
11-12 ,, ..	3		5	83	415	..	..	..	..	..	..
12-13 ,, ..	1		1	104	104	..	..	..	..	..	..
14-15 ,, ..	1		1	115	115	..	..	..	..	..	..
Total ..	16	..	25	..	1,393	..	..	..	..	..	..
Thadashi—											
6-7 feet ..	34	1·8	61	61	3,721	..	..	..	..	..	..
7-8 ,, ..	13		23	66	1,518	..	..	..	..	..	..
8-9 ,, ..	5		9	72	648	..	..	..	..	..	..
Total ..	52	..	93	..	5,887	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XIV—Area 300 acres, area of the sample plot 166 acres,—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects. Percentage.	On account of internal and other defects. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Irul—											
6–7 feet ..	91	1·8	163	61	9,943	10·2	1,014	10	994	2,008	7,935
7–8 ,, ..	49		88	80	7,040	10·	704		704	1,408	5,632
8–9 ,, ..	8		14	107	1,498	8·4	125		149	274	1,224
9–10 ,, ..	5		9	100	900	7·5	67		90	157	743
Total ..	153	..	274	..	19,381	..	1,910	..	1,937	3,847	15,534
Karumarrudu—											
6–7 feet ..	42	1·8	75	66	4,950	2·4	1,188	10	495	1,683	3,267
7–8 ,, ..	50		90	94	8,460	21 4	1,810		846	2,656	5,804
8–9 ,, ..	21		37	131	4,841	19·2	929		484	1,413	3,428
9–10 ,, ..	15		27	131	3,537	17·1	604		353	957	2,580
10–11 ,, ..	8		14	177	2,478	15·2	376		247	623	1,855
11–12 ,, ..	9		16	188	3,008	14 3	430		300	730	2,278
12–13 ,, ..	4		7	339	2,373	13·4	317		237	554	1,819
13–14 ,, ..	4		7	248	1,736	12·5	217		173	390	1,346
14–15 ,, ..	1		1	319	319	11·7	37		31	68	251
15–16 ,, ..	1		1	400	400	11·1	44		40	84	316
16–17 ,, ..	2		3	493	1,479	10·3	152		147	299	1,180
17–18 ,, ..	1			500	509	9·7	48		50	98	402
19–20 ,, ..	1		1	500	500	8·8	44		50	94	406
Total .	159	..	280	..	34,581	..	6,196	..	3,453	9,649	24,932
Vengai—											
6–7 feet ..	1	1·8	1	55	55	14·5	7	10	5	12	43
7–8 ,, ..	2		3	76	228	12·9	29		22	51	177
11–12 ,, ..	1		1	120	120	8·6	10		12	22	98
13–14 ,, ..	1		1	120	120	7·5	9		12	21	99
Total ..	5	..	6	..	523	..	55	..	51	106	417
Manjakadambai—											
6–7 feet ..	9	1·8	16	64	1,024	19·5	199	10	102	301	723
7–8 ,, ..	3		5	94	470	17·8	83		47	130	340
8–9 ,, ..	1		1	113	113	16·0	18		11	29	84
10–11 ,, ..	2		3	180	540	12·9	69		54	123	417
11–12 ,, ..	1		1	204	204	12·0	24		20	44	160
12–13 ,, ..	1		1	252	252	11·1	27		25	52	200
13–14 ,, ..	1		1	194	194	10·3	19		19	38	156
14–15 ,, ..	3		5	344	1,720	9·7	166		172	338	1,382
16–17 ,, ..	1		1	400	400	8·5	34		40	74	326
Total ..	22	..	34	..	4,917	..	639	..	490	1,129	3,788
Nirkadambai—											
6–7 feet ..	1	1·8	1	67	67	..	..	..	..	..	..
7–8 ,, ..	6		10	69	690	..	..	..	..	..	..
8–9 ,, ..	1		1	94	94	..	..	..	..	..	..
9–10 ,, ..	3		5	134	670	..	..	..	..	..	..
10–11 ,, ..	1		1	176	176	..	..	..	..	..	..
11–12 ,, ..	1		1	226	226	..	..	..	..	..	..
15–16 ,, ..	1		1	275	275	..	..	..	..	..	..
16–17 ,, ..	1		1	275	275	..	..	..	..	..	..
Total ..	15	..	21	..	2,473	..	..	..	..	..	..

Old compartment No. XIV.

Names of species.	Volume of 6–7 feet girth class trees.	Volume of 7–8 feet girth class trees and over. mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	12,497	58,902
Rosewood	1,354	3,182
Venteak	7,659	5,738
Pillamarudu	6,843	20,676
Irul	7,935	7,599
Karumarudu	3,267	21,665
Vengai	43	374
Manjakadambai	723	3,065
Total ..	40,321	121,201
B. Species at present unsaleable—		
Vagai	..	656
Poovathi	180	1,213
Thadashi	3,721	2,166
Nirkadambai	67	2,406
Total ..	3,968	6,441

With bark.

Total volume of mature and saleable timber.

	C. FT.
Teak	58,902
Rosewood	3,182
Other superior species	59,117
Grand total ..	121,201

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, old compartment No. XV—Area 298 acres, area of the sample plot 137 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	77	2·1	161	46	7,406	10·2	755	10	740	1,495	5,911
7– 8 ,, ..	51		107	60	6,420	10·0	642		642	1,284	5,136
8– 9 ,, ..	25		52	92	4,784	8·4	401		478	879	3,905
9–10 ,, ..	12		25	103	2,575	7·5	193		257	450	2,125
10–11 ,, ..	3		6	136	816	6·6	53		81	134	682
11–12 ,, ..	1		2	142	284	6·1	17		28	45	239
12–13 ,, ..	1		2	132	264	5·6	14		26	40	224
13–14 ,, ..	1		2	284	568	5·2	29		56	85	483
15–16 ,, ..	1		2	339	678	4·6	31		67	98	580
16–17 ,, ..	1		2	340	680	4·3	29		68	97	583
Total ..	173	..	361	..	24,475	..	2,164	..	2,443	4,607	19,868
Rosewood—											
6– 7 feet ..	4	2·1	8	41	328	19·5	63	10	32	95	233
7– 8 ,, ..	7		14	73	1,022	17·8	181		102	283	737
8– 9 ,, ..	4		8	98	784	16·0	125		78	203	581
12–13 ,, ..	1		2	262	524	11·1	58		52	110	414
Total ..	16	..	32	..	2,658	..	427	..	264	691	1,965
Venteak—											
6– 7 feet ..	56	2·1	117	50	5,850	7·4	432	10	585	1,017	4,833
7– 8 ,, ..	15		31	65	2,015	6·6	132		201	333	1,682
8– 9 ,, ..	2		4	110	440	5·8	25		44	69	371
9–10 ,, ..	2		4	111	444	5·2	23		44	67	377
10–11 ,, ..	1		2	140	280	4·8	13		28	41	239
Total ..	76	..	158	..	9,029	..	625	..	902	1,527	7,502
Irul—											
6– 7 feet ..	34	2·1	71	37	2,627	10·2	267	10	262	529	2,098
7– 8 ,, ..	9		18	48	864	10·0	86		86	172	692
8– 9 ,, ..	8		16	64	1,024	8·4	86		102	188	836
9–10 ,, ..	5		10	78	780	7·5	58		78	136	644
10–11 ,, ..	1		2	100	200	6·6	13		20	33	167
11–12 ,, ..	1		2	110	220	6·1	13		22	35	185
Total ..	58	..	119	..	5,715	..	523	..	570	1,093	4,622
Pillamarudu—											
6– 7 feet ..	33	2·1	69	39	2,691	14·5	390	10	269	659	2,032
7– 8 ,, ..	34		71	74	5,254	12·9	677		525	1,202	4,052
8– 9 ,, ..	26		54	74	3,996	11·5	459		399	858	3,138
9–10 ,, ..	28		58	130	7,540	10·2	769		754	1,523	6,017
10–11 ,, ..	14		29	129	3,741	9·3	347		374	721	3,020
11–12 ,, ..	8		16	152	2,432	8·6	209		243	452	1,980
12–13 ,, ..	3		6	196	1,176	8·0	94		117	211	965
13–14 ,, ..	1		2	230	460	7·5	34		46	80	380
14–15 ,, ..	2		4	265	1,060	7·0	74		106	180	880
Total ..	149	..	309	..	28,350	..	3,053	..	2,833	5,886	22,464
Thadashi—											
6-7 feet ..	12	2·1	25	26	650	..	..	..	..	..	..
7–8 ,, ..	3		6	49	294	..	..	..	..	..	..
Total ..	15	..	31	..	944	..	..	..	..	..	..
Karumarudu—											
6– 7 feet ..	40	2·1	84	46	3,864	24·0	927	10	386	1,313	2,551
7– 8 ,, ..	38		79	69	5,451	21·4	1,166		545	1,711	3,740
8– 9 ,, ..	38		79	104	8,216	19·2	1,577		821	2,398	5,818
9–10 ,, ..	45		94	118	11,092	17·1	1,896		1,109	3,005	8,087
10–11 ,, ..	10		21	118	2,478	15·2	376		247	623	1,855
11–12 ,, ..	5		10	180	1,800	14·3	257		180	437	1,363
12–13 ,, ..	11		23	191	4,393	13·4	588		439	1,027	3,366
13–14 ,, ..	2		4	200	800	12·5	100		80	180	620
14–15 ,, ..	3		6	231	1,386	11·7	162		138	300	1,086
15–16 ,, ..	4		8	267	2,136	11·1	237		213	450	1,686
Total ..	196	..	408	..	41,616	..	7,286	..	4,158	11,444	30,172
Poovathi—											
6– 7 feet ..	5	2·1	10	27	270	..	..	..	..	..	..
7– 8 ,, ..	6		12	39	468	..	..	..	..	..	..
8– 9 ,, ..	2		4	44	176	..	..	..	..	..	..
9–10 ,, ..	5		10	61	610	..	..	..	..	..	..
10–11 ,, ..	4		8	64	512	..	..	..	..	..	..
11–12 ,, ..	7		14	86	1,204	..	..	..	..	..	..
12–13 ,, ..	2		4	93	372	..	..	..	..	..	..
14–15 ,, ..	1		2	137	274	..	..	..	..	..	..
15–16 ,, ..	3		6	137	822	..	..	..	..	..	..
Total ..	35	..	70	..	4,708	..	..	..	..	..	..

Caculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forests, old compartment No. XV—Area 298 acres, area of the sample plot 137 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Manjakadambai—											
6- 7 feet ..	2	2·1	4	39	156	19·5	30	10	15	45	111
7- 8 ,, ..	1		2	48	96	17·8	17		9	26	70
8- 9 ,, ..	4		8	76	608	16·0	97		60	157	451
10-11 ,, ..	1		2	176	352	12·9	45		35	80	272
11-12 ,, ..	3		6	138	828	12·0	99		82	181	647
12-13 ,, ..	3		6	247	1,482	11·1	164		148	312	1,170
13-14 ,, ..	3		6	240	1,440	10·3	148		144	292	1,148
14-15 ,, ..	3		6	163	978	9·7	94		97	191	787
15-16 ,, ..	3		6	200	1,200	9·2	110		120	230	970
16-17 ,, ..	3		6	372	2,232	8·5	189		223	412	1,820
17-18 ,, ..	1		2	430	860	8·1	69		86	155	705
18-19 ,, ..	1		2	450	900	7·7	69		90	159	741
Total ..	28	..	56	..	11,132	..	1,131	..	1,109	2,240	8,892
Nirkadambai—											
6- 7 feet ..	7	2·1	14	45	630	..	..	..	..	..	..
7- 8 ,, ..	6		12	54	648	..	..	..	..	..	..
8- 9 ,, ..	2		4	101	404	..	..	..	..	..	..
9-10 ,, ..	2		4	97	388	..	..	..	..	..	..
10-11 ,, ..	2		4	170	680	..	..	..	..	..	..
11-12 ,, ..	1		2	150	300	..	..	..	..	..	..
12-13 ,, ..	1		2	150	300	..	..	..	..	..	..
15-16 ,, ..	1		2	150	300	..	..	..	..	..	..
Total ..	22	..	44	..	3,650	..	..	..	..	..	..
Vengai—											
6-7 feet ..	1	2·1	2	28	56	14·5	8	10	5	13	43
Vagai—											
6- 7 feet ..	1	2·1	2	38	76	..	..	..	..	..	..
7- 8 ,, ..	2		4	77	308	..	..	..	..	..	..
8- 9 ,, ..	1		2	85	170	..	..	..	..	..	..
11-12 ,, ..	1		2	101	202	..	..	..	..	..	..
Total ..	5	..	10	..	756	..	..	..	..	..	..

Old compartment No. XV.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	5,911	13,957
Rosewood	233	1,732
Ven-teak	4,833	2,669
Irul	2,098	2,524
Pillamarudu	2,032	20,432
Karumarudu	2,551	27,621
Vengai	43	
Manjakadambai ..	111	8,781
Total ..	17,812	77,716
B. Species at present unsaleable—		
Vagai	76	680
Poovathi	270	4,438
Thadashi	650	294
Nirkadambai	630	3,020
Total ..	1,426	8,432

Total volumes of mature and saleable timber. With bark.

	C. FT.
Teak	13,957
Rosewood	1,732
Other superior species	62,027
Grand total ..	77,716

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XVI—Area 277 acres, area of sample plot 171 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6- 7 feet ..	136	1·6	217	46	9,982	10·2	1,018	10	998	2,016	7,966
7- 8 ,, ..	106		169	60	10,140	10·0	1,014		1,014	2,028	8,112
8- 9 ,, ..	44		70	92	6,440	8·4	540		644	1,184	5,256
9-10 ,, ..	37		59	103	6,077	7·5	452		607	1,062	5,015
10-11 ,, ..	15		24	136	3,264	6·6	215		326	541	2,723
11-12 ,, ..	17		27	142	3,834	6·1	233		383	616	3,218
12-13 ,, ..	2		3	132	396	5·6	22		39	61	335
13-14 ,, ..	4		6	282	1,704	5·2	88		170	258	1,446
14-15 ,, ..	1		1	300	300	4·9	14		30	44	256
15-16 ,, ..	4		6	339	2,034	4·6	93		203	296	1,738
Total ..	366	..	582	..	44,171	..	3,692	..	4,414	8,306	36,065
Rosewood—											
6- 7 feet ..	19	1·6	30	41	1,230	19·5	239	10	123	362	868
7- 8 ,, ..	12		19	73	1,387	17·8	246		138	384	1,003
8- 9 ,, ..	6		9	98	882	16·0	141		88	229	653
9-10 ,, ..	4		6	152	912	14·2	129		91	220	692
11-12 ,, ..	1		1	154	154	12·0	18		15	33	121
12-13 ,, ..	1		1	262	262	11·1	29		26	55	207
Total ..	43	..	66	..	4,827		802	..	481	1,283	3,544
Venteak—											
6- 7 feet ..	86	1·6	137	50	6,850	7·4	506	10	685	1,191	5,659
7- 8 ,, ..	25		40	65	2,600	6·6	171		260	431	2,169
8- 9 ,, ..	7		11	110	1,210	5·8	70		121	191	1,019
Total ..	118	..	188	..	10,660	..	747	..	1,066	1,813	8,847
Pillamarudu—											
6- 7 feet ..	65	1·6	104	39	4,056	14·5	588	10	405	993	3,063
7- 8 ,, ..	53		84	74	6,216	12·9	801		621	1,422	4,794
8- 9 ,, ..	26		41	74	3,034	11·5	348		303	651	2,383
9-10 ,, ..	23		36	130	4,680	10·2	477		468	945	3,735
10-11 ,, ..	17		27	129	3,483	9·3	323		348	671	2,812
11-12 ,, ..	11		17	152	2,584	8·6	222		258	480	2,104
12-13 ,, ..	6		9	196	1,764	8·0	141		176	317	1,447
13-14 ,, ..	4		6	230	1,380	7·5	103		138	241	1,139
14-15 ,, ..	1		1	265	265	7·0	18		26	44	221
15-16 ,, ..	1		1	300	300	6·6	19		30	49	251
17-18 ,, ..	1		1	300	300	4·8	14		30	44	256
Total ..	208	..	327	..	28,062	..	3,054	..	2,803	5,857	22,205
Karumarudu—											
6- 7 feet ..	63	1·6	100	46	4,600	24·0	1,104	18	460	1,564	3,036
7- 8 ,, ..	61		97	69	6,693	21·4	1,426		669	2,095	4,598
8- 9 ,, ..	49		78	104	8,112	19·2	1,557		811	2,368	5,744
9-10 ,, ..	47		75	118	8,850	17·1	1,513		885	2,398	6,452
10-11 ,, ..	24		38	118	4,484	15·2	681		448	1,129	3,355
11-12 ,, ..	25		40	180	7,200	14·3	1,029		720	1,749	5,451
12-13 ,, ..	9		14	191	2,674	13·4	358		267	625	2,049
13-14 ,, ..	4		6	200	1,200	12·5	150		120	270	930
14-15 ,, ..	1		1	231	231	11·7	27		23	50	181
15-16 ,, ..	2		3	267	801	11·1	88		80	168	633
16-17 ,, ..	1		1	400	400	10·3	41		40	81	319
17-18 ,,	1		1	400	400	9·0	36		40	76	324
18-19 ,, ..	1		1	400	400	9·3	37		40	77	323
Total ..	288	..	455	..	46,045	..	8,047	..	4,603	12,650	33,395
Irul—											
6- 7 feet ..	12	1·6	19	37	703	10·2	71	10	70	141	562
7- 8 ,, ..	1		1	48	48	10·0	4		4	8	40
Total ..	13	..	20	..	751	..	75	..	74	149	602
Thadashi—											
6- 7 feet ..	11	1·6	17	26	442	..	..	..	..	..	..
7- 8 ,, ..	5		8	49	392	..	..	..	..	..	..
Total ..	16	..	25	..	834	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XVI—Area 277 acres, area of the sample plot 171 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vagai—											
6- 7 feet ..	13	1·6	20	38	760	..	..	..	..	..	..
7- 8 ,, ..	5		8	77	616	..	..	..	..	..	..
8- 9 ,, ..	1		1	85	85	..	..	..	..	..	..
9-10 ,, ..	3		4	85	340	..	..	..	..	..	..
Total ..	22	..	33	..	1,801	..	..	..	..	..	..
Poovathi—											
6- 7 feet ..	20	1·6	32	27	864	..	..	..	..	..	..
7- 8 ,, ..	27		43	39	1,677	..	..	..	..	..	..
8- 9 ,, ..	20		32	44	1,408	..	..	..	..	..	..
9-10 ,, ..	11		17	61	1,037	..	..	..	..	..	..
10-11 ,, ..	8		12	64	768	..	..	..	..	..	..
11-12 ,, ..	8		12	86	1,032	..	..	..	..	..	..
12-13 ,, ..	2		3	93	279	..	..	..	..	..	..
14-15 ,, ..	1		1	137	137	..	..	..	..	..	..
15-16 ,, ..	1		1	137	137	..	..	..	..	..	..
Total ..	98	..	153	..	7,339	..	..	..	..	..	..
Manjakadambai—											
6- 7 feet ..	1	1·6	1	39	39	19·5	7	10	3	10	29
7- 8 ,, ..	4		6	48	288	17·8	51		28	79	209
9-10 ,, ..	3		4	90	360	14·2	51		36	87	273
10-11 ,, ..	1		1	176	176	12·9	22		17	39	137
11-12 ,, ..	1		1	138	138	12·0	16		13	29	109
12-13 ,, ..	4		6	247	1,482	11·1	164		148	312	1,170
15-16 ,, ..	3		4	200	800	9·2	73		80	153	647
17-18 ,, .	2		3	436	1,308	8·1	105		130	235	1,073
18-19 ,, ..	1		1	450	450	7·7	34		45	79	371
19-20 ,, ..	2		3	450	1,350	7·3	98		135	233	1,117
Total ..	22		30	..	6,391	..	621	..	635	1,256	5,135
Nirkadambai—											
6- 7 feet ..	16	1·6	25	45	1,125	..	..	..	..	..	..
7- 8 ,, ..	14		22	54	1,188	..	..	..	..	..	..
8- 9 ,, ..	10		16	101	1,616	..	..	..	..	..	..
9-10 ,, ..	5		8	97	776	..	..	..	..	..	..
10-11 ,, ..	1		1	170	170	..	..	..	..	..	..
11-12 ,, ..	1		1	150	150	..	..	..	..	..	..
12-13 ,, ..	3		4	150	600	..	..	..	..	..	..
15-16 ,, ..	1		1	150	150	..	..	..	..	..	..
Total ..	51	..	78	..	5,775	..	..	..	..	..	..

Old compartment No. XVI.

Names of species.	Total volume of 6—7 feet girth class trees.	Total volume of 7—8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	7,966	28,099
Rosewood	868	2,676
Venteak	5,659	3,188
Irul	562	40
Pillamarudu	3,063	19,142
Karumarudu	3,036	30,359
Manjakadambai	29	5,106
Total ..	21,183	88,610
B. Species at present unsaleable—		
Vagai	760	1,041
Poovathi	864	6,475
Thadashi	442	392
Nirkadambai	1,125	4,650
Total ..	3,191	12,558

Total volume of mature and saleable timber.

	C. FT.
Teak	28,099
Rosewood	2,676
Other superior species.	57,835
Grand total ..	88,610

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XVII—Area 297 acres, area of the sample plot 144 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions in cubic feet.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	139	2	278	46	12,788	10·2	1,304	10	1,278	2,582	10,206
7– 8 ,, ..	90		180	60	10,800	10·0	1,080		1,080	2,160	8,640
8– 9 ,, ..	27		54	92	4,968	8·4	417		496	913	4,055
9–10 ,, ..	11		22	103	2,266	7·5	169		226	395	1,817
10–11 ,, ..	9		18	136	2,448	6·6	161		244	405	2,043
11–12 ,, ..	6		12	142	1,704	6·1	103		170	273	1,431
12–13 ,, ..	3		6	132	792	5·6	44		79	123	669
13–14 ,, ..	3		6	284	1,704	5·2	88		170	258	1,446
14–15 ,, ..	1		2	300	600	4·9	29		60	89	511
Total ..	289	..	578	..	38,070	..	3,395	..	3,803	7,198	30,872
Rosewood—											
6– 7 feet ..	6	2	12	41	492	19·5	95	10	49	144	348
7– 8 ,, ..	2		4	73	292	17·8	51		29	80	212
8– 9 ,, ..	2		4	98	392	16·0	62		39	101	291
9–10 ,, ..	3		6	152	912	14·2	129		91	220	692
19–20 ,, ..	1		2	341	682	7·3	49		68	117	565
Total ..	14	..	28	..	2,770	..	386	..	276	662	2,108
Venteak—											
6– 7 feet ..	48	2	96	50	4,800	7·4	355	10	480	835	3,965
7– 8 ,, ..	23		46	65	2,990	6·6	197		299	496	2,494
8– 9 ,, ..	6		12	110	1,320	5·8	76		132	208	1,112
9–10 ,, ..	2		4	111	444	5·2	23		44	67	377
10–11 ,, ..	1		2	140	280	4·8	13		28	41	239
Total ..	80	..	160	..	9,834	..	664	..	983	1,647	8,187
Thadashi—											
6– 7 feet ..	3	2	6	26	156	..	..	..	..	..	..
7– 8 ,,	1		2	49	98	..	..		..	..	..
Total ..	4	..	8	..	254	..	..	..	..	..	..
Pillamarudu—											
6– 7 feet ..	57	2	114	39	4,446	14·5	644	10	444	1,088	3,358
7– 8 ,, ..	52		104	74	7,696	12·9	992		769	1,761	5,935
8– 9 ,, ..	24		48	74	3,552	11·5	408		355	763	2,789
9–10 ,, ..	14		28	130	3,640	10·2	371		364	735	2,905
10 11 ,, ..	2		4	129	516	9·3	47		51	98	418
11–12 ,, ..	2		4	152	608	8·6	52		60	112	496
Total ..	151	..	302	..	20,458	..	2,514	..	2,043	4,557	15,901
Karumarudu—											
6– 7 feet ..	61	2	122	46	5,612	24·0	1,346	10	561	1,907	3,705
7– 8 ,, ..	32		64	69	4,416	21·4	945		441	1,386	3,030
8– 9 ,, ..	18		36	104	3,744	19·2	718		374	1,092	2,652
9–10 ,, ..	8		16	118	1,888	17.1	322		188	510	1,378
10–11 ,, ..	5		10	118	1,180	15·2	179		118	297	883
11–12 ,, ..	1		2	180	360	14·3	51		36	87	273
12–13 ,, ..	1		2	191	382	13·4	51		38	89	293
14–15 ,, ..	1		2	231	462	11·7	54		46	100	362
Total ..	127	..	254	..	18,044	..	3,666	..	1,802	5,468	12,576
Manjakadambai—											
6– 7 feet ..	1	2	2	39	78	19·5	15	10	7	22	56
7– 8 ,, ..	2		4	48	192	17·8	34		19	53	139
8– 9 ,, ..	2		4	76	304	16·0	48		30	78	226
10–11 ,, ..	1		2	176	352	12·9	45		35	80	272
11–12 ,, ..	1		2	138	276	12·0	33		27	60	216
12–13 ,, ..	1		2	247	494	11·1	54		49	103	391
Total ..	8		16	..	1,696	..	229	..	167	396	1,300
Vengai—											
6– 7 feet ..	1	2	2	28	56	14·5	8	10	5	13	43
7– 8 ,, ..	2		4	29	116	12·9	14		11	25	91
14–15 ,, ..	1		2	100	200	7·0	14		20	34	166
Total ..	4	..	8	..	372	..	36	..	36	72	300

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XVII—Area 297 acres, area of the sample plot 144 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions in cubic feet.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Vagai—											
6–7 feet ..	22	2	44	38	1,672	..	..	..	..	..	..
7–8 ,, ..	7		14	77	1,078	..	..	..	..	..	..
8–9 ,, ..	7		14	85	1,190	..	..	..	..	..	..
Total ..	36	..	72	..	3,940	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	16	2	32	27	864	..	..	..	..	..	..
7– 8 ,, ..	4		8	39	312	..	..	..	..	..	..
8– 9 ,, ..	2		4	44	176	..	..	..	..	..	..
9–10 ,, ..	10		20	61	1,220	..	..	..	..	..	..
10–11 ,, ..	2		4	64	256	..	..	..	..	..	..
11–12 ,, ..	1		2	86	172	..	..	..	..	..	..
14–15 ,, ..	3		6	137	822	..	..	..	..	..	..
Total ..	38	..	76	..	3,822	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	6	2	12	45	540	..	..	..	..	..	..
7– 8 ,, ..	2		4	54	216	..	..	..	..	..	..
8– 9 ,, ..	1		2	101	202	..	..	..	..	..	..
9–10 ,, ..	1		2	97	194	..	..	..	..	..	..
15–16 ,, ..	1		2	150	300	..	..	..	..	..	..
Total ..	11	..	22	..	1,452	..	..	..	..	..	..

Old compartment No. XVII.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	10,206	20,666
Rosewood	348	1,760
Venteak	3,965	4,222
Pillamarudu	3,358	12,543
Karumarudu	3,705	8,871
Vengai	43	257
Manjakadambai	56	1,244
Total ..	21,681	49,563
B. Species at present unsaleable—		
Vagai	1,672	2,268
Poovathi	864	2,958
Thadashi	156	98
Nirkadambai	540	912
Total ..	3,232	6,236

Total volume of mature and saleable timber.	C. FT.
Teak	20,666
Rosewood	1,760
Other superior species ..	27,137
Grand total ..	49,563

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XVIII—Area 376 acres, area of the sample plot 376 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		
						Percentage.	Quantity.	Percentage.	Quantity.	Total deductions in cubic feet.
Teak—										
6– 7 feet ..	181	1	181	46	8,326	10·2	849	10	332	1,681	6,645
7– 8 ,, ..	139	1	139	60	8,340	10·0	834	10	834	1,668	6,672
8– 9 ,, ..	67	1	67	92	6,164	8·4	517	10	616	1,133	5,031
9–10 ,, ..	28	1	28	103	2,884	7·5	216	10	288	504	2,380
10–11 ,, ..	15	1	15	136	2,040	6·6	134	10	204	338	1,702
11–12 ,, ..	10	1	10	142	1,420	6·1	86	10	142	228	1,192
12–13 ,, ..	1	1	1	132	132	5·6	7	10	13	20	112
13–14 ,, ..	2	1	2	284	568	5·2	29	10	56	85	483
14–15 ,, ..	1	1	1	300	300	4·9	14	10	30	44	256
15–16 ,, ..	1	1	1	339	339	4·6	15	10	33	48	291
16–17 ,, ..	1	1	1	339	339	4·3	14	10	33	47	292
Total ..	446	..	446	..	30,852	..	2,715	..	3,081	5,796	25,056
Rosewood—										
6– 7 feet ..	16	1	16	41	656	19·5	127	10	65	192	464
7– 8 ,, ..	7	1	7	73	511	17·8	90	10	51	141	370
8– 9 ,, ..	2	1	2	98	196	16·0	31	10	19	50	146
15–16 ,, ..	1	1	1	160	160	9·2	14	10	16	30	130
Total ..	26	..	26	..	1,523	..	262	..	151	413	1,110
Venteak—										
6– 7 feet ..	72	1	72	50	3,600	7·4	266	10	360	626	2,974
7– 8 ,, ..	22	1	22	65	1,430	6·6	94	10	143	237	1,193
8– 9 ,, ..	2	1	2	110	220	5·8	12	10	22	34	186
9–10 ,, ..	1	1	1	111	111	5·2	5	10	11	16	95
Total ..	97	..	97	..	5,361	..	377	..	536	913	4,448
Vengai—										
8– 9 feet ..	1	1	1	29	29	11·5	3	10	2	5	24
Irul—										
6– 7 feet ..	69	1	69	37	2,553	10·2	260	10	255	515	2,038
7– 8 ,, ..	31	1	31	48	1,488	10·0	148	10	148	296	1,192
8– 9 ,, ..	10	1	10	64	640	8·4	53	10	64	117	523
9–10 ,, ..	3	1	3	78	234	7·5	17	10	23	40	194
Total ..	113	..	113	..	4,915	..	478	..	490	968	3,947
Pillamarudu—										
6– 7 feet ..	66	1	66	39	2,574	14·5	373	10	257	630	1,944
7– 8 ,, ..	42	1	42	74	3,108	12·9	400	10	310	710	2,398
8– 9 ,, ..	17	1	17	74	1,258	11·5	144	10	125	269	989
9–10 ,, ..	6	1	6	130	780	10·2	79	10	78	157	623
10–11 ,, ..	7	1	7	129	903	9·3	83	10	90	173	730
11–12 ,, ..	4	1	4	152	608	8·6	52	10	60	112	496
12–13 ,, ..	1	1	1	196	196	8·0	15	10	19	34	162
13–14 ,, ..	2	1	2	230	460	7·5	34	10	46	80	380
14–15 ,, ..	2	1	2	265	530	7·0	37	10	53	90	440
15–16 ,, ..	1	1	1	300	300	6·6	19	10	30	49	251
Total ..	148	..	148	..	10,717	..	1,236	..	1,068	2,304	8,413
Vagai—										
6– 7 feet ..	6	1	6	38	228	..	..	10	..	..	..
7– 8 ,, ..	4	1	4	77	308	..	..	10	..	..	..
8– 9 ,, ..	1	1	1	85	85	..	..	10	..	..	..
10–11 ,, ..	2	1	2	110	220	..	..	10	..	..	..
Total ..	13	..	13	..	841	..	..	..	..	..	..
Karumarudu—										
6– 7 feet ..	143	1	143	46	6,578	24·0	1,578	10	657	2,235	4,343
7– 8 ,, ..	76	1	76	69	5,244	21·4	1,122	10	524	1,646	3,598
8– 9 ,, ..	34	1	34	104	3,536	19·2	678	10	353	1,031	2,505
9–10 ,, ..	19	1	19	118	2,242	17·1	383	10	224	607	1,635
10–11 ,, ..	13	1	13	118	1,534	15·2	233	10	153	386	1,148
11–12 ,, ..	4	1	4	180	720	14·3	102	10	72	174	546
12–13 ,, ..	3	1	3	191	573	13·4	76	10	57	133	440
13–14 ,, ..	1	1	1	200	200	12·5	25	10	20	45	155
14–15 ,, ..	2	1	2	231	462	11·7	54	10	46	100	362
15–16 ,, ..	1	1	1	267	267	11·1	29	10	26	55	212
Total ..	296	..	296	..	21,356	..	4,280	..	2,132	6,412	14,944

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XVIII, area 376 acres, area of the sample plot 376 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Manjakadambai—											
6– 7 feet ..	6	1	6	38	228	19·5	44	10	22	66	162
7– 8 ,, ..	7		7	48	336	17·8	59		33	92	244
8– 9 ,, ..	3		3	76	228	16·0	36		22	58	170
9–10 ,, ..	1		1	90	90	14·2	12		9	21	69
10–11 ,, ..	1		1	176	176	12·9	22		17	39	137
11–12 ,, ..	3		3	138	414	12·0	49		41	90	324
12–13 ,, ..	1		1	247	247	11·1	27		24	51	196
13–14 ,, ..	2		2	240	480	10·3	49		48	97	383
14–15 ,, ..	1		1	163	163	9·7	15		16	31	132
15–16 ,, ..	1		1	200	200	9·2	18		20	38	162
Total ..	26	..	26	..	2,562	..	331	..	252	583	1,979
Thadashi—											
6– 7 feet ..	53	1	53	61	3,233	..	..	..	..	..	..
7– 8 ,, ..	11		11	66	726	..	..	..	..	..	..
8– 9 ,, ..	7		7	72	504	..	..	..	..	..	..
9–10 ,, ..	3		3	135	405	..	..	..	..	..	..
Total ..	74	..	74	..	4,868	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	15	1	15	27	405	..	..	..	..	..	..
7– 8 ,, ..	11		11	39	429	..	..	..	..	..	..
8– 9 ,, ..	11		11	44	484	..	..	..	..	..	..
9–10 ,, ..	11		11	61	671	..	..	..	..	..	..
10–11 ,, ..	6		6	64	384	..	..	..	..	..	..
11–12 ,, ..	4		4	86	344	..	..	..	..	..	..
12–13 ,, ..	2		2	93	186	..	..	..	..	..	..
13–14 ,, ..	2		2	78	156	..	..	..	..	..	..
14–15 ,, ..	1		1	137	137	..	..	..	..	..	..
16–17 ,, ..	1		1	137	137	..	..	..	..	..	..
Total ..	64	..	64	..	3,333	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	19	1	19	45	855	..	..	..	..	..	..
7– 8 ,, ..	8		8	54	432	..	..	..	..	..	..
8– 9 ,, ..	6		6	101	606	..	..	..	..	..	..
9–10 ,, ..	1		1	97	97	..	..	..	..	..	..
10–11 ,, ..	1		1	170	170	..	..	..	..	..	..
Total ..	35	..	35	..	2,160	..	..	..	..	..	..

Old compartment No. XVIII.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	6,645	18,411
Rosewood	464	646
Venteak	2,974	1,474
Irul	2,038	1,909
Pillamarudu	1,944	6,469
Karumaradu	4,343	10,601
Vengai	..	24
Manjakadambai	162	1,817
Total ..	18,570	41,351
B. Species at present unsaleable—		
Vagai	228	613
Poovathi	405	2,928
Thadashi	3,233	1,635
Nirkadambai	855	1,305
Total ..	4,721	6,481

Total volume of mature and saleable timber.

	C. FT.
Teak	18,411
Rosewood	646
Other superior species ..	22,294
Grand total ..	41,351

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XIX, area 462 acres; area of the sample plot 195 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	64	2·3	147	46	6,762	10·2	689	10	676	1,365	5,397
7– 8 ,, ..	86		197	60	11,820	10·0	1,182		1,182	2,364	9,456
8– 9 ,, ..	37		85	92	7,820	8·4	656		782	1,438	6,382
9–10 ,, ..	20		46	103	4,738	7·5	355		473	828	3,910
10–11 ,, ..	9		20	136	2,720	6·6	179		272	451	2,269
11–12 ,, ..	7		16	142	2,272	6·1	138		227	365	1,907
12–13 ,, ..	2		4	132	528	5·6	29		52	81	447
13–14 ,, ..	2		4	284	1,136	5·2	59		113	172	964
14–15 ,, ..	2		4	300	1,200	4·9	58		120	178	1,022
15–16 ,, ..	1		2	339	678	4·6	31		67	98	580
17–18 ,, ..	1		2	340	680	4·1	27		68	95	585
Total ..	231	..	527	..	40,354	..	3,403	..	4,032	7,435	32,919
Rosewood—											
6– 7 feet ..	12	2·3	27	41	1,107	19·5	215	10	110	325	782
7– 8 ,, ..	12		27	73	1,971	17·8	350		197	547	1,424
8– 9 ,, ..	4		9	98	882	16·0	141		88	229	653
9–10 ,, ..	3		6	152	912	..	129		91	220	692
Total ..	31	..	69	..	4,872	..	835	..	486	1,321	3,551
Manjakadambai—											
6– 7 feet ..	2	2·3	4	39	156	19·5	30	10	15	45	111
7– 8 ,, ..	1		2	48	96	17·8	17		9	26	70
8– 9 ,, ..	2		4	76	304	16·0	48		30	78	226
10–11 ,, ..	1		2	176	352	12·9	45		35	80	272
11–12 ,, ..	1		2	138	276	12·0	33		27	60	216
13–14 ,, ..	1		2	240	480	10·3	49		48	97	383
15–16 ,, ..	1		2	200	400	9·2	36		40	76	324
Total ..	9	..	18	..	2,064	..	258	..	204	462	1,602
Venteak—											
6–7 feet ..	18	2·3	41	50	2,050	7·4	151	10	205	356	1,694
7–8 ,, ..	7		16	65	1,040	6·6	68		104	172	868
8–9 ,, ..	3		6	110	660	5 8	38		66	104	556
Total ..	28	..	63	..	3,750	..	257	..	375	632	3,118
Chadachi—											
6– 7 feet ..	21	2·3	48	26	1,248	..	..	..	..	..	..
7– 8 ,, ..	10		23	49	1,127	..	..	..	..	..	..
8– 9 ,, ..	1		2	37	74	..	..	..	..	..	..
9–10 ,, ..	2		4	102	408	..	..	..	..	..	..
Total ..	34	..	77	..	2,857	..	..	..	..	..	..
Pillamarudu—											
6– 7 feet ..	51	2·3	117	39	4,563	14·5	661	10	456	1,117	3,446
7– 8 ,, ..	50		115	74	8,510	12·9	1,097		851	1,948	6,562
8– 9 ,, ..	18		41	74	3,034	11·5	348		303	651	2,383
9–10 ,, ..	13		29	130	3,770	10·2	384		377	76	3,009
10–11 ,, ..	4		9	129	1,161	9·3	107		116	223	938
11–12 ,, ..	3		6	152	912	8·6	78		91	169	743
12–13 ,, ..	1		2	196	392	8·0	31		39	70	322
13–14 ,, ..	1		2	230	460	7·5	34		46	80	380
14–15 ,, ..	2		4	230	920	7·0	64		92	156	764
15–16 ,, ..	1		2	300	600	6·6	39		60	99	501
Total ..	144	..	327	..	24,322	..	2,842	..	2,431	5,273	19,048
Irul—											
6– 7 feet ..	25	2·3	57	37	2,109	10·2	215	10	210	425	1,684
7– 8 ,, ..	29		66	48	3,168	10·0	316		316	632	2,536
8– 9 ,, ..	6		13	64	832	8·4	69		83	152	680
9–10 ,, ..	3		6	78	468	7·5	35		46	81	387
Total ..	63	..	142	..	6,577	..	635	..	655	1,290	5,287
Vagai—											
6–7 feet ..	2	2·3	4	38	152	..	..	..	..	..	..
7–8 ,, ..	4		9	77	693	..	..	..	..	..	..
Total ..	6	..	13	..	845	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XIX, area 462 acres; area of the sample plot 195 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Karumarudu—											
6- 7 feet ..	50	2·3	115	46	5,290	24·0	1,269	10	529	1,798	3,492
7- 8 ,, ..	53	..	121	69	8,349	21·4	1,786		834	2,620	5,729
8- 9 ,, ..	38	..	87	104	9,048	19·2	1,737		904	2,641	6,407
9-10 ,, ..	26	..	59	118	6,962	17·1	1,190		696	1,886	5,076
10-11 ,, ..	6	..	13	118	1,534	15·2	233		153	386	1,148
11-12 ,, ..	8	..	18	180	3,240	14·3	463		324	787	2,453
12-13 ,, ..	3	..	6	191	1,146	13·4	153		114	267	879
Total ..	184	..	419	..	35,569	..	6,831	..	3,554	10,385	25,184
Nirkadambai—											
6- 7 feet ..	12	2·3	27	45	1,215	..	..	..	..	..	..
7- 8 ,, ..	8		18	54	972	..	..	..	..	..	..
8- 9 ,, ..	5		11	101	1,111	..	..	..	..	..	..
9-10 ,, ..	3		6	97	582	..	..	..	..	..	..
10-11 ,, ..	1		2	170	340	..	..	..	..	..	..
Total ..	29	..	64	..	4,220	..	..	..	..	..	..
Vengai—											
10-11 feet ..	2	2·3	4	100	400	9·3	37	10	40	77	323
Poovathi—											
6- 7 feet ..	11	2·3	25	27	675	..	..	..	..	..	..
7- 8 ,, ..	12		27	39	1,053	..	..	..	..	..	..
8- 9 ,, ..	10		23	44	1,012	..	..	..	..	..	..
9-10 ,, ..	11		25	61	1,525	..	..	..	..	..	..
10-11 ,, ..	3		6	64	384	..	..	..	..	..	..
11-12 ,, ..	5		11	86	946	..	..	..	..	..	..
12-13 ,, ..	3		6	93	558	..	..	..	..	..	..
13-14 ,, ..	2		4	78	312	..	..	..	..	..	..
14-15 ,, ..	2		4	137	548	..	..	..	..	..	..
15-16 ,, ..	1		2	137	274	..	..	..	..	..	..
Total ..	60	..	123	..	7,287	..	..	..	..	..	..

Old compartment No. XIX.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.	
A. Saleable species—	C. FT.	C. FT.	
Teak	5,397	24,522	
Rosewood	782	2,769	
Venteak	1,694	1,424	
Irul	1,684	3,603	
Pillamarudu	3,446	15,602	
Karumarudu	3,492	21,692	
Vengai	..	323	
Manjakadambai	111	1,491	
Total ..	16,606	74,426	
B. Species at present unsaleable—			
Vagai	152	693	
Poovathi	675	6,612	with bark.
Thadashi	1,248	1,609	
Nirkadambai	1,215	3,005	
Total ..	3,290	11,919	

Total volume of mature and saleable timber.

	C. FT.
Teak..	27,522
Rosewood	2,769
Other superior species.	44,135
Total ..	74,426

Calculations of volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XX, area 312 acres. ; area of the old compartment 150 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	108	2·0	216	46	9,936	10·2	1,013	10	993	2,006	7,930
7– 8 ,, ..	107		214	60	12,840	10·0	1,284		1,284	2,568	10,272
8– 9 ,, ..	65		130	92	11,960	8·4	1,004		1,196	2,200	9,760
9–10 ,, ..	20		40	103	4,120	7·5	309		412	721	3,399
10–11 ,, ..	7		14	136	1,904	6·6	125		190	315	1,589
11–12 ,, ..	5		10	142	1,420	6·1	86		142	228	1,192
12–13 ,, ..	1		2	132	264	5·6	14		26	40	224
13–14 ,, ..	2		4	284	568	5·2	29		56	85	483
14–15 ,, ..	1		2	300	600	4·9	29		60	89	511
18–19 ,, ..	1		2	340	680	3·9	26		68	94	586
Total ..	317	..	634	..	44,292	..	3,919	..	4,427	8,346	35,946
Rosewood—											
6– 7 feet ..	5	2·0	10	41	410	19·5	79	10	41	120	290
7– 8 ,, ..	2		4	73	292	17·8	51		29	80	212
11–12 ,, ..	1		2	154	308	12·0	36		30	66	242
Total ..	8	..	16	..	1,010	..	166	..	100	266	744
Venteak—											
6-7 feet ..	74	2·0	148	50	7,400	7·4	547	10	740	1,287	6,113
7–8 ,, ..	30		60	55	3,900	6·6	257		390	647	3,253
8–9 ,, ..	12		24	110	2,640	5·8	153		264	417	2,253
Total ..	116	..	232	..	13,940	..	957	..	1,394	2,350	11,589
Pillamarudu—											
6– 7 feet ..	44	2·0	88	39	3,432	14·5	497	10	343	840	2,592
7– 8 ,, ..	47		94	74	6,956	12·9	897		695	1,592	5,364
8– 9 ,, ..	22		44	74	3.256	11·5	374		325	699	2,557
9–10 ,, ..	7		14	130	1,820	10·2	185		182	367	1,453
10–11 ,, ..	6		12	129	1,548	9·3	143		154	297	1,251
11–12 ,, ..	4		8	152	1,216	8·6	104		121	225	991
12–13 ,, ..	2		4	196	784	8·0	62		98	140	644
13–14 ,, ..	1		2	230	460	7·5	34		46	80	380
Total ..	133	..	266	..	19,472	..	2,296	..	1,944	4,240	15,232
Karumarudu—											
6– 7 feet ..	43	2·0	86	46	3,956	24·0	949	10	395	1,344	2,612
7– 8 ,, ..	39		78	69	5,382	21·4	1,151		538	1,689	3,693
8– 9 ,, ..	34		68	104	7,072	19·2	1,357		707	2,064	5,008
9–10 ,, ..	13		26	118	3,068	17·1	524		306	830	2,238
10–11 ,, ..	9		18	118	2,124	15·2	322		212	534	1,590
11–12 ,, ..	11		22	180	3,960	14·3	565		396	962	2,998
12–13 ,, ..	6		12	191	2,292	13·4	307		229	536	1,756
13–14 ,, ..	3		6	200	1,200	12·5	150		120	270	930
15–16 ,, ..	1		2	267	534	11·1	59		53	112	422
Total ..	159	..	318	..	29,588	..	5,385	..	2,956	8,341	21,247
Thadashi-											
6–7 feet ..	12	2·0	24	26	624	..	..	..	..	..	..
7–8 ,, ..	5		10	49	490	..	..	..	..	..	..
Total ..	17	..	34	..	1,114	..	..	..	..	..	..
Irul—											
6– 7 feet ..	40	2·0	80	37	2,960	10·2	301	10	296	597	2,363
7– 8 ,, ..	22		44	48	2,112	10·0	211		211	422	1,690
8– 9 ,, ..	2		4	64	256	8·4	21		25	46	210
9–10 ,, ..	1		2	78	156	7·5	11		15	26	130
10–11 ,, ..	1		2	100	200	6·6	13		20	33	167
Total ..	66	..	132	..	5,684	..	557	..	567	1,124	4,560
Vagai—											
6-7 feet ..	1	2·0	2	38	76	..	..	..	..	..	..

Calculations of volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XX, area 312 acres ; area of the sample plot 150 acres —*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Manjakadambai—											
7– 8 feet ..	1	2·0	2	48	96	17·8	17	10	9	26	70
8– 9 ,, ..	2		4	76	304	16·0	48		30	78	226
9–10 ,, ..	1		2	90	180	12·9	23		18	41	139
13–14 ,, ..	2		4	240	960	10·3	98		96	194	766
15–16 ,, ..	2		4	200	800	9·2	73		80	153	647
16–17 ,, ..	1		2	372	744	8·5	63		74	137	607
17–18 ,, ..	1		2	436	872	8·1	70		87	157	715
19–20 ,, ..	1		2	450	900	7·3	65		90	155	745
Total ..	11	..	22	..	4,856	..	457	..	484	941	3,915
Poovathi—											
6– 7 feet ..	4	2·0	8	27	216	..	..	..	..	..	..
7– 8 ,, ..	6		12	39	468	..	..	..	..	..	..
8– 9 ,, ..	3		6	44	264	..	..	..	..	..	..
9–10 ,, ..	4		8	61	488	..	..	..	..	..	..
10–11 ,, ..	1		2	64	123	..	..	..	..	..	..
Total ..	18	..	36	..	1,564	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	3	2·0	6	45	270	..	..	..	..	..	..
7– 8 ,, ..	2		4	54	216	..	..	..	..	..	..
8– 9 ,, ..	3		6	101	606	..	..	..	..	..	..
9–10 ,, ..	1		2	97	194	..	..	..	..	..	..
12–13 ,, ..	2		4	150	600	..	..	..	..	..	..
Total ..	11	..	22	..	1,886	..	..	..	..	..	..

Old compartment No. XX.

Names of species.	Total volumes of 6-7 feet girth class trees.	Total volumes of 7–8 feet girth class and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	7,930	28 016
Rosewood	290	454
Venteak	6,113	5,476
Pillamarudu	2,592	12,640
Karumarudu	2,612	18,635
Irul	2,363	2,197
Manjakadambai	..	3,915
Total ..	21,900	71,333
B. Species at present unsaleable—		
Vagai	76	..
Poovathi	216	1,348
Thadashi	624	490
Nirkadambai	270	1,616
Total ..	1,186	3,454

Total volumes of mature and saleable timber.

	C. FT.
Teak	28,016
Rosewood	454
Other superior species ..	42,863
Grand total ..	71,333

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No XXI, area 380 acres ; area of the sample plot 170 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet	Reductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	75	2·2	165	46	7,590	10·2	776	10	759	1,533	6,057
7– 8 ,, ..	37		81	60	4,860	10·0	486		486	972	3,888
8– 9 ,, ..	19		41	92	3,772	8·4	316		377	693	3,079
9–10 ,, ..	14		30	103	3,090	7·5	231		309	540	2,550
10–11 ,, ..	10		22	136	2,992	6·6	197		299	496	2,494
11–12 ,, ..	4		8	142	1,136	6·1	69		113	182	954
15–16 ,, ..	1		2	339	676	4·6	31		67	98	580
16–17 ,, ..	1		2	340	680	4·3	29		63	97	583
Total ..	161	..	351	..	24,798	..	2,133	..	2,478	4,611	20,187
Rosewood—											
6–7 feet ..	3	2.2	6	41	246	19·5	47	10	24	71	175
7–8 ,, ..	3		6	73	438	17·8	77		43	120	318
8–9 ,, ..	2		4	98	392	16·0	62		39	101	291
Total ..	8	..	16	..	1,076	..	186	..	106	292	784
Venteak—											
6-7 feet ..	32	2·2	70	50	3,500	7·4	259	10	350	609	2,891
7–8 ,, ..	14		30	65	1,950	6·6	128		195	323	1,627
8–9 ,, ..	1		2	110	220	5·8	12		22	34	186
Total ..	47	..	102	..	5,670	..	399	..	567	966	4,704
Irul—											
6-7 feet ..	41	2·2	90	37	3,330	10·2	339	10	333	672	2,658
7–8 ,, ..	17		37	48	1,776	10·0	177		177	354	1,422
8–9 ,, ..	1		2	64	128	8·4	10		12	22	106
Total ..	59	..	129	..	5,234	..	526	..	522	1,048	4,186
Pillamarudu—											
6– 7 feet ..	28	2·2	61	39	2,379	14·5	344	10	237	581	1,798
7– 8 ,, ..	18		39	74	2,886	12·9	372		288	660	2,226
8– 9 ,, ..	5		11	74	814	11·5	93		81	174	640
9–10 ,, ..	6		13	130	1,690	10·2	172		169	341	1,349
10–11 ,, ..	3		6	129	774	9·3	71		77	148	626
11–12 ,, ..	1		2	152	304	8·6	26		30	56	248
14–15 ,, ..	1		2	230	460	7·0	32		46	78	382
Total ..	62	..	134	..	9,307	..	1,110	..	928	2,038	7,269
Karumarudu—											
6– 7 feet ..	47	2·2	103	46	4,738	24·0	1,137	10	473	1,610	3,128
7– 8 ,, ..	28		61	69	4,209	21·4	900		420	1,320	2,889
8– 9 ,, ..	22		48	104	4,992	19·2	958		499	1,457	3,535
9–10 ,, ..	19		41	118	4,838	17·1	827		483	1,310	3,528
10–11 ,, ..	13		28	118	3,304	15·2	502		330	832	2,472
11–12 ,, ..	5		11	180	1,980	14·3	283		198	481	1,499
12–13 ,, ..	4		8	191	1,528	13·4	204		152	354	1,172
13–14 ,, ..	1		2	200	400	12·5	50		40	99	310
Total ..	139	..	302	..	25,989	..	4,861	..	2,595	7,456	18,533
Thadashi—											
6–7 feet	17	2·2	37	26	962	..	..	..	..	..	..
7–8 ,, ..	8		17	49	833	..	..	..	..	..	..
Total ..	25	..	54	..	1,795	..	..	..	..	..	..
Vengai—											
6–7 feet ..	2	2·2	4	28	112	14·5	16	10	11	27	85
Poovathi—											
6– 7 feet ..	9	2·2	19	27	513	..	..	..	..	..	..
7– 8 ,, ..	6		13	34	507	..	..	..	..	..	..
8– 9 ,, ..	4		8	44	352	..	..	..	..	..	..
9–10 ,, ..	4		8	61	488	..	..	..	..	..	..
10–11 ,, ..	1		2	64	128	..	..	..	..	..	..
11–12 ,, ..	3		6	86	516	..	..	..	..	..	..
12–13 ,, ..	1		2	93	186	..	..	..	..	..	..
14–15 ,, ..	1		2	137	274	..	..	..	..	..	..
Total ..	29	..	60	..	2,964	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXI, area 380 acres; area of the sample plot 170 acres --*cont.*

Girth classs and species.	Number of trees in the sample plot	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vagai—											
6-7 feet ..	1	2·2	2	38	76	..	..	..	..	..	..
8-9 ,, ..	1		2	85	170	..	.	..	..	..	..
Total ..	2	..	4	..	246	..	..	..	..	..	..
Manjakadambai—											
8- 9 feet ..	1	2·2	2	76	152	16·0	24	10	15	39	113
12-13 ,, ..	1		2	247	494	11·1	54		49	103	391
14-15 ,, ..	1		2	163	326	9·7	31		32	63	263
Total ..	3	..	6	..	972	..	109	..	96	205	767
Nirkadambai—											
6-7 feet ..	9	2·2	19	45	855	..	..	..	..	..	..
7-8 ,, ..	1		2	54	108	..	..	..	..	..	..
8-9 ,, ..	1		2	101	202	..	..	..	..	..	..
Total ..	11	..	23	200	1,165	..	..	..	..	..	..

Old compartment No. XXI.

Names of species.	Total volume of 6-7 feet girth class trees.	Total volume of 7-8 feet girth class trees and over mature timber.		
A. Saleable species—	C FT.	C.FT.		
Teak	6,057	14,130		
Rosewood	175	609		
Venteak	2,891	1,813		
Irul	2,658	1,528	Teak	14,130
Pillamarudu	1,798	5,471	Rosewood	690
Karumarudu	3,128	15,405	Other species	24,984
Vengai	85	..		
Manjakadambai	..	767	Total ..	39,804
Total ..	16,792	39,723		
B. Species at present unsaleable—				
Vagai	76	170		
Poovathi	513	2,451	with bark.	
Thadashi	962	833		
Nirkadambai	855	310		
Total ..	2,406	3,764		

Calculation of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXII, area 350 acres ; area of the sample plot 153 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total.				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions in cubic feet.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6–7 feet ..	88	2·3	202	58	11,716	10·2	1,195	10	1,171	2,366	9,350
7–8 ,, ..	75		172	106	18,232	10·0	1,823		1,823	3,646	14,586
8–9 ,, ..	32		73	112	8,176	8·4	686		817	1,503	6,673
9–10 ,, ..	21		48	141	6,768	7·5	507		676	1,183	5,585
10–11 ,, ..	5		11	176	1,936	6·6	127		193	320	1,616
11–12 ,, ..	7		16	205	3,280	6·1	200		328	528	2,752
12–13 ,, ..	8		18	199	3,582	5·6	200		358	558	3,024
13–14 ,, ..	5		11	284	3,124	5·2	162		312	474	2,650
14–15 ,, ..	2		4	280	1,120	4·9	54		112	166	954
15–16 ,, ..	3		6	388	2,328	4·6	107		232	339	1,989
16–17 ,, ..	2		4	492	1,968	4·3	84		196	280	1,688
Total ..	248	..	565	..	62,230	..	5,145	..	6,218	11,363	50,867
Rosewood—											
6–7 feet ..	5	2·3	11	60	660	19·5	128	10	66	194	466
7–8 ,, ..	4		9	93	837	17·8	148		83	231	606
8–9 ,, ..	1		2	111	222	16·0	35		22	57	165
10–11 ,, ..	1		2	172	344	12·9	44		34	78	266
Total ..	11	..	24	..	2,063	..	355	..	205	560	1,503
Venteak—											
6–7 feet ..	31	2·3	71	76	5,396	7·4	399	10	539	938	4,458
7–8 ,, ..	13		29	79	2,291	6·6	151		229	380	1,911
8–9 ,, ..	3		6	118	708	5·8	41		70	111	597
Total ..	47	..	106	..	8,395	..	591	..	838	1,429	6,966
Vengai—											
9–10 feet ..	1	2·3	2	76	152	10·2	15	10	15	30	122
Irul—											
6–7 feet ..	26	2·3	59	61	3,599	10·2	367	10	359	726	2,873
7–8 ,, ..	13		29	80	2,320	10·0	232		232	464	1,856
8–9 ,, ..	4		9	107	963	8·4	80		96	176	787
Total ..	43	..	97	..	6,882	.	679	..	687	1,366	5,516
Pillamarudu—											
6–7 feet ..	48	2·3	110	53	5,830	14·5	845	10	583	1,428	4,402
7–8 ,, ..	27		62	75	4,650	12·9	599		465	1,064	3,586
8–9 ,, ..	12		27	171	4,617	11·5	530		461	991	3,626
9–10 ,, ..	12		27	141	3,807	10 2	388		380	768	3,039
10–11 ,, ..	7		16	155	2,480	9·3	230		248	478	2,002
11–12 ,, ..	10		23	150	3,450	8 6	296		345	641	2,809
12–13 ,, ..	3		6	146	876	8·0	70		87	157	719
13–14 ,, ..	1		2	200	400	7·5	30		40	70	330
14–15 ,, ..	2		4	260	1,040	7·0	72		104	176	864
16–17 ,, ..	1		2	319	638	6·1	38		63	101	537
Total ..	123	..	279	..	27,788	.	3,098	..	2,776	5,874	21,914
Manjakadambai—											
6–7 feet ..	1	2·3	2	64	128	19·5	24	10	12	36	92
7–8 ,, ..	1		2	94	188	17·8	33		18	51	137
8–9 ,, ..	1		2	113	226	15·7	35		22	57	169
13–14 ,, ..	1		2	194	388	10·3	39		38	77	311
15–16 ,, ..	2		4	356	1,424	9 2	131		142	273	1,151
17–18 ,, ..	1		2	400	800	8·1	64		80	144	656
19–20 ,, ..	1		2	600	1,200	7·3	87		120	207	993
Total ..	8	..	16	..	4,354	..	413	..	432	845	3,509

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest old compartment No. XXII, area 350 acres, area of the sample plot 153 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deduction to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Karumarudu—											
6–7 feet ..	35	2·3	80	66	5,280	24·0	1,267	10	528	1,795	3,485
7–8 ,, ..	47		108	94	10,152	21·4	2,172		1,015	3,187	6,965
8–9 ,, ..	18		41	131	5,371	19·2	1,031		537	1,568	3,803
9–10 ,, ..	14		32	131	4,192	17·1	716		419	1,135	3,057
10–11 ,, ..	6		13	177	2,301	15·2	349		230	579	1,722
11–12 ,, ..	3		6	188	1,128	14·3	161		112	273	855
12–13 ,, ..	3		6	339	2,034	13·4	272		203	475	1,559
13–14 ,, ..	3		6	248	1,488	12·5	186		148	334	1,154
14–15 ,, ..	1		2	319	638	11·7	74		63	137	501
16–17 ,, ..	1		2	493	986	10·3	101		98	199	787
Total ..	131	..	296	..	33,570	..	6,329	..	3,353	9,682	23,888
Vagai—											
7–8 feet ..	2	·3	4	63	252	..	..	..	..	..	..
Thadashi—											
6-7 feet ..	19	2·3	43	61	2,623	..	..	..	..	..	..
7–8 ,, ..	5		11	66	726	..	..	..	..	..	..
8–9 ,, ..	1		2	72	144	..	..	..	..	..	..
9–10 ,, ..	1		2	135	270	..	..	..	..	..	..
Total ..	26	..	58	..	3,763	..	..	..	..	..	..
Poovathi—											
6–7 feet ..	4	2·3	9	36	324	..	..	..	..	..	..
7–8 ,, ..	5		11	31	341	..	..	..	..	..	..
8–9 ,, ..	7		16	59	944	..	..	..	..	..	..
9–10 ,, ..	5		11	67	737	..	..	..	..	..	..
10–11 ,, ..	4		9	88	792	..	..	..	..	..	..
11–12 ,, ..	2		4	83	332	..	..	..	..	..	..
13–14 ,, ..	2		4	105	420	..	..	..	..	..	..
15–16 ,, ..	1		2	115	230	..	..	..	..	..	..
16–17 ,, ..	1		2	115	230	..	..	..	..	..	..
18–19 ,, ..	1		2	115	230	..	..	..	..	..	..
Total ..	32	..	70	..	4,580	..	..	..	..	..	..
Nirkadambai—											
8–9 feet ..	1	2·3	2	94	188	..	..	..	..	..	..
9–10 ,, ..	1		2	134	268	..	..	..	..	..	..
11–12 ,, ..	1		2	226	452	..	..	..	..	..	..
Total ..	3	..	6	..	908	..	..	..	..	..	..

Old compartment No. XXII.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	9,350	41,517
Rosewood	466	1,037
Venteak	4,458	2,508
Irul	2,873	2,643
Pillamarudu	4,402	17,512
Karumarudu	3,485	20,403
Manjakadambai	92	3,417
Vengai	..	122
Total ..	25,126	89,159
B. Species at present unsaleable—		
Vagai	..	252
Poovathi	324	4,256
Thadashi	2,623	1,140
Nirkadambai	..	908
Total ..	2,947	6,556

Total volume of mature and saleable timber.		C. FT.
Teak		41,517
Rosewood		1,037
Other superior species ..		46,605
Total ..		89,159

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXIII, area 302 acres, area of the sample plot, 169 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6- 7 feet ..	128	1·8	230	58	13,340	10·2	1,360	10	1,334	2,694	10,646
7- 8 ,, ..	86		154	106	16,324	10·0	1,632		1,632	3,264	13,060
8- 9 ,, ..	43		77	112	8,624	8·4	724		862	1,586	7,038
9-10 ,, ..	27		48	141	6,768	7·5	507		676	1,183	5,585
10-11 ,, .	5		9	176	1,584	6·6	104		158	262	1,322
11-12 ,, ..	8		14	205	2,870	6·1	175		287	462	2,408
12-13 ,, ..	2		3	199	597	5·6	33		59	92	505
13-14 ,, ..	3		5	284	1,420	5·2	73		142	215	1,205
15-16 ,, ..	1		1	388	388	4·6	17		38	55	333
16-17 ,, ..	1		1	492	492	4·3	21		49	70	422
Total ..	304	..	542	..	52,407	.	4,646	..	5,237	9,883	42,524
Rosewood—											
6- 7 feet ..	8	1·8	14	60	840	19·5	163	10	84	247	593
7- 8 ,, ..	1		1	93	93	17·8	16		9	25	68
8- 9 ,, ..	2		3	111	333	16·0	53		33	86	247
12-13 ,, ..	1		1	210	210	11·1	23		21	44	166
Total ..	12	..	19	..	1,476	..	255	..	147	402	1,074
Venteak—											
6-7 feet ..	14	1·8	25	76	1,900	7·4	140	10	190	330	1,570
7-8 ,, ..	2		3	79	237	6·6	15		23	38	199
Total ..	16	..	28	..	2,137	..	155	..	213	368	1,769
Thadashi—											
7-8 feet ..	1	1·8	1	66	66	..	..	..	..	..	..
Vagai—											
6-7 feet ..	1	1·8	1	45	45	..	..	..	..	..	..
Pillamarudu—											
6- 7 feet ..	38	1·8	68	53	3,604	14·5	522	10	360	882	2,722
7- 8 ,, ..	19		34	75	2,550	12·9	328		255	583	1,967
8- 9 ,, ..	8		14	117	1,638	11·5	188		163	351	1,287
9-10 ,, ..	7		12	141	1,692	10·2	172		169	341	1,351
10-11 ,, ..	4		7	155	1,085	9·3	101		108	209	876
11-12 ,, ..	2		3	150	450	8·6	38		45	83	367
12-13 ,, ..	1		1	326	326	8·0	26		32	58	268
Total ..	79	..	139	..	11,345	..	1,375	..	1,132	2,507	8,838
rumarudu—											
6- 7 feet ..	141	1·8	253	66	16,698	24·0	4,007	10	1,669	5,676	11,022
7- 8 ,, ..	102		183	94	17,202	21·4	3,681		1,720	5,401	11,801
8- 9 ,, ..	71		127	131	16,637	19·2	3,194		1,663	4,857	11,780
9-10 ,, ..	30		54	131	7,074	17·1	1,209		707	1,916	5,158
10-11 ,, ..	12		21	177	3,717	15·2	564		371	935	2,782
11-12 ,, ..	5		9	188	1,692	14·3	241		169	410	1,282
12-13 ,, ..	1		1	339	339	13·4	45		33	78	261
13-14 ,, ..	1		1	248	248	12·5	31		24	55	193
14-15 ,, ..	1		1	319	319	11·7	37		31	68	251
Total ..	364	..	650	..	63,926	..	13,009	..	6,387	19,396	44,530
Irul—											
6- 7 feet ..	10	1·8	18	61	1,098	10·2	111	10	109	220	878
7- 8 ,, ..	3		5	80	400	10·0	40		40	80	320
8- 9 ,, ..	2		3	107	321	8·4	26		32	58	263
9-10 ,, ..	1		1	100	100	7·5	7		10	17	83
Total ..	16	..	27	..	1,919	..	184	..	191	375	1,544
Poovathi—											
6- 7 feet ..	4	1·8	7	36	252	..	..	..	..	..	..
7- 8 ,, ..	3		5	31	155	..	..	..	..	..	..
8- 9 ,, ..	5		9	59	531	..	..	..	..		..
9-10 ,, ..	1		1	67	67	..	..	..	..	..	..
10-11 ,, ..	1		1	88	88	..	..	..	..	..	..
11-12 ,, ..	1		1	83	83	..	..	..	..	..	..
12-13 ,, ..	1		1	104	104	..	..	..	..	..	..
13-14 ,, ..	1		1	105	105	..	..	..	..	..	..
Total ..	17	..	26	..	1,385	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXIII, area 302 acres, area of the sample plot, 169 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total					Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Manjakadambai—											
8-9 feet ..	1	1·8	1	113	113	16	18	10	11	29	84
Nirkadambai—											
6- 7 feet ..	4	1·8	7	67	469	..	..	..	..	..	..
7- 8 ,, ..	5		9	69	621	..	..	..	..	..	..
8- 9 ,, ..	2		3	94	282	..	..	..	..	..	..
9-10 ,, ..	2		3	134	402	..	..	..	..	..	..
Total ..	13	..	22	..	1,774	..	..	..	..	..	..
Vengai—											
6- 7 feet ..	2	1·8	3	55	165	14·5	23	10	16	39	126
7- 8 ,, ..	1		1	76	76	12·9	9		7	16	60
9-10 ,, ..	1		1	106	106	10·2	·10		10	20	86
Total ..	4	..	5	..	347	..	42	..	33	75	272

Old compartment No. XXIII.

Name of species.	Volumes of 6-7 feet girth class trees.	Total volume of 7-8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	10,646	31,878
Rosewood	593	481
Venteak	1,570	199
Pillamarudu	2,722	6,116
Karumarudu	11,022	33,508
Vengai	126	146
Irul	878	666
Manjakadambai	..	84
Total ..	27,557	73,078
B. Species at present unsaleable—		
Nirkadambai	469	1,305
Vagai	45	..
Thadashi	..	66
Poovathi	252	1,133
Total ..	766	2,504

Total volume of mature and saleable timber.

	C. FT.
Teak	31,878
Rosewood	481
Other superior species ..	40,719
Total ..	73,078

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXIV, area 575 acres, area of the sample plot, 241 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total					Net volume in cubic feet
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions.	
						Percentage.	Quantity	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	233	2·3	535	58	31,030	10·2	3,165	10	3,103	6,268	24,762
7– 8 ,, ..	275		632	106	66,992	10·0	6,699		6,699	13,398	53,594
8– 9 ,, ..	98		225	112	25,200	8·4	2,116		2,520	4,636	20,564
9–10 ,, ..	63		144	141	20,304	7·5	1,522		2,030	3,552	16,752
10–11 ,, ..	33		75	176	13,200	6·6	1,871		1,320	2,191	11,009
11–12 ,, ..	38		87	205	17,835	6·1	1,087		1,783	2,870	14,965
12–13 ,, ..	10		23	199	4,577	5·6	256		457	713	3,864
13–14 ,, ..	12		27	284	7,668	5·2	398		766	1,164	6,504
14–15 ,, ..	8		18	280	5,040	4·9	246		504	750	4,290
15–16 ,, ..	5		11	388	4,268	4·6	196		426	622	3,646
16–17 ,, ..	6		13	492	6,396	4·3	275		639	914	5,482
17–18 ,, ..	3		6	547	3,282	4·1	134		328	462	2,820
18–19 ,, ..	4		9	536	4,824	3·9	188		482	670	4,154
19–20 ,, ..	1		2	612	1,224	3·7	45		122	167	1,057
Total ..	789	..	1,807	..	211,840	..	17,198	..	21,179	38,377	173,463
Rosewood—											
6– 7 feet ..	23	2·3	52	60	3,120	19·5	608	10	312	920	2,200
7– 8 ,, ..	19		43	93	3,999	17 8	711		399	1,110	2,889
8– 9 ,, ..	5		11	111	1,221	16·0	195		122	317	904
9–10 ,, ..	2		4	158	632	14·2	89		63	152	480
10–11 ,, ..	1		2	172	344	12·9	44		34	78	266
12–13 ,, ..	2		4	210	840	11·1	93		84	177	663
Total ..	52	..	116	..	10,156	..	1,740	..	1,014	2,754	7,402
Venteak—											
6– 7 feet ..	90	2·3	207	76	15,732	7·4	1,164	10	1,573	2,737	12 995
7– 8 ,, ..	44		101	79	7,979	6·6	526		797	1,323	6,656
8– 9 ,, ..	6		13	118	1,534	5·8	88		153	241	1,293
9–10 ,, ..	1		2	135	270	5·2	14		27	41	229
10–11 ,, ..	5		11	140	1,540	4·8	73		154	227	1,313
11–12 ,, ..	1		2	150	300	4·4	13		30	43	257
Total ..	147	..	336	..	27,355	..	1,878	..	2,734	4,612	22,743
Pillamarudu—											
6– 7 feet ..	93	2·3	213	53	11,289	14·5	1,635	10	1,128	2,767	8,525
7– 8 ,, ..	113		259	75	19,425	12·9	2,505		1,942	4,447	14,978
8– 9 ,, ..	57		131	117	15,327	11·5	1,762		1,532	3,294	12.033
9–10 ,, ..	33		75	141	10,575	10·2	1,078		1,057	2,135	8,440
10–11 ,, ..	23		52	155	8,060	9·3	749		806	1,555	6,505
11–12 ,, ..	21		48	150	7,200	8·6	619		720	1,339	5,861
12–13 ,, ..	5		11	146	1,606	8·0	128		160	288	1,318
13–14 ,, ..	5		11	200	2,200	7·5	165		220	385	1,815
14–15 ,, ..	4		9	260	2,340	7·0	163		234	397	1,943
15–16 ,, ..	7		16	326	5,216	6·6	344		521	865	4,351
16–17 ,, ..	2		4	319	1,276	6·1	77		127	204	1,072
17–18 ,, ..	2		4	313	1,252	5·8	72		125	197	1,055
18–19 ,, ..	1		2	352	704	5·5	38		70	108	596
19–20 ,, ..	1		2	391	782	5·3	41		78	119	663
Total ..	367	..	837	..	87,252	..	9,377	..	8,720	18,097	69,155
Karumarudu—											
6– 7 feet ..	84	2·3	193	66	12,738	24·0	3,057	10	1,273	4,330	8,408
7– 8 ,, ..	102		234	94	21,996	21·4	4,707		2,199	6,906	15,090
8– 9 ,, ..	52		119	131	15,589	19·2	2,993		1,558	4,551	11,038
9–10 ,, ..	45		103	131	13,493	17·1	2,307		1,349	3,656	9,837
10–11 ,, ..	31		71	177	12,567	15·2	1.910		1,256	3,166	9,401
11–12 ,, ..	22		50	188	9,400	14·3	1,344		940	2,284	7,116
12–13 ,, ..	8		18	339	6,102	13·4	817		610	1,427	4,675
13–14 ,, ..	7		16	248	3,968	12·5	496		396	892	3,076
14–15 ,, ..	2		4	319	1,276	11·7	149		127	276	1,000
15–16 ,, ..	2		4	400	1,600	11·1	177		160	337	1,263
16–17 ,, ..	2		4	493	1,972	10·3	203		197	400	1,572
Total ..	537	..	816	..	100,701	..	18,160	..	10,065	28,225	72,476
Poovathi—											
6– 7 feet ..	5	2·3	11	36	396	..	..	..	..	..	..
7– 8 ,, ..	14		32	31	992	..	..	..	..	..	..
8– 9 ,, ..	9		20	59	1,180	..	..	..	..	..	..
9–10 ,, ..	13		29	67	1,943	..	..	..	..	..	..
10–11 ,, ..	12		27	88	2,376	..	..	..	..	..	..
11–12 ,, ..	6		13	83	1,079	..	..	..	..	..	..
12–13 ,, ..	4		9	104	936	..	..	..	..	..	..
13–14 ,, ..	5		11	105	1,155	..	..	..	..	..	..
14–15 ,, ..	4		9	115	1,035	..	..	..	..	..	..
16–17 ,, ..	1		2	115	230	..	..	..	..	..	..
17–18 ,, ..	1		2	115	230	..	..	..	..	..	..
Total ..	74	..	165	..	11,552	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXIV, area 575 acres, area of the sample plot, 241 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Irul—											
6– 7 feet ..	49	2·3	112	61	6,832	10·2	696	10	683	1,379	5,453
7– 8 ,, ..	51		117	80	9,360	10·0	936		936	1,872	7,488
8– 9 ,, ..	18		41	107	4,387	8·4	368		438	806	3,581
9–10 ,, ..	5		11	100	1,100	7·5	82		110	192	908
10–11 ,, ..	1		2	147	294	6·6	19		29	48	246
12–13 ,, ..	1		2	142	284	5·6	15		28	43	241
Total ..	125	..	285	..	22,257	..	2,116	..	2,224	4,340	17,917
Manjakadambai—											
6– 7 feet ..	3	2·3	6	64	384	19·5	74	10	38	112	272
7– 8 ,, ..	7		16	94	1,504	17·8	267		150	417	1,087
8– 9 ,, ..	5		11	113	1,243	16·0	198		124	322	921
9–10 ,, ..	4		9	175	1,575	14·2	223		157	380	1,195
10–11 ,, ..	4		9	180	1,620	12·9	208		162	370	1,250
11–12 ,, ..	4		9	204	1,836	12·0	220		183	403	1,433
12–13 ,, ..	4		9	252	2,268	11·1	251		226	477	1,791
13–14 ,, ..	7		16	194	3,104	10·3	319		310	629	2,475
14–15 ,, ..	5		11	344	3,784	9·7	367		378	745	3,039
15–16 ,, ..	6		13	356	4,628	9·2	425		462	887	3,741
16–17 ,, ..	3		6	400	2,400	8·5	204		240	444	1,956
17–18 ,, ..	3		6	400	2,400	8·1	194		240	434	1,966
18–19 ,, ..	3		6	532	3,192	7·7	245		319	564	2,628
19–20 ,, ..	4		9	600	5,400	7·3	394		540	934	4,466
Total ..	62	..	136	..	35,338	..	3,589	..	3,529	7,118	28,220
Nirkadambai—											
6– 7 feet ..	10	2·3	23	67	1,541	..	..	..	..	..	..
7– 8 ,, ..	11		25	69	1.725	..	..	..	..	..	..
8– 9 ,, ..	1		2	94	188	..	..	..	..	..	..
9–10 ,, ..	5		11	134	1,474	..	..	..	..	..	..
10–11 ,, ..	2		4	176	704	..	..	..	..	..	..
11–12 ,, ..	3		6	226	1,356	..	..	..	..	..	..
12–13 ,, ..	1		2	250	500	..	..	..	..	..	..
13–14 ,, ..	3		6	250	1,500	..	..	..	..	..	..
17–18 ,, ..	1		2	250	500	..	..	..	..	..	..
Total ..	37	..	81	..	9,488	..	..	..	..	..	..
Thadashi—											
6–7 feet ..	43	2·3	98	61	5,978	..	..	..	..	..	..
7–8 ,, ..	14		32	66	2,112	..	..	..	..	..	..
8–9 ,, ..	2		4	72	288	..	..	..	..	..	..
Total ..	59	..	134	..	8,378	..	..	..	..	..	..
Vagai—											
6– 7 feet ..	1	2·3	2	45	90	..	..	..	..	..	..
8– 9 ,, ..	2		4	89	356	..	..	..	..	..	..
17–18 ,, ..	1		2	200	400	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..

Old compartment No. XXIV.

Names of species.	Volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	24,762	148,701
Rosewood	2,200	5,208
Venteak	12,995	9,748
Irul	5,453	12,464
Pillamarudu	8,525	60,630
Karumarudu	8,408	64,068
Vengai	..	..
Manjakadambai	272	27,948
Total ..	62,615	328,761
B. Species at present unsaleable—		
Nirkadambai	1,541	7,947
Vagai	90	756
Poovathi	396	11,156
Thadashi	5,978	2,400
Total ..	8,005	22,259

With bark.

Total volumes of mature and saleable species in cubic feet.

	C. FT.
Teak	148,701
Rosewood	5,202
Other superior species ..	174,858
Total ..	328,761

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXV, area 316 acres, area of the sample plot, 169 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	136	1·8	244	58	14,152	10·2	1,443	10	1,415	2,858	11,294
7– 8 ,, ..	175		315	106	33,390	10·0	3,339		3,339	6,678	26,712
8– 9 ,, ..	75		135	112	15,120	8·4	1,270		1,512	2,782	12,338
9–10 ,, ..	39		70	141	9,870	7·5	740		987	1,727	8,143
10–11 ,, ..	28		50	176	8,800	6·6	580		880	1,460	7,340
11–12 ,, ..	15		27	205	5,535	6·1	337		553	890	4,645
12–13 ,, ..	4		7	199	1,393	5·6	78		139	217	1,176
13–14 ,, ..	7		12	284	3,408	5·2	177		340	517	2,891
14–15 ,, ..	3		5	280	1,400	4·9	68		140	208	1,192
15–16 ,, ..	4		7	388	2,716	4·6	124		271	395	2,321
16–17 ,, ..	1		1	492	492	4·3	21		49	70	422
17–18 ,, ..	1		1	547	547	4·1	22		54	76	471
18–19 ,, ..	1		1	536	536	3·9	20		53	73	463
19–20 ,, ..	2		3	612	1,836	3·7	67		183	250	1,586
Total ..	491	..	878	..	99,195	..	8,286	..	9,916	18,201	80,994
Rosewood—											
6– 7 feet ..	4	1·8	7	60	420	19·5	81	10	42	123	297
7– 8 ,, ..	10		18	93	1,674	17·8	297		167	464	1,210
8– 9 ,, ..	2		3	111	333	16·0	53		33	86	247
9–10 ,, ..	1		1	158	158	14·2	22		15	37	121
10–11 ,, ..	2		3	172	516	12·9	66		51	117	399
14–15 ,, ..	1		1	349	349	9·7	33		34	67	282
Total ..	20	..	33	..	3,450	..	552	..	342	894	2,556
Vagai—											
6– 7 feet ..	1	1·8	1	45	45	..	..	..	..	..	..
Ven-teak—											
6– 7 feet ..	30	1·8	54	76	4,104	7·4	303	10	410	713	3,391
7– 8 ,, ..	13		23	79	1,817	6·6	119		181	300	1,517
8– 9 ,, ..	3		5	118	590	5·8	34		59	93	497
9–10 ,, ..	1		1	135	135	5·2	7		13	20	115
Total ..	47	..	83	..	6,646	..	463	..	663	1,126	5,520
Irul—											
6– 7 feet ..	32	1·8	57	61	3,477	10·2	354	10	347	701	2,776
7– 8 ,, ..	18		32	80	2,560	10·0	256		256	512	2,048
8– 9 ,, ..	7		12	107	1,284	8·4	107		128	235	1,049
9–10 ,, ..	1		1	100	100	7·5	7		10	17	83
10–11 ,, ..	1		1	147	147	6·6	9		14	23	124
15–16 ,, ..	1		1	166	166	4·6	7		16	23	143
Total ..	60	..	104	..	7,734	..	740	..	771	1,511	6,223
Pillamarudu—											
6– 7 feet ..	47	1·8	84	53	4,452	14·5	645	10	445	1,090	3,362
7– 8 ,, ..	42		75	75	5,625	12·9	725		562	1,287	4,338
8– 9 ,, ..	14		25	117	2,925	11·5	336		292	628	2,297
9–10 ,, ..	11		19	141	2,679	10·2	273		267	540	2,139
10–11 ,, ..	3		5	155	775	9·3	72		77	149	626
11–12 ,, ..	6		10	150	1,500	8·6	129		150	279	1,221
12–13 ,, ..	2		3	146	438	8·0	35		43	78	360
13–14 ,, ..	3		5	200	1,000	7·5	75		100	175	825
14–15 ,, ..	2		3	260	780	7·0	54		78	132	648
15–16 ,, ..	1		1	326	326	6·6	21		32	53	273
Total ..	131	..	230	..	20,500	..	2,365	..	2,046	4,411	16,089
Karumarudu—											
6– 7 feet ..	118	1·8	212	66	13,992	24·0	3,358	10	1,399	4,757	9,235
7– 8 ,, ..	116		208	94	19,552	21·4	4,184		1,955	6,139	13,413
8– 9 ,, ..	56		100	131	13,100	19·2	2,515		1,310	3,825	9,275
9–10 ,, ..	36		64	131	8,384	17·1	1,433		838	2,271	6,113
10–11 ,, ..	14		25	177	4,425	15·2	672		442	1,114	3,311
11–12 ,, ..	6		10	188	1,880	14·3	268		188	456	1,424
12–13 ,, ..	4		7	339	2,373	13·4	317		237	554	1,819
13–14 ,, ..	4		7	248	1,736	12·5	217		173	390	1,346
14–15 ,, ..	1		1	319	319	11·7	37		31	68	251
15–16 ,, ..	3		5	400	2,000	11·1	222		200	422	1,578
6-17 ,, ..	1		1	493	493	10·3	50		49	99	394
Total ..	359	..	640	..	68,254	..	13,27	..	6,822	20,095	48,159

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXV, area 316 acres, area of the sample plot, 169 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Vengai—											
6– 7 feet ..	1	1·8	1	55	55	14·5	7	10	5	12	43
7– 8 ,, ..	2		3	76	228	12·9	29		22	51	177
8– 9 ,, ..	1		1	106	106	11·5	12		10	22	84
10–11 ,, ..	1		1	120	120	9·3	11		12	23	97
11–12 ,, ..	1		1	120	120	8·6	10		12	22	98
Total ..	6	..	7	..	629	..	69	..	61	130	499
Thadashi—											
6– 7 feet ..	4	1·8	7	61	427	..	..	..	..	..	..
7– 8 ,, ..	1		1	66	66	..	..	..	..	..	..
8– 9 ,, ..	1		1	72	72	..	..	..	..	..	..
9–10 ,, ..	1		1	135	135	..	..	..	..	..	..
Total ..	7	..	10	..	700	..	..	..	..	..	..
Manjakadambai—											
7– 8 feet ..	3	1·8	5	94	470	17·8	83	10	47	130	340
12–13 ,, ..	1		1	252	252	11·1	27		25	52	200
13–14 ,, ..	1		1	194	194	10·3	19		19	38	156
14–15 ,, ..	1		1	344	344	9·7	33		34	67	277
16–17 ,, ..	2		3	400	1,200	8·5	102		120	222	978
17–18 ,, ..	1		1	400	400	8·1	32		40	72	328
Total ..	9	..	12	..	2,860	..	296	..	285	581	2,279
Poovathi—											
6– 7 feet ..	2	1·8	3	36	108	..	..	..	..	..	..
7– 8 ,, ..	8		5	31	155	..	..	..	..	..	..
8– 9 ,, ..	4		7	59	413	..	..	..	..	..	..
9–10 ,, ..	2		3	67	201	..	..	..	..	..	..
10–11 ,, ..	1		1	88	88	..	..	..	..	..	..
Total ..	12	..	19	..	965	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	7	1·8	12	67	804	..	..	..	..	..	..
7– 8 ,, ..	1		1	69	69	..	..	..	..	..	..
8– 9 ,, ..	7		12	94	1,128	..	..	..	..	..	..
9–10 ,, ..	6		10	134	1,340	..	..	..	..	..	..
10–11 ,, ..	2		3	176	528	..	..	..	..	..	..
13–14 ,, ..	1		1	261	261	..	..	..	..	..	..
Total ..	24	..	39	..	4,130	..	..	..	..	..	..

Compartment XXV.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	11,294	69,700
Rosewood	297	2,259
Ven-teak	3,391	2,129
Irul	2,776	3,447
Pillamarudu	3,362	12,727
Karumarudu	9,235	38,982
Vengai	43	456
Manjakadambai	..	2,279
Total ..	30,398	131,979
B. Species at present unsaleable—		
Vagai	45	..
Poovathi	108	857
Thadashi	427	273
Nirkadambai	804	3,326
Total ..	..	..

Total volumes of mature and saleable timber.

With bark.

	C. FT.
Teak	69,700
Rosewood	2,259
Other superior species ..	60,020
Grand total ..	131,979

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. XXVI, area 354 acres, area of the sample plot, 242 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average trees in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Teak—											
6– 7 feet	99	1·4	138	58	8,004	10·2	816	10	800	1,616	6,388
7– 8 ,, ..	113		158	106	16,748	10	1,674		1,674	3,348	13,400
8– 9 ,, ..	61		85	112	9,520	8·4	799		952	1,751	7,769
9–10 ,, ..	53		74	141	10,434	7·5	782		1,043	1,825	8,609
10–11 ,, ..	36		50	176	8,800	6·6	580		880	1,460	7,340
11–12 ,, ..	21		29	205	5,945	6·1	362		594	956	4,989
12–13 ,, ..	17		23	199	4,577	5·6	256		457	713	3,864
13–14 ,, ..	12		16	284	4,544	5·2	236		454	690	3,854
14–15 ,, ..	6		8	280	2,240	4·9	109		224	333	1,907
15–16 ,, ..	7		9	388	3,492	4·6	160		349	509	2,983
16–17 ,, ..	2		2	492	984	4·3	42		98	140	844
18–19 ,, ..	1		1	536	536	3·9	20		53	73	463
19–20 ,, ..	1		1	612	612	3·7	22		61	83	529
Total ..	429	..	594	..	76,436	..	5,858	..	7,639	13,497	62,939
Rosewood—											
6– 7 feet	18	1·4	25	60	1,500	19·5	292	10	150	442	1,058
7– 8 ,, ..	14		19	93	1,767	17·8	314		176	490	1,277
8– 9 ,, ..	7		9	111	999	16·0	159		99	258	741
9–10 ,, ..	6		8	158	1,264	14·2	179		126	305	959
10–11 ,, ..	4		5	172	860	12·9	110		86	196	664
11–12 ,, ..	6		8	186	1,488	12·0	178		148	326	1,162
13–14 ,, ..	2		2	279	558	10·3	57		55	112	446
15–16 ,, ..	1		1	306	306	9·2	28		30	58	248
16–17 ,, ..	1		1	306	306	8·5	26		30	56	250
Total ..	59	..	78	..	9,048	..	1,343	..	900	2,243	6,805
Venteak—											
6– 7 feet	140	1·4	196	76	14,896	7·4	1,102	10	1,489	2,951	12,305
7– 8 ,, ..	89		124	79	9,796	6·6	646		979	1,625	8,171
8– 9 ,, ..	35		49	118	5,782	5·8	335		578	913	4,869
9–10 ,, ..	15		21	135	2,835	5·2	147		283	430	2,405
10–11 ,, ..	4		5	140	700	4·8	33		70	103	597
11–12 ,, ..	3		4	150	600	4·4	26		60	86	514
13–14 ,, ..	1		1	160	160	3·8	6		16	22	138
Total ..	287	..	400	..	34,769	..	2,297	..	3,475	5,770	28,999
Pillamarudu—											
6– 7 feet	89	1·4	124	53	6,572	14·5	952	10	657	1,609	4,963
7– 8 ,, ..	92		128	75	9,600	12·9	1,238		960	2,198	7,402
8– 9 ,, ..	56		78	117	9,126	11·5	1,049		912	1,961	7,165
9–10 ,, ..	53		74	141	10,434	10·2	1,064		1,043	2,197	8,327
10–11 ,, ..	36		50	155	7,750	9·3	720		775	1,495	6,255
11–12 ,, ..	17		23	150	3,450	8·6	296		345	641	2,809
12–13 ,, ..	14		19	146	2,774	8·0	221		277	498	2,276
13–14 ,, ..	9		12	200	2,400	7·5	180		240	420	1,980
14–15 ,, ..	5		7	260	1,820	7·0	127		182	309	1,511
15–16 ,, ..	5		7	326	2,282	6·6	150		228	378	1,904
16–17 ,, ..	2		2	319	638	6·1	38		63	101	537
17–18 ,, ..	1		1	313	313	5·8	18		31	49	264
18–19 ,, ..	3		4	352	1,408	5·5	77		140	217	1,191
Total ..	382	..	529	..	58,567	..	6,130	..	5,853	11,983	46,584
Vagai—											
6– 7 feet	3	1·4	4	65	260	..	..	..	..	..	..
7– 8 ,, ..	1		1	63	63	..	..		..	..	..
Total ..	4	..	5	..	323	..	..	..	..	..	..
Karumarudu											
6– 7 feet	39	1·4	54	66	3,564	24·0	855	10	356	1,211	2,353
7– 8 ,, ..	41		57	94	5,358	21·4	1,146		535	1,681	3,677
8– 9 ,, ..	37		51	131	6,681	19·2	1,282		668	1,950	4,731
9–10 ,, ..	38		53	131	6,943	17·1	1,187		694	1,881	5,062
10–11 ,, ..	36		50	177	8,850	15·2	1,345		885	2,230	6,620
11–12 ,, ..	23		32	188	6,016	14·3	860		601	1,461	4,555
12–13 ,, ..	11		15	339	5,085	13·4	681		508	1,189	3,896
13–14 ,, ..	6		8	248	1,984	12·5	248		198	446	1,538
14–15 ,, ..	4		5	319	1,595	11·7	186		159	345	1,250
15–16 ,, ..	10		14	400	5,600	11·1	621		560	1,181	4,419
16–17 ,, ..	5		7	493	3,451	10·3	355		345	700	2,751
17–18 ,, ..	1		1	500	500	9·7	48		50	98	402
18–19 ,, ..	1		1	500	500	9·3	46		50	96	404
19–20 ,, ..	2		2	500	1,000	8·8	88		100	188	812
Total ..	254	..	350	..	57,127	..	8,948	..	5,709	14,657	42,470

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, Old Compartment No. XXVI, area 354 acres ; area of the sample plot, 242 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark — Percentage.	On account of bark — Quantity.	On account of internal and other defects as a margin of safety — Percentage.	On account of internal and other defects as a margin of safety — Quantity.	Total deductions.	Net volume in cubic feet.
				C. FT.	C. FT.						
Irul—											
6– 7 feet	111	1·4	155	61	9,455	10·2	964	10	945	1,909	7,546
7– 8 ,, ..	92		128	80	10,240	10·0	1,024		1,024	2,048	8,192
8– 9 ,, ..	34		47	107	5,029	8·4	422		502	924	4,105
9–10 ,, ..	28		39	100	3,900	7·5	292		390	682	3,218
10–11 ,, ..	13		18	147	2,646	6·6	174		264	438	2,208
11–12 ,, ..	3		4	166	664	6·1	40		66	106	558
Total ..	281	..	391	..	31,934	..	2,916	..	3,191	6,107	25,827
Manjakadambai—											
6– 7 feet	3	1·4	4	64	256	19·5	49	10	25	74	182
7– 8 ,, ..	4		5	94	470	17·8	83		47	130	340
8– 9 ,, ..	3		4	113	452	16·0	72		45	117	335
9–10 ,, ..	3		4	175	700	14·2	99		70	169	531
10–11 ,, ..	9		12	180	2,160	12·9	278		216	494	1,666
11–12 ,, ..	5		7	204	1,428	12·0	171		142	313	1,115
12–13 ,, ..	3		4	252	1,008	11·1	111		100	211	797
13–14 ,, ..	2		2	194	388	10·3	39		38	77	311
14–15 ,, ..	5		7	344	2,408	9·7	233		240	473	1,935
15–16 ,, ..	10		14	356	4,984	9·2	458		498	956	4,028
16–17 ,, ..	4		5	400	2,000	8·5	170		200	370	1,630
17–18 ,, ..	5		7	400	2,800	8·1	226		280	506	2,294
18–19 ,,	7		9	532	4,788	7·7	368		478	846	3,942
19–20 ,, ..	10		14	600	8,400	7·3	613		840	1,453	9,947
Total ..	73	..	98	..	32,242	..	2,970	..	3,219	6,189	26,053
Nirkadambai—											
6– 7 feet	22	1·4	30	67	2,010	..	..	..	..	..	..
7– 8 ,, ..	18		25	69	1,725	..	..	..	..	..	..
8– 9 ,, ..	4		5	94	470	..	..	..	..	..	..
9–10 ,, ..	4		5	134	670	..	..	..	..	..	..
10–11 ,, ..	6		8	176	1,408	..	..	..	..	..	..
11–12 ,, ..	4		5	226	1,130	..	..	..	..	..	..
14–15 ,, ..	1		1	275	275	..	..	..	..	..	..
Total ..	59	..	79	..	7,688	..	..	..	..	..	..
Poovathi—											
6– 7 feet	7	1·4	9	36	324	..	..	..	..	..	..
7– 8 ,, ..	6		8	31	248	..	..	..	..	..	..
8– 9 ,, ..	4		5	59	295	..	..	..	..	..	..
9–10 ,, ..	6		8	67	536	..	..	..	..	..	..
10–11 ,, ..	6		8	88	704	..	..	..	..	..	..
11–12 ,, ..	3		4	83	332	..	..	..	..	..	..
12–13 ,, ..	1		1	104	104	..	..	..	..	..	..
13–14 ,, ..	2		2	115	230	..	..	..	..	..	..
14–15 ,, ..	1		1	115	115	..	..	..	..	..	..
15–16 ,, ..	2		2	115	230	..	..	..	..	..	..
17–18 ,, ..	3		4	115	460	..	..	..	..	..	..
Total ..	41	..	52	..	3,578	..	..	..	..	..	..
Thadashi—											
6– 7 feet	58	1·4	81	61	4,941	..	..	..	..	..	..
7– 8 ,, ..	52		72	66	4,752	..	..	..	..	..	..
8– 9 ,, ..	17		23	72	1,656	..	..	..	..	..	..
9–10 ,, ..	8		11	135	1,485	..	..	..	..	..	..
Total ..	135	..	187	..	12,834	..	..	..	..	..	..

Compartment XXVI.

Names of species.	Total volume of 6–7 feet girth class trees	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	c. ft.	c. ft.
Teak	6,388	56,551
Rosewood	1,058	5,747
Venteak	12,305	16,694
Irul	7,546	18,281
Pillamarudu	4,963	41,621
Karumarudu	2,353	0,117
Manjakadambai	182	25,871
Total ..	34,795	204,882
B. Species at present unsaleable—		
Vagai	260	63
Poovathi	324	3,254
Thadashi	4,941	7,893
Nirkadambai	2,010	5,678
Total ..	7,535	16,888

Total volumes of mature and saleable timber.

	c. ft.
Teak	56,551
Rosewood	5,747
Other superior species ..	142,584
Total ..	204,882

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXVII, area 603 acres, area of the sample plot 236 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
				C. FT.	C. FT.						
Teak—											
6– 7 feet ..	268	2·5	670	58	38,860	10·2	3,963	10	3,886	7,849	31,011
7– 8 ,, ..	278		695	106	73,670	10·0	7,367		7,367	14,734	58,936
8– 9 ,, ..	111		277	112	31,024	8·4	2,606		3,102	5,708	25,316
9–10 ,, ..	90		225	141	31,725	7·5	2,379		3,172	5,551	26,174
10–11 ,, ..	48		120	176	21,120	6·6	3,093		2,112	3,505	17,615
11–12 ,, ..	27		67	205	13,735	6·1	837		1,373	2,210	11,525
12–13 ,, ..	25		137	199	27,263	5·6	1,526		2,726	4,252	23,011
13–14 ,, ..	11		27	284	7,668	5·2	398		766	1,164	6,504
14–15 ,, ..	7		17	280	4,760	4·9	233		476	709	4,051
15–16 ,, ..	4		10	388	3,880	4·6	178		388	566	3,314
16–17 ,, ..	4		10	492	4,920	4·3	211		492	703	4,217
17–18 ,, ..	5		12	547	6,564	4·1	269		656	925	5,639
19–20 ,, ..	1		2	612	1,224	3·7	45		122	167	1,057
Total ..	879	..	2,269	..	266,413	..	21,405	..	26,638	48,043	218,370
Rosewood—											
6– 7 feet ..	6	2·5	15	60	900	19·5	175	10	90	265	635
7– 8 ,, ..	2		5	93	465	17·8	82		46	128	337
8– 9 ,, ..	3		7	113	791	16·0	126		79	205	586
9–10 ,, ..	2		5	158	790	14·2	112		79	191	599
11–12 ,, ..	1		2	186	372	12·0	44		37	81	291
Total ..	14	..	34	..	3,318	..	539	..	331	870	2,448
Venteak—											
6– 7 feet ..	136	2·5	340	76	25,840	7·4	1,912	10	2,584	4,496	21,344
7– 8 ,, ..	65		162	79	12,798	6·6	844		1,279	2,123	10,675
8– 9 ,, ..	22		55	118	6,490	5·8	376		649	1,025	5,465
9–10 ,, ..	7		17	135	2,295	5·2	119		229	348	1,947
10–11 ,, ..	3		7	140	980	4·8	47		98	145	835
12–13 ,, ..	1		2	160	320	4·0	12		32	44	276
Total ..	234	..	583	..	48,723	..	3,310	..	4,871	8,181	40,542
Irul—											
6– 7 feet ..	110	2·5	275	61	16,775	10·2	1,711	10	1,677	3,388	13,387
7– 8 ,, ..	61		152	80	12,160	10·0	1,216		1,216	2,432	9,728
8– 9 ,, ..	13		32	107	3,424	8·4	287		342	629	2,795
9–10 ,, ..	4		10	100	1,000	7·5	75		100	175	825
10–11 ,, ..	1		2	147	294	6·6	19		29	48	246
Total ..	189		471	..	33,653	..	3,308	..	3,364	6,672	26,981
Vengai—											
6– 7 feet ..	1	2·5	2	55	110	14·5	15	10	11	26	84
7– 8 ,, ..	1		2	76	152	12·9	19		15	34	118
11–12 ,, ..	1		2	120	240	8·6	20		24	44	196
13–14 ,, ..	1		2	120	240	7·5	18		24	42	198
Total ..	4	..	8	..	742	..	72	..	74	146	596
Pillamarudu—											
6– 7 feet ..	43	2·5	107	53	5,671	14·5	822	10	567	1,389	4,282
7– 8 ,,	65		162	75	12,150	12·9	1,567		1,215	2,782	9,368
8– 9 ,, ..	32		80	117	9,360	11·5	1,076		936	2,012	7,348
9–10 ,, ..	16		40	141	5,640	10·2	575		564	1,139	4,501
10–11 ,, ..	9		22	155	3,410	9·3	317		341	658	2,752
11–12 ,, ..	12		30	150	4,500	8·6	387		450	837	3,663
12–13 ,, ..	6		15	146	2,190	8·0	175		219	394	1,796
13–14 ,, ..	5		12	200	2,400	7·5	180		240	420	1,980
15–16 ,, ..	3		7	326	2,282	6·6	150		228	378	1,904
16–17 ,, ..	5		12	319	3,828	6·1	233		382	615	3,213
18–19 ,, ..	1		2	352	704	5·5	38		70	108	596
Total ..	197	..	489	..	52,135	..	5,520	..	5,212	10,732	41,403
Poovathi—											
6– 7 feet ..	3	2·5	7	36	252	..	..	..	..	..	..
7– 8 ,, ..	2		5	31	155	..	..	..	..	..	..
8– 9 ,, ..	4		10	59	590	.	..	..	..	..	..
9–10 ,, ..	6		15	67	1,005	..	..	..	..	..	..
11–12 ,, ..	3		7	83	581	..	..	..	..	..	..
13–14 ,, ..	2		5	105	525	..	..	..	..	..	..
15–16 ,, ..	2		5	115	575	..	..	..	..	..	..
18–19 ,, ..	2		5	115	575	..	..	..	..	..	..
19–20 ,, ..	1		2	115	230	..	..	..	..	..	..
Total ..	25	..	61	..	4,488	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXVII, area 603 acres, area of the sample plot, 236 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net value in cubic feet.
				C. FT.	C. FT.						
Karumarudu—											
6- 7 feet ..	87	2·5	217	66	14,322	24·0	3,437	10	1,432	4,869	9,453
7- 8 ,, ..	82		205	94	19,270	21·4	4,123		1,927	6,050	13,220
8- 9 ,, ..	54		135	131	17,685	19·2	3,395		1,768	5,163	12,522
9-10 ,, ..	38		95	131	12,445	17·1	2,128		1,244	3,372	9,073
10-11 ,, ..	30		75	177	13,275	15·2	2,017		1,327	3,344	9,931
11-12 ,, ..	20		50	188	9,400	14·3	1,344		940	2,284	7,116
12-13 ,, ..	11		27	339	9,153	13·4	1,226		915	2,141	7,012
13-14 ,, ..	6		15	248	3,720	12·5	465		372	837	2,883
14-15 ,, ..	2		5	319	1,595	11·7	186		159	345	1,250
16-17 ,, ..	2		5	493	2,465	10·3	253		246	499	1,966
17-18 ,, ..	1		2	500	1,000	9·7	97		100	197	803
Total ..	333	..	831	..	104,330	..	18,671	..	10,430	29,101	75,229
Vagai—											
7- 8 feet ..	1	2·5	2	63	126	..	..	..	..	..	..
9-10 ,, ..	1		2	110	220	..	..	..	..	..	..
Total ..	2	..	4	..	346	..	..	..	..	..	..
Thadashi—											
6- 7 feet ..	50	2·5	125	61	7,625	..	..	..	..	..	..
7- 8 ,, ..	29		72	66	4,752	..	..	..	..	..	..
8- 9 ,, ..	8		20	72	1,440	..	..	..	..	..	..
9-10 ,, ..	1		2	135	270	..	..	..	..	..	..
Total ..	88	..	219	..	14,087	..	..	..	..	..	..
Nirkadambai—											
6- 7 feet ..	2	2·5	5	67	335	..	..	..	..	..	..
7- 8 ,, ..	4		10	69	690	..	..	..	..	..	..
8- 9 ,, ..	3		7	94	658	..	..	..	..	..	..
9-10 ,, ..	2		5	134	670	..	..	..	..	..	..
10-11 ,, ..	3		7	176	1,232	..	..	..	..	..	..
11-12 ,, ..	3		7	226	1,582	..	..	..	..	..	..
12-13 ,, ..	1		2	234	468	..	..	..	..	..	..
14-15 ,, ..	1		2	275	550	..	..	..	..	..	..
17-18 ,, ..	1		2	275	550	..	..	..	..	..	..
Total ..	20	..	47	..	6,735	..	..	..	..	..	..
Manjakadambai—											
6- 7 feet ..	2	2·5	5	64	320	19·5	62	10	32	94	226
7- 8 ,, ..	11		27	94	2,538	17·8	451		253	704	1,834
8- 9 ,, ..	4		10	113	1,130	16·0	180		113	293	837
9-10 ,, ..	7		17	175	2,975	14·2	422		297	719	2,256
10-11 ,, ..	11		27	180	4,860	12·9	626		486	1,112	3,748
11-12 ,, ..	7		17	204	3,468	12·0	416		346	762	2,706
12-13 ,, ..	7		17	252	4,284	11·1	475		428	903	3,381
13-14 , ..	6		15	194	2,910	10·3	299		291	590	2,320
14-15 ,, ..	5		12	344	4,128	9·7	400		412	812	3,316
15-16 ,, ..	4		10	356	3,560	9·2	327		356	683	2,877
16-17 ,, ..	3		7	400	2,800	8·5	238		280	518	2,282
18-19 ,, ..	4		10	532	5,320	7·7	409		532	941	4,379
19-20 ,, ..	2		5	600	3,000	7·3	219		300	519	2,481
Total ..	73	..	179	..	41,293	..	4,524	..	4,126	8,650	32,643

Old Compartment No. XXVII.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	31,011	187,359
Rosewood	635	1,813
Venteak	21,344	19,198
Vengai	84	512
Pillamarudu	4,282	37,121
Karumarudu	9,453	65,776
Manjakadambai	226	32,417
Irul	13,387	13,594
Total ..	80,422	357,790
B. Species at present unsaleable—		
Vagai	..	346
Poovathi	252	4,236
Thadashi	7,625	6,462
Nirkadambai	335	6,400
Total ..	8,212	17,444

Total volume of mature and saleable timber.	C. FT.
Teak	187,359
Rosewood	1,813
Other superior species ..	168,618
Grand total ..	357,790

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXVIII, area 386 acres, area of the sample plot, 170 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet	Net value in cubic feet.
				C.FT.	C.FT.						
Teak—											
6– 7 feet ..	64	2·2	140	41	5,740	10·2	585	10	574	1,159	4,581
7– 8 ,, ..	68		149	63	9,387	10·0	938		938	1,876	7,511
8– 9 ,, ..	21		46	85	3,910	8·4	328		391	719	3,191
9–10 ,, ..	15		33	107	3,531	7·5	264		353	617	2,914
10–11 ,, ..	9		19	113	2,147	6·6	141		214	355	1,792
11–12 ,, ..	8		17	187	3,179	6·1	193		317	510	2,669
12–13 ,, ..	1		2	159	318	5·6	17		31	48	270
13–14 ,, ..	1		2	146	292	5·2	15		29	44	248
15–16 ,, ..	1		2	197	394	4·6	18		39	57	337
17–18 ,, ..	1		2	216	432	4·1	17		43	60	372
Total ..	189	..	412	..	29,330	..	2,516	..	2,929	5,445	23,885
Rosewood—											
6– 7 feet ..	8	2·2	17	44	748	19·5	145	10	74	219	529
7– 8 ,, ..	2		4	65	260	17·8	46		26	72	188
8– 9 ,, ..	1		2	100	200	16·0	32		20	52	148
9–10 ,, ..	1		2	100	200	14·2	28		20	48	152
Total ..	12	..	25	..	1,408	..	251	..	140	391	1,017
Venteak—											
6– 7 feet ..	14	2·2	30	40	1,200	7·4	88	10	120	208	992
7– 8 ,, ..	6		13	55	715	6·6	47		71	118	597
9–10 ,, ..	1		2	108	216	5·2	11		21	32	184
Total ..	21	..	45	..	2,131	..	146	..	212	358	1,773
Vengai—											
6– 7 feet ..	4	2·2	8	28	224	14·5	32	10	22	54	170
7– 8 ,, ..	2		4	30	120	12·9	15		12	27	93
10–11 ,, ..	1		2	90	180	9·3	16		18	34	146
Total ..	7	..	14	..	524	..	63	..	52	115	409
Irul—											
6– 7 feet ..	79	2·2	173	37	6,401	10·2	652	10	640	1,292	5,109
7– 8 ,, ..	37		81	52	4,212	10·0	421		421	842	3,370
8– 9 ,, ..	6		13	82	1,066	8·4	89		106	195	871
9–10 ,, ..	3		6	101	606	7·5	45		60	105	501
Total ..	125	..	273	..	12,285	..	1,207	..	1,227	2,434	9,851
Pillamarudu—											
6– 7 feet ..	37	2·2	81	46	3,726	14·2	540	10	372	912	2,814
7– 8 ,, ..	23		50	68	3,400	12·9	438		340	778	2,622
8– 9 ,, ..	8		17	94	1,598	11·5	183		159	342	1,256
9–10 ,, ..	14		30	90	2,700	10·2	275		270	545	2,155
10–11 ,, ..	6		13	107	1,391	9·3	129		139	268	1,123
11–12 ,, ..	1		2	150	300	8·6	25		30	55	245
12–13 ,, ..	4		8	146	1,168	8·0	93		116	209	959
13–14 ,, ..	3		6	236	1,416	7·5	106		141	247	1,169
14–15 ,, ..	1		2	203	406	7·0	28		40	68	338
15–16 ,, ..	1		2	238	476	6·6	31		47	78	398
16–17 ,, ..	1		2	231	462	6·1	28		46	74	388
Total ..	99	..	213	..	17,043	..	1,876	..	1,700	3,576	13,467
Karumarudu—											
6– 7 feet ..	110	2·2	242	48	11,616	24·0	2,787	10	1,161	3,948	7,668
7– 8 ,, ..	94		206	61	12,566	21·4	2,689		1,256	3,945	8,621
8– 9 ,, ..	50		110	82	9,020	19·2	1,731		902	2,633	6,387
9–10 ,, ..	56		123	104	12,972	17·1	2,218		1,297	3,515	9,457
10–11 ,, ..	26		57	133	7,581	15·2	1,152		758	1,910	5,671
11–12 ,, ..	28		61	179	10,919	14·3	1,561		1,091	2,652	8,267
12–13 ,, ..	8		17	187	3,179	13·4	425		317	742	2,437
13–14 ,, ..	4		8	244	1,952	12·5	244		195	439	1,513
14–15 ,, ..	5		11	217	2,387	11·7	279		238	517	1,870
15–16 ,, ..	4		8	250	2,000	11·1	222		200	422	1,578
17–18 ,, ..	1		2	250	500	9·7	48		50	98	402
Total ..	386	..	845	..	74,692	..	13,356	..	7,465	20,821	53,871
Manjakadambai—											
6– 7 feet ..	3	2·2	6	39	234	19·5	45	10	23	68	166
7– 8 ,, ..	5		11	74	814	17·8	144		81	225	589
8– 9 ,, ..	1		2	73	146	16·0	23		14	37	109
11–12 ,, ..	3		6	155	930	12·0	111		93	204	726
15–16 ,, ..	1		2	344	688	9·2	63		68	131	557
17–18 ,, ..	1		2	295	590	8·1	47		59	106	484
Total ..	14	..	29	..	3,402	..	433	..	338	771	2,631

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXVIII, area 386 acres, area of the sample plot 170 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Net value in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions in cubic feet.
						Percentage.	Quantity.	Percentage.	Quantity.	
				C.FT.	C.FT.					
Vagai—										
6–7 feet ..	18	2·2	39	45	1,755	..	..	..	..	..	..
7–8 ,, ..	7		15	63	945	..	..	..	..	..	..
8–9 ,, ..	2		4	89	356	..	..	..	..	..	..
11–12 ,, ..	1		2	112	224	..	..	..	..	..	..
Total ..	28	..	60	..	3,280	..	..	..	..	..	..
Poovathi—										
6–7 feet ..	6	2·2	13	36	468	..	..	..	..	..	..
7–8 ,, ..	10		22	31	682	..	..	..	..	..	..
8–9 ,, ..	6		13	59	767	..	.	..	..	..	..
9–10 ,, ..	5		11	67	737	..	..	..	..	..	..
10–11 ,, ..	4		8	88	704	..	..	..	..	..	..
11–12 ,, ..	2		4	83	332	..	..	..	.		..
12–13 ,, ..	2		4	104	416	..	..	..	..	..	..
13–14 ,, ..	1		2	105	210	..	..	.	..	..	..
Total ..	36	..	77	..	4,316	..	..	..	..	..	..
Thadashi—										
6–7 feet ..	9	2·2	19	61	1,159	..	..	..	..	..	..
7–8 ,, ..	11		24	66	1,584	..	..	..	..	..	..
8–9 ,, ..	1		2	72	144	..	..	..	..	..	..
9–10 ,, ..	1		2	135	270	..	..	..	..	..	..
Total ..	22	..	47	..	3,157	..	..	..	..	..	..
Nirkadambai—										
6–7 feet ..	11	2·2	24	67	1,608	..	..	..	..	..	..
7–8 ,, ..	6		13	69	897	..	..	..	..	.	..
8–9 ,, ..	5		11	94	1,034	..	..	..	..	..	..
9–10 ,, ..	2		4	134	536	..	..	..	..	..	..
10–11 ,, ..	1		2	176	352	..	..	..	..		..
11–12 ,, ..	1		2	226	452	..	..	..	..	..	..
12–13 ,, ..	1		2	234	468	..	..	..	..	..	..
Total ..	27	..	58	..	5,347	..	..	..	..	..	..

Old Compartment No. XXVIII.

Name of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C.FT.	C.FT.
A. Saleable species—		
Teak	4,581	19,304
Rosewood	529	488
Venteak	992	781
Irul	5,109	4,742
Pillamarudu	2,814	10,653
Karumarudu	7,668	46,203
Vengai	170	239
Manjakadambai	166	2,465
Total ..	22,029	84,875
B. Species at present unsaleable—		
Vagai	1,755	1,525
Poovathi	468	3,848
Thadashi	1,159	1,998
Nirkadambai	1,608	3,739
Total ..	4,990	11,110

Total volume of mature and saleable timber.

	C.FT.
Teak	19,304
Rosewood	488
Other superior species ..	65,083
Grand total ..	84,875

with bark.

Calculations of volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXIX, area 396 acres, area of the sample plot, 234 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
				C. FT.	C. FT.						
Teak—											
6– 7 feet ..	35	1·6	56	41	2,296	10·2	234	10	229	463	1,833
7– 8 ,, ..	49		78	63	4,914	10·0	491		491	982	3,932
8– 9 ,, ..	45		72	85	6,120	8·4	514		612	1,126	4,994
9–10 ,, ..	19		30	107	3,210	7·5	240		321	561	2,649
10–11 ,, ..	5		8	113	904	6·6	59		90	149	755
11–12 ,, ..	1		1	187	187	6·1	11		18	29	158
12–13 ,, ..	1		1	159	159	5·6	8		15	23	136
13–14 ,, ..	2		3	146	438	5·2	22		43	65	373
14–15 ,, ..	1		1	134	134	4·9	6		13	19	115
15–16 ,, ..	1		1	197	197	4·6	9		19	28	169
Total ..	159	..	251	..	18,559	..	1,594	..	1,851	3,445	15,114
Rosewood—											
6–7 feet ..	5	1·6	8	44	352	19·5	68	10	35	103	249
7–8 ,, ..	3		4	65	260	17·8	46		26	72	188
Total ..	8		12	109	612	..	114	..	61	175	437
Venteak—											
6– 7 feet ..	71	1·6	113	40	4,520	7·4	334	10	452	786	3,734
7– 8 ,, ..	47		75	55	4,125	6·6	272		412	684	3,441
8– 9 ,, ..	13		20	96	1,920	5 8	111		192	303	1,617
9–10 ,, ..	3		4	108	432	5·2	22		43	65	367
11–12 ,, ..	2		3	158	474	4·4	20		47	67	407
Total ..	136	..	215	..	11,471	..	759	..	1,146	1,905	9,566
Irul—											
6– 7 feet ..	62	1·6	99	37	3,663	10 2	373	10	366	739	2,924
7– 8 ,, ..	35		56	52	2,912	10·0	291		291	582	2,330
8– 9 ,, ..	11		17	82	1,394	8·4	117		139	256	1,138
9-10 ,, ..	1		1	101	101	7 5	7		10	17	84
12–13 ,, ..	1		1	115	115	5·6	6		11	17	98
Total ..	110	..	174	..	8,185	..	794	..	817	1,611	6,574
Pillamarudu—											
6– 7 feet ..	58	1·6	92	46	4,232	14·5	613	10	428	1,036	3,196
7– 8 ,, ..	64		102	68	6,936	12·9	894		693	1 587	5,349
8– 9 ,, ..	36		57	94	5,358	11·5	616		535	1,151	4,207
9–10 ,, ..	30		48	90	4,320	10·2	440		432	872	3,448
10–11 ,, ..	12		19	107	2,033	9·3	189		203	392	1,641
11–12 ,, ..	11		17	150	2,550	8·6	219		255	474	2,076
12–13 ,, ..	7		11	146	1,606	8·0	128		160	288	1,318
13–14 ,, ..	2		3	236	708	7·5	53		70	123	585
14–15 ,, ..	4		6	203	1,218	7·0	85		121	206	1,012
15–16 ,, ..	2		3	238	714	6·6	47		71	118	596
17–18 ,, ..	2		3	224	672	5·8	38		67	105	567
18–19 ,, ..	1		1	407	407	5·5	22		40	62	345
19–20 ,, ..	1		1	407	407	5·0	20		40	60	347
Total ..	230	..	363	..	31,161	..	3,364	..	3,110	6,474	24,687
Vengai—											
6–7 feet ..	2	1·6	3	28	84	14·5	12	10	8	20	64
7–8 ,, ..	1		1	30	30	12·9	3		3	6	24
Total ..	3	..	4	..	114	..	15	..	11	26	88
Karumarudu—											
6– 7 feet ..	20	1·6	32	48	1.536	24·0	368	10	153	521	1,015
7– 8 ,, ..	30		48	61	2,928	21 4	626		292	918	2,010
8– 9 ,, ..	31		49	82	4,018	19·2	771		401	1,172	2,846
9–10 ,, ..	22		35	104	3,640	17·1	622		364	986	2,654
10–11 ,, ..	17		27	133	3,591	15·2	545		359	904	2,687
11–12 ,, ..	5		8	179	1,432	14 3	204		143	347	1,085
12–13 ,, ..	6		9	187	1,683	13·4	225		168	393	1,290
13–14 ,, ..	4		6	244	1,464	12 5	183		146	329	1,135
14–15 ,, ..	3		4	217	868	11·7	101		86	187	681
15–16 ,, ..	2		3	250	750	11.1	83		75	158	592
Total ..	140	..	221	..	21,910	..	3,728	..	2,187	5,915	15,995

Calculations of volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXIX, area 396 acres, area of the sample plot, 234 acres —*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
				C. FT.	C. FT.						
Manjakadambai—											
6– 7 feet ..	7	1·6	11	39	429	19·5	83	10	42	125	304
7– 8 ,, ..	13		20	74	1,480	17·8	263		148	411	1,069
8– 9 ,, ..	8		12	73	876	16·0	140		87	227	649
9–10 ,, ..	6		9	129	1,161	14·2	164		116	280	881
10–11 ,, ..	2		3	120	360	12·9	46		36	82	278
11–12 ,, ..	3		4	155	620	12·0	74		62	136	484
12–13 ,, ..	2		3	180	540	11·1	59		54	113	427
13–14 ,, ..	1		1	168	168	10·3	17		16	33	135
14–15 ,, ..	3		4	200	800	9·7	77		80	157	643
15–16 ,, ..	2		3	344	1,032	9·2	94		103	197	835
16–17 ,, ..	2		3	312	936	8·5	79		93	172	764
Total ..	49	..	73	..	8,402	..	1,096	..	837	1,933	6,469
Vagai—											
6– 7 feet ..	9	1·6	14	45	630	..	..	..	..	..	..
7– 8 ,, ..	6		9	63	567	..	..	..	..	..	..
8– 9 ,, ..	1		1	89	89	..	..	..	..	..	..
10–11 ,, ..	1		1	112	112	..	..	..	..	..	..
Total ..	17	..	25	..	1,398	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	12	1·6	19	36	684	..	..	..	..	..	..
7– 8 ,, ..	7		11	31	341	..	..	..	..	..	..
8– 9 ,, ..	4		6	59	354	..	..	..	..	..	..
9–10 ,, ..	10		16	67	1,072	..	..	..	..	..	..
10–11 ,, ..	2		3	88	264	..	..	..	..	..	..
11–18 ,, ..	4		6	83	498	..	..	..	..	..	..
12–13 ,, ..	3		4	104	416	..	..	..	..	..	..
16–17 ,, ..	3		4	115	460	..	..	..	..	..	..
Total ..	45	..	69	..	4,089	..	..	..	..	..	..
Thadashi—											
6– 7 feet ..	23	1·6	36	61	2,196	..	..	..	..	..	..
7– 8 ,, ..	17		27	66	1,782	..	..	..	..	..	..
9–10 ,, ..	1		1	135	135	..	..	..	..	..	..
10–11 ,, ..	1		1	138	138	..	..	..	..	..	..
12–13 ,, ..	1		1	148	148	..	..	..	..	..	..
Total ..	43	..	66	..	4,399	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	13	1·6	20	67	1,340	..	..	..	..	..	..
7– 8 ,, ..	12		19	69	1,311	..	..	..	..	..	..
8– 9 ,, ..	6		9	94	846	..	..	..	..	..	..
9–10 ,, ..	4		6	134	804	..	..	..	..	..	..
12–13 ,, ..	1		1	234	234	..	..	..	..	..	..
14–15 ,, ..	1		1	275	275	..	..	..	..	..	..
Total ..	37	..	56	..	4,810	..	..	..	..	..	..

Old Compartment No. XXIX.

Names of species.	Total volume of 6 to 7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	1,833	13,281
Rosewood	249	188
Venteak	3,734	5,832
Irul	2,924	3,650
Pillamarudu	3,196	21,491
Karumaruthu	1,015	14,980
Vengai	64	24
Manjakadambai	304	6,165
Total ..	13,319	65,611
B. Species at present unsaleable—		
Vagai	630	768
Poovathi	684	3,405
Thadashi	2,196	2,203
Nirkadambai	1,340	3,470
Total ..	4,850	9,846

Total volumes of mature and saleable timber.

	C. FT.
Teak	13,281
Rosewood	188
Other superior species ..	52,142
Grand total ..	65,611

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXX, area 280 acres, area of the sample plot, 140 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
				C. FF.	C. FF.						C. FT.
Teak—											
6– 7 feet ..	33	2	66	78	5,148	10·2	525	10	514	1,039	4,109
7– 8 ,, ..	43		86	93	7,998	10·0	799		799	1,598	6,400
8– 9 ,, ..	22		44	112	4,928	8·4	413		492	905	4,023
9–10 ,, ..	22		44	119	5,236	7·5	392		523	915	4,321
10–11 ,, ..	5		10	113	1,130	6·6	74		113	187	943
11–12 ,, ..	6		12	171	2,052	6·1	125		205	330	1,722
12–13 ,, ..	3		6	98	588	5·6	32		58	90	498
13–14 ,, ..	1		2	281	562	5·2	29		56	85	477
14–15 ,, ..	1		2	287	574	4·9	28		57	85	489
15–16 ,, ..	3		6	287	1,722	4·6	79		172	251	1,471
16–17 ,, ..	1		2	294	588	4·3	25		58	83	505
17–18 ,, ..	1		2	294	588	4·1	24		58	82	506
Total ..	141	..	282	..	31,114	..	2,545	..	3,105	5,650	25,464
Rosewood—											
6– 7 feet ..	5	2	10	44	440	19·5	85	10	44	129	311
7– 8 ,, ..	2		4	101	404	17·8	71		40	111	293
8– 9 ,, ..	2		4	96	384	16·0	61		38	99	285
9–10 ,, ..	1		2	96	192	14·2	27		19	46	146
Total ..	10	..	20	..	1,420	..	244	..	141	385	1,035
Venteak—											
6– 7 feet ..	44	2	88	78	6,864	7·4	507	10	686	1,193	5,671
7– 8 ,, ..	37		74	80	5,920	6·6	390		592	982	4,938
8– 9 ,, ..	10		20	82	1,640	5·8	95		164	259	1,381
9–10 ,, ..	3		6	117	702	5·2	36		70	106	596
10–11 ,, ..	1		2	120	240	4·8	11		24	35	205
Total ..	95	..	190	..	15,366	..	1,039	..	1,536	2,575	12,791
Irul—											
6– 7 feet ..	22	2	44	38	1,672	10·2	170	10	167	337	1,335
7– 8 ,, ..	12		24	67	1,608	10·0	160		160	320	1,288
8– 9 ,, ..	1		2	75	150	8·4	12		15	27	123
9–10 ,, ..	1		2	115	230	7·5	17		23	40	190
Total ..	36	..	72	..	3,660	..	359	..	365	724	2,936
Pillamarudu—											
6– 7 feet ..	29	2	58	72	4,176	14·5	605	10	417	1,022	3,154
7– 8 ,, ..	20		40	80	3,200	12·9	412		320	732	2,468
8– 9 ,, ..	15		30	116	3,480	11·5	400		348	748	2,732
9–10 ,, ..	6		12	132	1,584	10·2	161		158	319	1,265
10–11 ,, ..	5		10	183	1,830	9·3	170		183	353	1,477
11–12 ,, ..	4		8	224	1,792	8·6	154		179	333	1,459
12–13 ,, ..	2		4	266	1,064	8·0	85		106	191	873
13–14 ,, ..	3		6	234	1,404	7·5	105		140	245	1,159
14–15 ,, ..	1		2	203	406	7·0	28		40	68	338
15–16 ,, ..	3		6	238	1,428	6·6	94		142	236	1,192
Total ..	88		176	..	20,364	..	2,214	..	2,033	4,247	16,117
Vengai—											
6– 7 feet ..	2	2	4	55	220	14·5	31	10	22	53	167
7– 8 ,, ..	4		8	76	608	12·9	78		60	138	470
8– 9 ,, ..	1		2	92	184	11·5	21		18	39	145
9–10 ,, ..	1		2	106	212	10·2	21		21	42	170
10–11 ,, ..	2		4	106	424	9·3	39		42	81	343
Total ..	10	..	20	..	1,648	..	190	..	163	353	1,295
Karumarudu—											
6– 7 feet ..	19	2	38	71	2,698	24·0	647	10	269	916	1,782
7– 8 ,, ..	18		36	91	3,276	21·4	701		327	1,028	2,248
8– 9 ,, ..	8		16	122	1,952	19·2	374		195	569	1,383
9–10 ,, ..	6		12	121	1,452	17·1	248		145	393	1,058
10–11 ,, ..	2		4	121	484	15·2	73		48	121	363
11–12 ,, ..	3		6	276	1,656	14·3	236		165	401	1,255
12–13 ,, ..	1		2	254	508	13·4	68		50	118	390
Total ..	57	..	114	..	12,026	..	2,347	..	1,199	3,546	8,480

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekad leased forest, Old Compartment No. XXX, area 280 acres, area of the sample plot, 140 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Total deductions in cubic feet.	Net value in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
				C. FT.	C. FT.					C. FT.	C. FT.
Manjakadambai—											
9–10 feet ..	1	2	2	108	216	14·2	30	10	21	51	165
11–12 ,, ..	1		2	197	394	12·0	47		39	86	308
12–13 ,, ..	1		2	197	394	11·1	43		39	82	312
Total ..	3	..	6	..	1,004	..	120	..	99	299	785
Vagai—											
6– 7 feet ..	3	2	6	45	270	..	..	..	..	..	..
7– 8 ,, ..	1		2	63	126	..	..	..	..	..	..
8– 9 ,, ..	2		4	89	356	..	..	..	..	..	..
10–11 ,, ..	1		2	90	180	..	..	..	..	..	..
Total ..	7	..	14	..	932	..	..	..	..	..	..
Nirkadambai—											
6–7 feet ..	1	2	2	67	134	..	..	..	..	..	..
7–8 ,, ..	2		4	69	276	..	..	..	..	..	..
Total ..	3	..	6	..	410	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	5	2	10	36	360	..	..	..	..	..	..
7– 8 ,, ..	2		4	31	124	..	..	..	..	..	..
8– 9 ,, ..	2		4	59	236	..	..	..	..	..	..
9–10 ,, ..	4		8	67	536	..	..	..	..	..	..
10–11 ,, ..	1		2	88	176	..	..	..	..	..	..
11–12 ,, ..	1		2	83	166	..	..	..	..	..	..
Total ..	15	..	30	..	1,598	..	..	..	..	..	..
Thadashi—											
6–7 feet ..	2	2	4	61	244	..	..	..	..	..	..
7–8 ,, ..	2		4	66	264	..	..	..	..	..	..
Total ..	4	.	8	..	508	..	..	..	..	..	..

Old Compartment No. XXX.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
A. Species saleable—	C. FT.	C. FT.
Teak	4,109	21,355
Rosewood	311	724
Venteak	5,671	7,120
Irul	1,335	1,601
Pillamarudu	3,154	12,963
Karumarudu	1,782	6,698
Vengai	167	1,128
Manjakadambai	..	785
Total ..	16,529	52,374
B. Species at present unsaleable—		
Vagai	270	662
Poovathi	360	1,238
Thadashi	244	264
Nirkadambai	134	276
Total ..	1,008	2,440

Total volumes of mature and saleable timber.

	C. FT.
Teak	21,355
Rosewood	724
Other superior species ..	30,295
Total ..	52,374

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXXI, area 323 acres,area of the sample plot, 162 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average trees in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
				C.FT.	C.FT.						
Teak—											
6- 7 feet ..	50	2	100	41	4,100	10·2	418	10	410	828	3,272
7- 8 ,, ..	37	2	74	63	4,662	10·0	466	10	466	932	3,730
8- 9 ,, ..	20	2	40	85	3,400	8·4	285	10	340	625	2,775
9-10 ,, ..	15	2	30	107	3,210	7·5	240	10	321	561	2,649
10-11 ,, ..	8	2	16	113	1,808	6·6	119	10	180	299	1,509
11-12 ,, ..	7	2	14	187	2,618	6·1	159	10	261	420	2,198
Total ..	137	..	274	..	19,798	..	1,687	..	1,978	3,665	16,133
Rosewood—											
6- 7 feet ..	10	2	20	44	880	19·5	171	10	88	259	621
7- 8 ,, ..	1	2	2	65	130	17·8	23	10	13	36	94
8- 9 ,, ..	1	2	2	100	200	16·0	32	10	20	52	148
9-10 ,, ..	1	2	2	100	200	14·2	28	10	20	48	152
Total ..	13	..	26	..	1,410	..	254	..	141	395	1,015
Venteak—											
6- 7 feet ..	53	2	106	40	4,240	7·4	313	10	424	737	3,503
7- 8 ,, ..	28	2	56	55	3,080	6·6	203	10	308	511	2,569
8- 9 ,, ..	10	2	20	96	1,920	5·8	111	10	192	303	1,617
9-10 ,, ..	7	2	14	108	1,512	5·2	78	10	151	229	1,283
10-11 ,, ..	2	2	4	135	540	4·8	25	10	54	79	461
Total ..	100	..	200	..	11,292	..	730	..	1,129	1,859	9,433
Vengai—											
6- 7 feet ..	5	2	10	28	280	14·5	40	10	28	68	212
7- 8 ,, ..	5	2	10	30	300	12·9	38	10	30	68	232
8- 9 ,, ..	2	2	4	50	200	11·5	23	10	20	43	157
9-10 ,, ..	1	2	2	82	164	10·2	16	10	16	32	132
13-14 ,, ..	1	2	2	100	200	7·5	15	10	20	35	165
15-16 ,, ..	1	2	2	100	200	6·6	13	10	20	33	167
Total ..	15	..	30	..	1,344	..	145	..	134	279	1,065
Manjakadambai—											
6- 7 feet ..	2	2	4	39	156	19·5	30	10	15	45	111
7- 8 ,, ..	3	2	6	74	444	17·8	79	10	44	123	321
8- 9 ,, ..	2	2	4	73	292	16·0	46	10	29	75	217
9-10 ,, ..	2	2	4	129	516	14·2	73	10	51	124	392
10-11 ,, ..	2	2	4	120	480	12·9	61	10	48	109	371
11-12 ,, ..	2	2	4	155	620	12·0	74	10	62	136	484
12-13 ,, ..	1	2	2	180	360	11·1	39	10	36	75	285
Total ..	14	..	28	..	2,868	..	402	..	285	687	2.181
Vagai—											
6- 7 feet ..	19	2	38	45	1,710	..	..	10	..	..	..
7- 8 ,, ..	18	2	36	63	2,268	..	..	10	..	..	..
8- 9 ,, ..	6	2	12	89	1,068	..	..	10	..	..	..
9-10 ,, ..	2	2	4	110	440	..	..	10	..	..	..
Total ..	45	..	90	..	5,486	..	..	..	..	..	..
Pillamarudu—											
6- 7 feet ..	41	2	82	46	3,772	14·5	546	10	377	923	2,849
7- 8 ,, ..	48	2	96	68	6,528	12·9	842	10	652	1,494	5,034
8- 9 ,, ..	26	2	52	94	4,888	11·5	562	10	488	1,050	3,838
9-10 ,, ..	18	2	36	90	3,240	10·2	330	10	324	654	2,586
10-11 ,, ..	14	2	28	107	2,996	9·3	278	10	299	577	2,419
11-12 ,, ..	9	2	18	150	2,700	8·6	232	10	270	502	2,198
12-13 ,, ..	4	2	8	146	1,168	8·0	93	10	116	209	959
13-14 ,, ..	4	2	8	236	1,888	7·5	141	10	188	329	1,559
14-15 ,, ..	4	2	8	203	1,624	7·0	113	10	162	275	1,349
15-16 ,, ..	2	2	4	238	952	6·6	62	10	95	157	795
19-20 ,, ..	1	2	2	407	814	5·0	40	10	81	121	693
Total ..	171	..	342	..	30,570	..	3,239	..	3,052	6,291	24,279

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest Old Compartment No. XXXI, area 323 acres, area of sample plot, 162 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Karumarudu—											
6– 7 feet ..	43	2	86	48	4,128	24	990	10	412	1,402	2,726
7– 8 ,, ..	38	2	76	61	4,636	21·4	992	10	463	1,455	3,181
8– 9 ,, ..	16	2	32	82	2,624	19·2	503	10	262	765	1,859
9–10 ,, ..	9	2	18	104	1,872	17·1	320	10	187	507	1,365
10–11 ,, ..	8	2	16	133	2,128	15·2	323	10	212	535	1,593
11–12 ,, ..	4	2	8	179	1,432	14·3	204	10	143	347	1,085
12–13 ,, ..	1	2	2	187	374	13·4	50	10	37	87	287
13–14 ,, ..	3	2	6	244	1,464	12·5	183	10	146	329	1,135
14–15 ,, ..	1	2	2	217	434	11·7	50	10	43	93	341
15–16 ,, ..	1	2	2	250	500	11·1	55	10	50	105	391
Total ..	124	..	248	..	19,592	..	3,670	..	1,955	5,625	13,967
Poovathi—											
6– 7 feet ..	7	2	14	36	504	..	..	..	..	..	..
7– 8 ,, ..	6	2	12	31	372	..	..	..	..	..	..
8– 9 ,, ..	4	2	8	59	472	..	..	..	..	..	..
9–10 ,, ..	2	2	4	67	268	..	..	..	..	..	..
10–11 ,, ..	1	2	2	88	176	..	..	..	..	..	..
11–12 ,, ..	1	2	2	83	166	..	..	..	..	..	..
12–13 ,, ..	1	2	2	104	208	..	..	..	..	..	..
14–15 ,, ..	1	2	2	115	230	..	..	..	..	..	..
Total ..	23	..	46	..	2,396	..	..	..	..	..	..
Thadashi—											
6– 7 feet ..	21	2	42	61	2,562	..	..	..	..	..	..
7– 8 ,, ..	8	2	16	66	1,056	..	..	..	..	..	..
8– 9 ,, ..	1	2	2	72	144	..	..	..	..	..	..
10–11 ,, ..	1	2	2	138	276	..	..	..	..	..	..
Total ..	31	..	62	..	4,038	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	5	2	10	67	670	..	..	..	..	..	..
7– 8 ,, ..	5	2	10	69	690	..	..	..	..	..	..
8– 9 ,, ..	2	2	4	94	376	..	..	..	..	..	..
10–11 ,, ..	2	2	4	176	704	..	..	..	..	..	..
11–12 ,, ..	1	2	2	226	452	..	..	..	..	..	..
Total ..	15	..	30	..	2,892	..	..	..	..	..	..

Old Compartment No. XXXI.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	3,272	12,861
Rosewood	621	394
Venteak	3,503	5,930
Pillamarudu	2,849	21,430
Karumarudu	2,726	11,241
Vengai	212	853
Manjakadambi	111	2,070
Total ..	13,294	54,779
B. Species at present unsaleable—		
Vagai	1,710	3,776
Poovathi	504	1,892
Thadshi	2,562	1,476
Nirkadambai	670	2,222
Total ..	5,446	9,366

Total volumes of mature and saleable timber.

	C. FT.
Teak	12,861
Rosewood	394
Other superior species ..	41,524
Grand total ..	54,779

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXXII, area 288 acres, area of the sample plot, 170 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
				C. FT.	C. FT.					C. FT.	C. FT.
Teak—											
6– 7 feet ..	47	1·6	75	41	3,075	10·2	313	10	307	620	2,455
7– 8 ,, ..	38		60	63	3,780	10·0	378		378	756	3,024
8– 9 ,, ..	17		27	85	2,295	8·4	192		229	421	1,874
9–10 ,, ..	9		14	107	1,498	7·5	112		149	261	1,237
10–11 ,, ..	3		4	113	452	6·6	29		45	74	378
11–12 ,, ..	3		4	187	748	6·1	45		74	119	629
12–13 ,, ..	1		1	159	159	5·6	8		15	23	136
14–15 ,, ..	1		1	134	134	4·9	6		13	19	115
Total ..	119	..	186	..	12,141	..	1,083	..	1,210	2,293	9,848
Rosewood—										c	
6–7 feet ..	6	1·6	9	44	396	19·5	77	10	39	116	280
7–8 ,, ..	1		1	65	65	17·8	11		6	17	48
8–9 ,, ..	2		3	100	300	16·0	48		30	78	222
Total ..	9	..	13	..	761	..	136	..	75	211	550
Venteak –											
6– 7 feet ..	18	1·6	28	40	1,120	7·1	82	..	112	194	926
7– 8 ,, ..	10		16	55	880	6·6	58		88	146	734
8– 9 ,, ..	2		3	96	288	5·8	16		28	44	244
Total ..	30	..	47	..	2,288	..	156	..	228	384	1,904
Vengai—											
6– 7 feet ..	2	1·6	3	28	84	14·5	12	10	8	20	64
7– 8 ,, ..	1		1	30	30	12·9	3		3	6	24
8– 9 ,, ..	3		4	50	200	11·5	23		20	43	157
Total ..	6	..	8	..	314	..	38	..	31	69	245
Pillamarudu—											
6– 7 feet ..	46	1·6	73	46	3,358	14·5	486	10	335	821	2,537
7– 8 ,, ..	36		57	68	3,875	12·9	500		387	887	2,989
8– 9 ,, ..	19		30	94	2,820	11·5	324		282	606	2,214
9–10 ,, ..	17		27	90	2,430	10·2	247		248	490	1,940
10–11 ,, ..	17		27	107	2,889	9·3	268		288	556	2,330
11–12 ,, ..	7		11	150	1,650	8·6	141		165	306	1,344
13–14 ,, ..	1		1	236	236	7·5	17		23	40	196
14–15 ,, ..	3		4	203	812	7·0	5		81	86	726
Total ..	146	..	230	..	18,071	..	1,988	..	1,804	3,792	14,276
Karumarudu—											
6– 7 feet ..	35	1·6	56	48	2,688	24·0	645	10	268	913	1,775
7– 8 ,, ..	39		62	61	3,782	21·4	809	..	378	1,187	2,595
8– 9 ,, ..	16		25	82	2,050	19·2	393	..	205	598	1,452
9–10 ,, ..	24		38	104	3,952	17·1	675	..	395	1,070	2,882
10–11 ,, ..	12		19	133	2,527	15·2	384	..	252	636	1,891
11–12 ,, ..	13		20	179	3,580	14·3	511	..	358	869	2,711
12–13 ,, ..	3		4	187	748	13·4	100	..	74	174	574
13–14 ,, ..	1		1	244	244	12·5	30	..	24	54	190
15–16 ,, ..	2		3	250	750	11·1	83	..	75	158	592
16–17 ,, ..	1		1	250	250	10·3	25	..	25	50	200
Total ..	146	..	229	..	20,571	..	3,655	..	2,054	5,709	14,862
Manjakadambai—											
6– 7 feet ..	1	1·6	1	39	39	19·5	7	10	3	10	29
7– 8 ,, ..	3		4	74	296	17·8	52	..	29	81	215
8– 9 ,, ..	1		1	73	73	16·0	11	..	7	18	55
9–10 ,, ..	1		1	129	129	14·2	18	..	12	30	99
10–11 ,, ..	1		1	120	120	12·9	15	..	12	27	93
12–13 ,, ..	1		1	180	180	11·1	19	..	18	37	143
Total ..	8	..	9	..	837	..	122	..	81	203	634
Vagai—											
6–7 feet ..	14	1·6	22	45	990	..	..	..	..	..	..
7–8 ,, ..	7		11	63	693	..	..	..	..	..	..
8–9 ,, ..	3		4	89	356	..	..	..	..	..	..
Total ..	24	..	37	..	2,039	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXXII, area 288 acres, area of the sample plot, 170 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Poovathi—											
6–7 feet ..	12	1·6	19	36	684	..	..	..	..	..	..
7–8 ,, ..	7		11	31	341	..	..	..	..	..	..
8–9 ,, ..	5		8	59	472	..	..	..	..	..	..
9–10 ,, ..	1		1	67	67	..	..	..	..	..	..
10–11 ,, ..	1		1	88	88	..	..	..	..	..	..
11–12 ,, ..	3		4	83	332	..	..	..	..	..	..
Total ..	29	..	44	..	1,984	..	..	..	..	..	..
Thadashi—											
6–7 feet ..	11	1·6	17	61	1,037	..	..	..	..	..	..
7–8 ,, ..	3		4	66	264	..	..	..	..	..	..
8–9 ,, ..	1		1	72	72	..	..	..	..	..	..
Total ..	15	..	22	..	1,373	..	..	..	..	..	..
Nirkadambai—											
6–7 feet ..	3	1·6	4	67	268	..	..	..	..	..	..
8–9 ,, ..	3		4	94	376	..	..	..	..	..	..
9–10 ,, ..	1		1	134	134	..	..	..	..	..	..
Total ..	7	..	9	..	778	..	..	..	..	..	..

Old Compartment No. XXXII.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.	Total volume of mature and saleable timber.	
	C.FT.	C.FT.		C.FT.
A. Saleable species—				
Teak	2,455	7,393	Teak	7,393
Rosewood	280	270	Rosewood	270
Venteak	926	978	Other superior species ..	26,593
Pillamarudu	2,537	11,742		
Karumarudu	1,775	13,087	Grand total ..	34,256
Vengai	64	181		
Manjakadambai	29	605		
Total ..	8,066	34,256		
B. Species at present unsaleable—				
Vagai	990	1,049		
Poovathi	684	1,300	with bark.	
Thadashi	1,037	336		
Nirkadambai	268	510		
Total ..	2,979	3,195		

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, Old Compartment No. XXXIII, area 525 acres, area of sample plot, 177 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	77	3	231	41	9,471	10·2	966	10	947	1,913	7,558
7– 8 ,, ..	83		249	63	15,687	10·0	1,568		1,568	3,136	12,551
8– 9 ,, ..	40		120	85	10,200	8·4	856		1,020	1,876	8,324
9–10 ,, ..	35		105	107	11,235	7·5	842		1,123	1,965	9,270
10–11 ,, ..	9		27	113	3,051	6·6	201		305	506	2,545
11–12 ,, ..	8		24	187	4,488	6·1	273		448	721	3,767
12–13 ,, ..	5		15	159	2,385	5·6	133		238	371	2,014
14–15 ,, ..	2		6	134	804	4·9	39		80	119	685
17–18 ,, ..	1		3	216	648	4·1	26		64	90	558
Total ..	260	..	780	..	57,969	..	4,904	..	5,793	10,697	47,272
Rosewood—											
6–7 feet ..	7	3	21	44	924	19·5	180	10	92	272	652
7–8 ,, ..	7		21	65	1,365	17·8	242		136	378	987
8–9 ,, ..	4		12	100	1,200	16·0	192		120	312	888
Total ..	18	..	54	..	3,489	..	614	..	348	962	2,527
Venteak—											
6–7 feet ..	21	3	63	40	2,520	7·4	186	10	252	438	2,082
7–8 ,, ..	9		27	55	1,485	6·6	98		148	246	1,239
8–9 ,, ..	1		3	96	288	5·8	16		28	44	244
Total ..	31	..	93	..	4,293	..	300	..	428	728	3,565
Pillamarudu—											
6– 7 feet ..	37	3	111	46	5,106	14·5	740	10	510	1,250	3,856
7– 8 ,, ..	34		102	68	6,936	12·9	894		693	1,587	5,349
8– 9 ,, ..	19		57	94	5,358	11·5	616		535	1,151	4,207
9–10 ,, ..	12		36	90	3,240	10·2	330		324	654	2,586
10–11 ,, ..	5		15	107	1,605	9·3	149		160	309	1,296
11–12 ,, ..	7		21	150	3,150	8·6	270		315	585	2,565
12–13 ,, ..	2		6	146	876	8·0	70		87	157	719
13–14 ,, ..	2		6	236	1,416	7·5	106		141	247	1,169
Total ..	118	..	354	..	27,687	..	3,175	..	2,765	5,940	21,747
Karumarudu—											
6– 7 feet ..	71	3	213	48	10,224	24·0	2,453	10	1,022	3,475	6,749
7– 8 ,, ..	47		141	61	8,601	21·4	1,840		860	2,700	5,901
8– 9 ,, ..	23		69	82	5,658	19·2	1,086		565	1,651	4,007
9–10 ,, ..	17		51	104	5,304	17·1	906		530	1,436	3,868
10–11 ,, ..	9		27	133	3,591	15·2	545		359	904	2,687
11–12 ,, ..	4		12	179	2,148	14·3	307		214	521	1,627
12–13 ,, ..	2		6	187	1,122	13·4	150		112	262	860
13–14 ,, ..	2		6	244	1,464	12·5	183		146	329	1,135
14–15 ,, ..	1		3	217	651	11 7	76		65	141	510
15–16 ,, ..	1		3	250	750	11·1	83		75	158	592
Total ..	177	..	531	..	39,513	..	7,629	..	3,948	11,577	27,936
Vengai—											
6– 7 feet ..	5	3	15	28	420	14·5	60	10	42	102	318
7– 8 ,, ..	9		27	30	810	12·9	104		81	185	625
8– 9 ,, ..	1		3	50	150	11·5	17		15	32	118
9–10 ,, ..	3		9	82	738	10·2	75		73	148	590
11–12 ,, ..	1		3	90	270	8·6	23		27	50	220
12–13 ,, ..	2		6	100	600	8·0	48		60	108	492
13–14 ,, ..	3		9	100	900	7·5	67		90	157	743
15–16 ,, ..	2		6	100	600	6·6	39		60	99	501
Total ..	26	..	78	..	4,488	..	433	..	448	881	3,607
Manjakadambai—											
6– 7 feet ..	3	3	9	39	351	19·5	68	10	35	103	248
7– 8 ,, ..	1		3	74	222	17·8	39		22	61	161
8– 9 ,, ..	2		6	73	438	16·0	70		43	113	325
9–10 ,, ..	3		9	129	1,161	14·2	164		116	280	881
10–11 ,, ..	2		6	120	720	12·9	92		72	164	556
Total ..	11	..	33	..	2,892	..	433	..	288	721	2,171

Calculations of the volume of marketable timber contained in standing trees in 1913, Tekadi leased forest, Old Compartment No. XXXIII, area 525 acres, area of sample plot, 177 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Thadashi—											
6–7 feet ..	1	3	3	61	183	..	..	..	..	..	..
7–8 ,, ..	6		18	66	1,188	..	..	..	..	..	..
8–9 ,, ..	1		3	72	216	..	..	..	..	..	..
Total ..	8	..	24	..	1,587	..	..	..	..	..	..
Poovathi—											
6–7 feet ..	5	3	15	36	540	..	..	..	..	..	..
7–8 ,, ..	9		27	31	837	..	..	..	..	..	..
8–9 ,, ..	5		15	59	885	..	..	..	..	..	..
9–10 ,, ..	1		3	67	201	..	..	..	..	..	..
10–11 ,, ..	1		3	88	264	..	..	..	..	..	..
11–12 ,, ..	1		3	83	249	..	..	..	..	..	..
15–16 ,, ..	1		3	115	345	..	..	..	..	..	..
Total ..	23	..	69	..	3,321	..	..	..	..	..	..
Vagai											
6–7 feet ..	12	3	36	45	1,620	..	..	..	..	..	..
7–8 ,, ..	9		27	63	1,701	..	..	..	..	..	..
9–10 ,, ..	1		3	110	330	..	..	..	..	..	..
Total ..	22	..	66	..	3,651	..	..	..	..	..	..
Nirkadambai—											
6-7 feet ..	1	3	3	67	201	..	..	..	..	..	..

Old Compartment No. XXXIII.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.	Total volumes of mature and saleable timber.	
	C. FT.	C. FT.		C. FT.
A. Saleable species—				
Teak	7,558	39,714		
Rosewood	652	1,875		
Venteak	2,082	1,483	Teak	39,714
Pillamarudu	3,856	17,891	Rosewood	1,875
Karumarudu	6,749	21,187	Other superior species ..	45,773
Vengai	318	3,289		
Manjakadambai	248	1,923	Total ..	87,362
Total ..	21,463	87,362		
B. Species at present unsaleable—				
Vagai	1,620	2,031		
Thadashi	183	1,404		
Poovathi	540	2,781	with bark.	
Nirkadambai	201	..		
Total ..	2,544	6,216		

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekkadi leased forest, Old Compartment, No. XXXIV, area 334 acres, area of the sample plot, 167 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6- 7 feet ..	54	2	108	41	4,428	10·2	451	10	442	893	3,535
7- 8 „ ..	56		112	63	7,056	10·0	705		705	1,410	5,646
8- 9 „ ..	14		28	85	2,380	8·4	199		238	437	1,943
9-10 „ ..	16		32	107	3,424	7·5	256		342	598	2,826
10-11 „ ..	13		26	113	2,938	6·6	193		293	486	2,452
11-12 „ ..	9		18	187	3,366	6·1	205		336	541	2,825
13-14 „ ..	3		6	146	876	5·2	45		87	132	744
14-15 „ ..	1		2	134	268	4·9	13		26	39	229
Total ..	166	..	332	..	24,736	..	2,067	..	2,469	4,536	20,200
Rosewood—											
6- 7 feet ..	3	2	6	44	264	19·5	51	10	26	77	187
7- 8 „ ..	6		12	65	780	17·8	138		78	216	564
8- 6 „ ..	1		2	100	200	16 0	32		20	52	148
Total ..	10	..	20	..	1,244	..	221	..	124	345	899
Venteak—											
6- 7 feet ..	6	2	12	40	480	7·4	35	10	48	83	397
7- 8 „ ..	2		4	55	220	6·6	14		22	36	184
8- 9 „ ..	1		2	96	192	5·8	11		19	30	162
Total ..	9	..	18	..	892	..	60	..	89	149	743
Vengai—											
6- 7 feet ..	4	2	8	28	224	14·5	32	10	22	54	170
7- 8 „ ..	1		2	30	60	12·9	7		6	13	47
11-12 „ ..	1		2	90	180	8·6	15		18	33	147
Total ..	6	..	12	..	464	..	54	..	46	100	364
Pillamarudu—											
6- 7 feet ..	24	2	48	46	2,208	14·5	320	10	220	540	1,668
7- 8 „ ..	22		44	68	2,992	12·9	385		299	684	2,308
8- 9 „ ..	13		26	94	2,444	11·5	281		244	525	1,919
9-10 „ ..	7		14	90	1,260	10·2	128		126	254	1,006
10-11 „ ..	3		6	107	642	9·3	59		64	123	519
11-12 „ ..	1		2	155	310	8·6	26		31	57	253
Total ..	70	..	140	..	9,856	..	1,199	..	984	2,183	7,673
Karumarudu—											
6- 7 feet ..	8	2	16	48	768	24·0	184	10	76	260	508
7- 8 „ ..	16		32	61	1,952	21·4	417		195	612	1,340
8- 9 „ ..	3		6	82	492	19·2	94		49	143	349
10-11 „ ..	3		6	133	798	15·2	121		79	200	598
11-12 „ ..	2		4	177	708	14·3	101		70	171	537
12-13 „ ..	1		2	187	374	13·4	50		37	87	287
Total ..	33	..	66	..	5,092	..	967	..	506	1,473	3,619
Manjakadamba—											
6- 7 feet ..	2	2	4	39	156	19·5	30	10	15	45	111
7- 8 „ ..	2		4	74	296	17·8	52		29	81	215
9-10 „ ..	1		2	129	258	14·2	36		25	61	197
15-16 „ ..	1		2	344	688	9·2	63		68	131	557
Total ..	6	..	12	..	1,398	..	181	..	137	318	1,080
Vagai—											
6- 7 feet ..	20	2	40	45	1,800	..	..	..	..	..	..
7- 8 „ ..	13		26	63	1,638	..	..	..	..	..	..
Total ..	33	..	66	..	3,438	..	..	..	..	..	..
Poovathi—											
6- 7 feet ..	4	2	8	36	288	..	..	..	..	..	..
7- 8 „ ..	2		4	31	124	..	..	..	..	..	..
Total ..	6	..	12	..	412	..	..	..	..	..	.

Calculations of the volume of marketable timber contained in standing trees in 1918, Tekadi leased forest, old compartment No. XXXIV—area 334 acres, area of the sample plot, 167 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Thadashi—											
6–7 feet ..	1	2	2	61	122	..	..	..	..	..	..
7–8 „ ..	1		2	66	132	..	..	..	..	..	..
Total ..	2	..	4	..	254	..	..	..	..	..	..
Nirkadambai—											
6–7 feet ..	2	2	4	67	268	..	..	..	..	..	..
10–11 „ ..	1		2	176	352	..	..	..	..	..	..
Total ..	3	..	6	..	620	..	..	..	..	..	..

Old compartment No. XXXIV.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.	Total volumes of mature and saleable timber.	
A. Saleable species—	C. FT.	C. FT.		C. FT.
Teak	3,535	16,765	Teak	16,765
Rosewood	187	712	Rosewood	712
Venteak	397	346	Other superior species ..	10,625
Pillamarudu	1,668	6,005		
Karumarudu	508	3,111		
Vengai	170	194	Grand total ..	28,102
Manjakadambai	111	969		
Total ..	6,576	28,102		
B. Species at present unsaleable—				
Vagai	1,800	1,638	} with bark.	
Poovathi	288	124		
Thadashi	122	132		
Nirkadambai	268	352		
Total ..	2,478	2,246		

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. A—area 36[illegible] acres, area of sample plot, 197 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total. On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
											C. FT.
Teak—											
6– 7 feet ..	10	1·8	18	46	828	10 2	84	10	82	166	662
7– 8 ,, ..	30		54	60	3.240	10·0	324		324	648	2,592
8– 9 ,, ..	11		19	92	1,748	8·4	146		174	320	1,428
9–10 ,, ..	8		14	103	1,442	7·5	108		144	252	1,190
10–11 ,, ..	2		3	136	408	6·6	26		40	66	342
11–12 ,, ..	7		12	142	1,704	6·1	103		170	273	1,431
12–13 ,, ..	1		1	132	132	5·6	7		13	20	112
13–14 ,, ..	5		9	284	2,556	5·2	132		255	387	2,169
14–15 ,, ..	2		3	300	900	4·9	44		90	134	766
15–16 ,, ..	16		28	339	9,492	4·6	436		949	1,385	8,107
18–19 ,, ..	1		1	400	400	3·9	15		40	55	345
20–21 ,, ..	1		1	400	400	3·5	14		40	54	346
Total ..	94	..	163	..	23,250	..	1,439	..	2,321	3,760	19,490
Irul—											
6-7 feet ..	10	1·8	18	37	666	10·2	67	10	66	133	533
7–8 ,, ..	8		14	48	672	10·0	67		67	134	538
8–9 ,, ..	1		1	64	64	8·4	5		6	11	53
Total ..	19	..	33	..	1,402	..	139	..	139	278	1,124
Venteak—											
6– 7 feet ..	35	1·8	63	50	3,150	7·4	233	10	315	548	2,602
7– 8 ,, ..	13		23	65	1,495	6·6	98		149	247	1,248
8– 9 ,, ..	5		9	110	990	5·8	57		99	156	834
9–10 ,, ..	3		5	111	555	5·2	28		55	83	472
10–11 ,, ..	1		1	140	140	4·8	6		14	20	120
Total ..	57	..	101	..	6,330	..	422	..	632	1,054	5,276
Rosewood—											
6– 7 feet ..	12	1·8	21	41	861	19 5	167	10	86	253	608
7– 8 ,, ..	14		25	73	1,825	17·8	324		182	506	1,319
8– 9 ,, ..	4		7	98	686	16 0	109		68	177	509
9–10 ,, ..	1		1	152	152	14 2	21		15	36	116
10–11 ,, ..	2		3	114	342	12·9	44		34	78	264
11–12 ,, ..	5		9	154	1,386	12·0	166		138	304	1,082
12–13 ,, ..	2		3	262	786	11·1	87		78	165	621
15–16 ,, ..	1		1	160	160	9·2	14		16	30	130
17–18 ,, ..	3		5	341	1,705	8 1	138		170	308	1,397
18–19 ,, ..	2		3	341	1,023	7 7	78		102	180	843
19–20 ,, ..	1		1	341	341	7 3	24		34	58	283
Total ..	47	..	79	..	9,467	..	1,172	..	923	2,095	7,172
Karumarudu—											
6– 7 feet ..	29	1·8	52	46	2,392	24·0	574	10	239	813	1,579
7– 8 ,, ..	54		97	69	6,693	21 4	1,432		669	2,101	4,592
8– 9 ,, ..	20		36	104	3,744	19·2	718		374	1,092	2,652
9–10 ,, ..	17		30	118	3,540	17 1	605		354	959	2,581
10–11 ,, ..	13		23	118	2,714	15·2	412		271	683	2,031
11–12 ,, ..	14		25	180	4,500	14·3	643		450	1,093	3,407
12–13 ,, ..	5		9	191	1,719	13·4	230		171	401	1,318
13–14 ,, ..	6		10	200	2,000	12·5	250		200	450	1,550
14–15 ,, ..	6		10	231	2,310	11·7	270		231	501	1,809
15–16 ,, ..	2		3	267	801	11·1	88		80	168	633
Total ..	166	..	295	..	30,413	.	5,222	..	3,039	8,261	22,152
Pillamarudu—											
6– 7 feet ..	54	1·8	97	39	3,783	14·5	548	10	378	926	2,857
7– 8 ,, ..	64		115	74	8,51[illegible]	12 9	1,097		851	1.948	6,562
8– 9 ,, ..	39		70	74	5,180	11·5	595		518	1,113	4,067
9–10 ,, ..	12		21	130	2,7[illegible]0	10·2	278		273	551	2,179
10–11 ,, ..	11		19	129	2,451	9 3	227		245	472	1,979
11–12 ,, ..	6		10	152	1,520	8·6	130		152	282	1,238
12–13 ,, ..	6		10	196	1,960	8·0	156		196	352	1,608
13–14 ,, ..	3		5	230	1,150	7·5	86		115	201	949
17–18 ,, ..	1		1	300	300	5·8	17		30	47	253
19–20 ,, ..	1		1	300	300	5·3	15		30	45	255
Total ..	197	..	349	..	27,884	..	3,149	..	2,788	5,937	21,947

Calculations of the volume of marketable timber contained in standing trees in 1917, Tekadi leased forest, old compartment No. A—area 352 acres, area of sample plot, 197 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Manjakadambai—											
9–10 feet ..	1	1·8	1	90	90	14·2	12	10	9	21	69
11–12 ,, ..	1		1	138	138	12·0	16		13	29	109
15–16 ,, ..	1		1	200	200	9·2	18		20	38	162
Total ..	3	..	3	..	428	..	46	..	42	88	340
Vengai—											
10–11 feet ..	1	1·8	1	100	100	9·3	9	..	10	19	81
Nirkadambai—											
6– 7 feet ..	9	1·8	16	45	720	..	..	..	..	..	..
7– 8 ,, ..	9		16	54	864	..	..	..	..	..	..
9–10 ,, ..	4		7	97	679	..	..	..	..	..	..
10–11 ,, ..	3		5	170	850	..	..	..	..	..	..
11–12 ,, ..	2		3	150	450	..	..	..	..	..	..
Total ..	27	..	47	..	3,563	..	..	..	..	..	..
Vagai—											
6– 7 feet ..	3	1·8	5	38	190	..	..	..	..	..	..
7– 8 ,,	4		7	77	539	..	..	..	..	..	..
8– 9 ,, ..	1		1	85	85	..	..	..	..	..	..
11–12 ,,	1		1	101	101	..	..	..	..	..	..
Total ..	9	..	14	..	915	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	7	1·5	12	27	324	..	..	..	..	..	..
7– 8 ,, ..	11		19	39	741	..	..	..	..	..	..
8– 9 ,, ..	8		14	44	616	..	..	..	..	..	..
9–10 ,, ..	8		14	61	854	..	..	..	..	..	..
10–11 ,, ..	3		5	64	320	..	..	..	..	..	..
11–12 ,, ..	2		3	86	258	..	..	..	..	..	..
12–13 ,, ..	2		3	93	279	..	..	..	..	..	
13–14 ,, ..	1		1	78	78	..	..	..	..	..	..
14–15 ,,	1		1	137	137	..	..	..	..	..	..
Total ..	43	..	72	..	3,607	..	..	..	..	..	..
Thadashi—											
6– 7 feet ..	8	1·8	14	26	364	..	..	..	..	..	..
7– 8 ,, ..	5		9	49	441	..	..	..	..	..	..
8– 9 ,, ..	2		3	37	111	..	..	..	..	..	..
9–10 ,, ..	1		1	102	102	..	..	..	..	..	..
Total ..	16		27	..	1,018	..	..	..	..	..	..

Old compartment No. A.

Names of species.	Volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over, mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	662	18,828
Rosewood	608	6,564
Venteak	2,602	2,674
Irul	533	591
Pillamarudu	2,857	19,090
Karumarudu	1,579	20,573
Manjakadambai	..	340
Vengai	..	81
Total ..	8,841	68,741
B. Species at present unsaleable—		
Vagai	190	725
Poovathi	324	3,283
Thadashi	364	654
Nirkadambai	726	2,843
Total ..	1,598	7,505

Total volumes of mature and saleable timber.

	C. FT.
Teak	18,828
Rosewood	6,564
Other superior species ..	43,349
Total ..	68,741

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, Block No. I—area 440 acres, area of the sample plot, 172 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	222	2·5	555	42	23,310	10·2	2,377	10	2,331	4,708	18,602
7– 8 ,, ..	193		482	62	29,884	10·0	2,988		2,988	5,976	23,908
8– 9 ,, ..	95		237	81	19,197	8·4	1,612		1,919	3,531	15,666
9–10 ,, ..	68		170	99	16,830	7·5	1,262		1,683	2,945	13,885
10–11 ,, ..	48		120	111	13,320	6·6	879		1,332	2,211	11,109
11–12 ,, ..	30		75	133	9,975	6·1	608		997	1,605	8,370
12–13 ,, ..	10		25	180	4,500	5·6	252		450	702	3,798
13–14 ,, ..	11		27	193	5,211	5 2	270		521	791	4,420
14–15 ,, ..	7		17	216	3,672	4·9	179		367	546	3,126
15–16 ,, ..	10		25	260	6,500	4·6	299		650	949	5,551
16–17 ,, ..	4		10	257	2,570	4·3	110		257	367	2,203
19–20 ,, ..	3		7	362	2,534	3·7	93		253	346	2,188
Total ..	701	..	1,750	..	1,37,503	..	10,929	..	13,748	24,677	1,12,826
Rosewood—											
6– 7 feet ..	7	2·5	17	50	850	19·5	165	10	85	250	600
7– 8 ,, ..	10		25	48	1,200	17·8	213		120	333	867
8– 9 ,, ..	5		12	76	912	16·0	145		91	236	676
10–11 ,, ..	5		12	112	1,344	12·9	173		134	307	1,037
11–12 ,, ..	2		5	122	610	12·0	73		61	134	476
14–15 ,, ..	1		2	175	350	9·7	33		35	68	282
Total ..	30	..	73	..	5,266	..	802	..	526	1,328	3,938
Vengai—											
6– 7 feet ..	5	2·5	12	32	384	14·5	55	..	38	93	291
7– 8 ,, ..	4		10	47	470	12·9	52	..	47	99	371
Total ..	9	..	22	..	854	..	107	..	85	192	662
Venteak—											
6– 7 feet ..	65	2·5	162	41	6,642	7·4	491	10	664	1,155	5,487
7– 8 ,, ..	59		147	60	8,820	6·6	582		882	1,464	7,356
8– 9 ,, ..	33		82	74	6.068	5·8	351		606	957	5,111
9–10 ,, ..	21		52	89	4,628	5·2	240		462	702	3,926
10–11 ,, ..	4		10	114	1,140	4·8	54		114	168	972
11–12 ,, ..	6		15	120	1,800	4·4	79		180	259	1,541
13–14 ,, ..	1		2	135	270	3·8	10		27	37	233
Total ..	189	..	470	..	29,368	..	1,807	..	2,935	4,742	24,626
Pillamarudu—											
6– 7 feet ..	20	2·5	50	37	1,850	14·5	268	10	185	453	1,397
7– 8 ,, ..	12		30	58	1,740	12·9	224		174	398	1,342
8– 9 ,, ..	11		27	64	1,728	11·5	198		172	370	1,358
9–10 ,, ..	7		17	101	1,717	10·2	175		171	346	1,371
10–11 ,, ..	1		2	91	182	9·3	16		18	34	148
11–12 ,, ..	2		5	142	710	8·6	61		71	132	578
12–13 ,, ..	1		2	136	272	8·0	21		27	48	224
13–14 ,, ..	2		5	154	770	7·5	57		77	134	636
15–16 ,, ..	1		2	339	678	6·6	44		67	111	567
Total ..	57	..	140	..	9,647	..	1,064	..	962	2,026	7,621
Vagai—											
6– 7 feet ..	32	2·5	70	37	2,590	..	..	..	..	..	..
7– 8 ,, ..	18		45	56	2,520	..	..	..	..	..	..
8– 9 ,, ..	12		30	88	2,640	..	..	..	..	..	..
9–10 ,, ..	4		10	88	880	..	..	..	..	..	..
10–11 ,, ..	2		5	88	440	..	..	..	..	..	..
Total ..	68	..	160	..	9,070	..	..	..	..	..	..
Karumarudu—											
6– 7 feet ..	33	2·5	82	48	3,936	24·0	944	10	393	1,337	2,599
7– 8 ,, ..	29		72	62	4,464	21·4	955		446	1,401	3,063
8– 9 ,, ..	9		22	82	1,804	19·2	346		180	526	1,278
9–10 ,, ..	9		22	98	2,156	17·1	368		215	583	1,573
10–11 ,, ..	5		12	124	1,488	15·2	226		148	374	1,114
11–12 ,, ..	7		17	130	2,210	14·3	316		221	537	1,673
12–13 ,, ..	4		10	138	1,380	13·4	184		138	322	1,058
13–14 ,, ..	2		5	212	1,060	12·5	132		106	238	822
14–15 ,, ..	3		7	337	2,359	11·7	276		235	511	1,848
15–16 ,, ..	2		5	337	1,685	11·1	187		168	355	1,330
Total ..	103	..	254	..	22,542	..	3,934	..	2,250	6,184	16,358

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. I—area 440 acres, area of the sample plot, 172 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Manjakadambai—											
6- 7 feet ..	8	2·5	20	32	640	19·5	124	10	64	188	452
7- 8 ,, ..	5		12	50	600	17·8	106		60	166	434
8- 9 ,, ..	2		5	73	365	16	58		36	94	271
9-10 ,, ..	2		5	77	385	14·2	54		38	92	293
10-11 ,, ..	4		10	165	1,650	12·9	212		165	377	1,273
11-12 ,, ..	2		5	145	725	12	87		72	159	566
12-13 ,, ..	1		2	205	1,025	11·1	112		102	214	811
13-14 ,, ..	1		2	170	340	10·3	35		34	69	271
14-15 ,, ..	1		2	220	440	9·7	42		44	86	354
15-16 ,, ..	1		2	220	440	9·2	40		44	84	356
17-18 ,, ..	1		2	348	696	8·1	56		69	125	571
Total ..	28	..	67	..	7,306	..	926	..	728	1,654	5,652
Poovathi—											
6- 7 feet ..	4	2·5	10	27	270	..	..	..	..	..	..
7- 8 ,, ..	2		5	38	190	..	..	..	..	..	..
8- 9 ,, ..	2		5	47	235	..	..	..	..	..	..
9-10 ,, ..	1		2	52	104	..	..	..	..	..	..
10-11 ,, ..	1		2	68	136	..	..	..	..	..	..
12-13 ,, ..	2		5	86	430	..	..	..	..	..	..
13-14 ,, ..	1		2	122	244	..	..	..	..	..	..
14-15 ,, ..	1		2	122	244	..	..	..	..	..	..
Total ..	..	..	33	..	1,853	..	..	..	..	..	..
Thadashi—											
6- 7 feet ..	35	2·5	87	29	2,523	..	..	..	..	..	..
7- 8 ,, ..	16		40	39	1,560	..	..	..	..	..	..
8- 9 ,, ..	3		7	49	343	..	..	..	..	..	..
Total ..	..	..	134	..	4,426	..	..	..	..	..	..
Nirkadambai—											
6- 7 feet ..	9	2·5	22	36	792	..	..	..	..	..	..
7- 8 ,, ..	7		17	56	952	..	..	..	..	..	..
8- 9 ,, ..	6		15	80	1,200	..	..	..	..	..	..
10-11 ,, ..	2		5	104	520	..	..	..	..	..	..
11-12 ,, ..	2		5	113	565	..	..	..	..	..	..
15-16 ,, ..	1		2	151	302	..	..	..	..	..	..
Total ..	27	..	66	..	4,331	..	..	..	..	..	..

Block No. I, Mount Stuart.

Names of species.	Total volume of 6-7 feet girth class trees.	Total volume of 7-8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	18,602	94,224
Rosewood	600	3,338
Venteak	5,487	19,139
Pillamarudu	1,397	6,224
Karumarudu	2,599	13,759
Vengai	291	371
Manjakadambai	452	5,200
Total ..	29,428	1,42,255
B. Species at present unsaleable—		
Vagai	2,590	6,480
Poovathi	270	1,583
Thadashi	2,523	1,903
Nirkadambai	792	3,539
Total ..	6,175	13,505

Total volumes of mature and saleable timber.

	C. FT.
Teak	94,224
Rosewood	3,338
Other superior species.	44,693
Total ..	1,42,255

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. II—area 828 acres, area of the sample plot 276 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	128	3	384	42	16,128	10·2	1,645	10	1,612	3,257	12,871
7– 8 ,, ..	160		480	62	29,760	10	2,976		2,976	5,952	23,808
8– 9 ,, ..	57		171	81	13,851	8·4	1,163		1,385	2,548	11,303
9–10 ,,	34		102	99	10,098	7·5	757		1,009	1,766	8,332
10–11 ,, ..	23		69	111	7,659	6·6	505		765	1,270	6,389
11–12 ,, ..	22		66	133	8,778	6·1	535		877	1,412	7,366
12–13 ,, ..	3		9	180	1,620	5·6	90		162	252	1,368
14–15 ,, ..	3		9	216	1,944	4·9	95		194	289	1,655
15–16 ,, ..	2		6	260	1,560	4·6	71		156	227	1,333
18–19 ,, ..	2		6	300	1,800	3·9	70		180	250	1,550
Total ..	434	..	1,302	..	93,198	..	7,907	..	9,316	17,223	75,975
Rosewood—											
6– 7 feet ..	6	3	18	50	900	19·5	175	10	90	265	635
7– 8 ,, ..	10		30	48	1,340	17·8	238		134	372	968
8– 9 ,, ..	3		9	76	684	16	109		68	177	507
9–10 ,, ..	6		18	67	1,206	14·2	171		120	291	915
10–11 ,, ..	2		6	112	672	12·9	86		67	153	519
11–12 ,, ..	2		6	122	732	12	87		73	160	572
12–13 ,, ..	2		6	151	906	11·1	100		90	190	716
13-14 ,, ..	1		3	175	525	10·3	54		52	106	419
14–15 ,, ..	1		3	175	525	9·7	50		52	102	423
Total ..	33	..	99	..	7,490	..	1,070	..	746	1,816	5,674
Irul—											
6– 7 feet ..	6	3	18	61	1,098	10·2	109	10	109	220	878
7– 8 ,, ..	4		12	80	960	10	96		96	192	768
8– 9 ,, ..	1		3	107	321	8·4	26		32	58	263
Total ..	11	..	33	..	2,379	..	231	..	237	470	1,909
Venteak—											
6– 7 feet ..	49	3	147	41	6,027	7 4	445	10	662	1,047	4,980
7– 8 ,, ..	24		72	60	4,320	6·6	285		432	717	3,603
8– 9 ,, ..	13		39	74	2,886	5·8	167		288	455	2,431
9–10 ,, ..	4		12	89	1,068	5·2	55		106	161	907
10–11 ,, ..	4		12	114	1,368	4·8	65		136	201	1,167
11–12 ,, ..	3		9	120	1,080	4·4	47		108	155	925
Total ..	97	..	291	..	16,749	..	1,064	..	1,672	2,736	14,013
Pillamarudu—											
6– 7 feet ..	82	3	246	37	9,102	14·5	1,319	..	910	2,229	6,873
7– 8 ,, ..	72		216	58	12,528	12 9	1,616	..	1,252	2,868	9,660
8– 9 ,, ..	33		99	64	6,316	11·5	726	..	631	1,357	4,959
9–10 ,, ..	21		63	101	6,363	10·2	649	..	636	1,285	5,078
10–11 ,, ..	24		72	91	6,552	9·3	609	..	655	1,264	5,288
11–12 ,, ..	8		24	142	3,408	8·6	293	..	340	633	2,775
12–13 ,, ..	3		9	136	1,224	8	97	..	122	219	1,005
13–14 ,, ..	1		3	154	462	7·5	34	..	46	80	382
14–15 ,, ..	2		6	154	924	7	64	..	92	156	768
15–16 ,, ..	2		6	339	2,034	6 6	134	..	203	337	1,697
16–17 ,, ..	1		3	339	1,017	6·1	62	..	101	163	854
Total ..	249	..	747	..	49,930	..	5,603	..	4,988	10,591	39,339
Thadashi—											
6– 7 feet ..	40	3	120	29	3,480	..	..	..	..	..	..
7– 8 ,, ..	9		27	39	1,053	..	..	..	..	..	..
8– 9 ,, ..	1		3	49	147	..	..	..	..	..	..
Total ..	50	..	150	..	4,680	..	..	..	..	..	..
Karumarudu—											
6– 7 feet ..	104	3	312	48	14,976	24	3,594	10	1,497	5,091	9,885
7– 8 ,, ..	112		336	62	20,832	21·4	4,458		2,083	6,541	14,291
8– 9 ,, ..	50		150	82	12,300	19·2	2,361		1,230	3,591	8,709
9–10 ,, ..	34		102	98	9,996	17·1	1,709		999	2,708	7,288
10–11 ,, ..	25		75	124	9,300	15·2	1,413		930	2,343	6,957
11–12 ,, ..	16		48	130	6,240	14·3	892		624	1,516	4,724
12–13 ,, ..	4		12	138	1,656	13·4	221		165	386	1,270
13–14 ,, ..	6		18	212	3,816	12·5	477		381	858	2,958
15–16 ,, ..	2		6	337	2,022	11·1	224		202	426	1,596
Total ..	353	..	1,059	..	81,138	..	15,349	..	8,111	23,460	57,678

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. II—area 828 acres, area of the sample plot, 276 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vengai—											
6– 7 feet ..	15		45	32	1,440	14·5	208		144	352	1,088
7– 8 ,, ..	8		24	47	1,128	12·9	145		112	257	871
8– 9 ,, ..	13		39	55	2,145	11·5	246		214	460	1,685
9–10 ,, ..	5		15	73	1,095	10·2	111		109	220	875
10–11 ,, ..	4		12	93	1,116	9·3	103		111	214	902
11–12 ,, ..	8	3	24	94	2,256	8·6	194	10	225	419	1,837
12–13 ,, ..	7		21	106	2,226	8	178		222	400	1,826
13–14 ,, ..	3		9	120	1,080	7·5	81		108	189	891
15–16 ,, ..	1		3	139	417	6·6	27		41	68	349
16–17 ,, ..	1		3	150	450	6·1	27		45	72	378
18–19 ,, ..	1		3	150	450	5·5	24		45	69	381
Total ..	66	..	198	..	13,803	..	1,344	..	1,376	2,720	11,083
Manjakadambai—											
6– 7 eet ..	3		9	32	288	19·5	56		28	84	204
7– 8 ,, ..	4		12	50	600	17·8	106		60	166	434
9–10 ,, ..	2		6	77	462	14·2	65		46	111	351
10–11 ,, ..	3	3	9	165	1,485	12·9	191	10	148	339	1,146
11–12 ,, ..	2		6	145	870	12	104		87	191	679
13–14 ,, ..	1		3	170	510	10·3	52		51	103	407
18–19 ,, ..	1		3	348	1,044	7·7	80		104	184	860
Total ..	16	..	48	..	5,259	..	654	..	524	1,178	4,081
Vagai—											
6– 7 feet ..	30		90	37	3,330	..	..	..	..	..	..
7– 8 ,, ..	20		60	56	3,360	..	..	..	..	..	..
8– 9 ,, ..	4		12	88	1,056	..	..	..	..	..	..
9–10 ,, ..	1	3	3	88	264	..	..	..	..	..	..
10–11 ,, ..	1		3	88	264	..	..	..	..	..	..
11–12 ,, ..	1		3	95	285	..	..	..	..	..	..
14–15 ,, ..	1		3	128	384	..	..	..	..	..	..
Total ..	58	..	174	..	8,943	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	12		36	36	1,296	..	..	..	..	..	..
7– 8 ,, ..	6	3	18	56	1,008	..	..	..	..	..	..
8– 9 ,, ..	1		3	80	240	..	..	..	..	..	..
9–10 ,, ..	1		3	132	396	..	..	..	..	..	..
Total ..	20	..	60	..	2,940	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	4		12	27	324	..	..	..	..	..	..
7– 8 ,, ..	8		24	38	912	..	..	..	..	..	..
8– 9 ,, ..	2		6	47	282	..	..	..	..	..	..
9–10 ,, ..	1	3	3	52	156	..	..	..	..	..	..
10–11 ,, ..	1		3	68	204	..	..	..	..	..	..
12–13 ,, ..	1		3	86	258	..	..	..	..	..	..
13–14 ,, ..	2		6	122	732	..	..	..	..	..	..
16–17 ,, ..	1		3	182	546	..	..	..	..	..	..
Total ..	20	..	60	..	3,414	..	..	..	..	..	..

Block No. II, Mount Stuart.

Names of species.	Total volume of 6–7 feet girth class trees.	Total volumes of 7-8 feet girth class trees and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	12,871	63,104
Rosewood	635	5,039
Venteak	4,980	9,033
Irul	878	1,031
Pillamarudu	6,873	32,466
Karumarudu	9,885	47,793
Vengai	1,088	9,995
Manjakadambai	204	2,877
Total ..	37,414	1,71,338
B. Species at present unsaleable—		
Vagai	3,330	5,613
Poovathi	324	3,090
Thadashi	3.480	1,200 with bark.
Nirkadambai	1,296	1,644
Total ..	8,430	11,547

Total volumes of mature and saleable timber.

	C. FT.
Teak	63,104
Rosewood	5,039
Other superior species..	1,03,195
Total ..	1,71,338

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. III, area 382 acres, area of sample plot, 113 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	67	3·3	221	33	2,431	10·2	247	10	243	490	1,941
7– 8 ,, ..	73		240	52	12,480	10	1,248		1,248	2,496	9,984
8– 9 ,, ..	19		62	54	3,348	8·4	281		334	615	2,733
9–10 ,, ..	14		46	83	3,818	7 5	286		381	667	3,161
10–11 ,, ..	3		9	60	540	6·6	35		54	89	451
11–12 ,, ..	3		9	101	909	6·1	55		90	145	764
12–13 ,, ..	3		9	137	1,233	5·6	69		123	192	1,041
14–15 ,, ..	1		3	149	447	4·9	21		44	65	382
15–16 ,, ..	1		3	181	543	4 6	24		54	78	465
16–17 ,, ..	1		3	181	543	4·3	23		54	77	466
17–18 ,, ..	1		3	181	543	4·1	22		54	76	467
Total ..	186	..	588	..	26,835	..	2,311	..	2,679	4,990	21,845
Rosewood—											
6– 7 feet ..	8	3·3	26	42	1,092	19·5	212	..	109	321	771
7– 8 ,, ..	4		13	49	637	17·8	113	..	63	176	461
8– 9 ,, ..	1		3	82	246	16	39	..	24	63	183
10–11 ,, ..	1		3	94	282	12·9	36	..	28	64	218
11–12 ,, ..	1		3	122	366	12	43	..	36	79	287
13–14 ,, ..	1		3	175	525	10·3	54	..	52	106	419
Total ..	16	..	51	..	3,148	..	497	..	312	809	2,339
Venteak—											
6– 7 feet	23	3·3	75	40	3,000	7·4	222	..	300	522	2,478
7– 8 ,, ...	8		26	43	1,118	6·6	73	..	111	184	934
8– 9 ,, ...	4		13	61	793	5·8	45	..	79	124	669
9–10 ,, ...	2		6	92	552	5·2	28	..	55	83	469
Total ..	37		120	..	5,463	..	368	..	545	913	4,550
Pillamarudu—											
6– 7 feet ..	26	3·3	85	39	3,315	14·5	480	10	331	811	2,504
7– 8 ,, ..	35		115	47	5,405	12·9	697		540	1,237	4,168
8– 9 ,, ..	9		29	59	1,711	11·5	196		171	367	1,344
9–10 ,, ..	5		16	96	1,536	10·2	156		153	309	1,227
10–11 ,, ..	1		3	122	366	9·3	34		36	70	296
13–14 ,, ..	1		3	144	432	7·5	32		43	75	357
Total ..	77	..	251	..	12,765	..	1,595	..	1,274	2,869	9,896
Karnmarudu—											
6– 7 feet ..	31	3·3	102	36	3,672	24	881	..	367	1,248	2,424
7– 8 ,, ..	50		165	57	9,405	21·4	2,012	..	940	2,952	6,453
8– 9 ,, ..	26		85	84	7,140	19·2	1 370	..	714	2,084	5,056
9–10 ,, ..	12		39	91	3,549	17·1	606	..	354	960	2,589
10–11 ,, ..	5		16	95	1,520	15·2	231	..	152	383	1,137
11–12 ,, ..	6		19	146	2,774	14·3	396	..	277	673	2,101
12–13 ,, ..	1		3	166	498	13·4	66	..	49	115	383
13–14 ,, ..	3		9	200	1,800	12·5	225	..	180	405	1,395
15–16 ,, ..	1		3	250	750	11·1	78	..	75	153	597
Total ..	135	..	441	..	31,108	..	5,865	..	3,108	8,973	22,135
Manjakadambai—											
6– 7 feet ..	3	3·3	9	32	288	19·5	56	..	28	84	204
7– 8 ,, ..	2		6	32	192	17·8	34	..	19	53	139
8– 9 ,, ..	1		3	32	96	16	15	..	9	24	72
9–10 ,, ..	2		6	77	462	14·2	65	..	46	111	351
10–11 ,, ..	1		3	81	243	12·9	31	..	24	55	188
12–13 ,, ..	1		3	205	615	11·1	68	..	61	129	486
Total ..	10	..	30	..	1,896	..	269	..	187	456	1,440
Vengai—											
6– 7 feet ..	12	3·3	39	24	936	14.5	135	10	93	228	708
7– 8 ,, ..	17		56	35	1,960	12·9	252		196	448	1,512
8– 9 ,, ..	4		13	40	520	11·5	59		52	111	409
9–10 ,, ..	8		16	78	1,248	10·2	127		124	251	997
10–11 ,, ..	4		13	88	1,148	9·3	106		114	220	928
11–12 ,, ..	2		6	100	600	8·6	52		60	112	488
12–13 ,, ..	1		3	138	414	8	33		41	74	340
14–15 ,, ..	1		3	200	600	7	42		60	102	498
15–16 ,, ..	2		6	200	1,200	6·6	79		120	199	1,001
Total ..	48	..	154	..	8,626	..	885	..	860	1,745	6,881

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. III, area 382 acres, area of sample plot, 113 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vagai—											
6– 7 feet	4	3·3	13	31	403	..	..	..	..	..	..
7– 8 ,, ...	5		16	49	784	..	..	..	..	..	..
9–10 ,, ...	1		3	88	264	..	..	..	..	..	..
Total ..	10	..	32	..	1,451	..	..	..	..	..	..
Poovathi—											
6– 7 feet ..	1	3·3	3	29	87	..	..	..	..	..	..
8– 9 ,, ..	1		3	32	96	..	..	..	..	..	..
9–10 ,, ..	2		6	38	228	..	..	..	..	..	..
11–12 ,, ..	1		3	101	303	..	..	..	..	..	..
12–13 ,, ..	1		3	86	198	..	..	..	..	..	..
Total ..	6	..	18	..	912	..	..	..	..	..	..
Thadashi—											
6– 7 feet	1	3·3	3	28	84	..	..	..	..	..	..
7– 8 ,, ...	1		3	32	96	..	..	..	..	..	..
9–10 ,, ...	1		3	49	147	..	..	..	..	..	..
Total ..	3	..	9	..	327	..	..	..	..	..	..
Nirkadambai—											
7– 8 feet ..	2	3·3	6	37	222	..	..	..	..	..	..
8– 9 ,, ..	1		3	49	147	..	..	..	..	..	..
9–10 ,, ..	1		3	132	396	..	..	..	..	..	..
10–11 ,, ..	1		3	104	312	..	..	..	..	..	..
18–19 ,, ..	1		3	150	450	..	..	..	..	..	..
Total ..	6	..	18	..	1,527	..	..	..	..	..	..

Block No. III, Mount Stuart.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	1,941	19,904
Rosewood	771	1,568
Venteak	2,478	2,072
Pillamarudu	2,504	7,392
Karumarudu	2,424	19,711
Vengai	708	6,173
Manjakadambai	204	1,236
Total ..	11,030	58,056
B. Species at present unsaleable—		
Vagai	403	948
Poovathi	87	825
Thadashi	84	243
Nirkadambai	222	1,305
Total ..	796	3,321

Total volumes of mature and saleable timber.

	C. FT.
Teak	19,904
Rosewood	1,568
Other superior species	36,584
Total ..	58,056

} with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. IV, area 330 acres, area of the sample plot, 162 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6- 7 feet ..	12	2	24	33	792	10·2	80	10	79	159	633
7- 8 ,, ..	13		26	52	1,352	10	135		135	270	1,082
8- 9 ,, ..	5		10	54	540	8·4	45		54	99	441
9-10 ,, ..	2		4	83	332	7·5	24		33	57	275
10-11 ,, ..	3		6	60	360	6·6	23		36	59	301
11-12 ,, ..	5		10	101	1,010	6·1	61		101	162	848
12-13 ,, ..	1		2	137	274	5·6	15		27	42	232
Total ..	41	..	82	..	4,460	..	383	..	465	848	3,812
Rosewood—											
6- 7 feet ..	12	2	24	42	1,008	19·5	196	10	100	296	712
7- 8 ,, ..	7		14	49	686	17·8	122		68	190	496
9-10 ,, ..	4		8	88	704	14·2	99		70	169	535
10-11 ,, ..	2		4	94	376	12·9	48		37	85	291
11-12 ,, ..	1		2	122	244	12·	29		24	53	211
12-13 ,, ..	1		2	278	556	11·1	61		55	116	440
17-18 ,, ..	1		2	278	556	8·1	45		55	100	456
Total ..	28	..	56	..	4,130	..	600	..	409	1,009	3,141
Venteak—											
6- 7 feet ..	25	2	50	40	2,000	7·4	148	10	200	348	1,652
7- 8 ,, ..	25		50	43	2,150	6·6	141		215	356	1,794
8- 9 ,, ..	12		24	61	1,464	5·8	84		146	230	1,234
9-10 ,, ..	3		6	92	552	5·2	28		55	83	469
10-11 ,, ..	4		8	66	528	4·8	25		52	77	451
11-12 ,, ..	1		2	66	132	4·4	58		13	71	61
15-16 ,, ..	1		2	95	190	3·4	64		19	83	107
18-19 ,, ..	1		2	102	204	2·4	48		20	68	136
Total ..	72	..	144	..	7,220	..	596	..	720	1,316	5,904
Pillamarudu—											
6- 7 feet ..	39	2	78	39	3,042	14·5	441	10	304	745	2,297
7- 8 ,, ..	32		64	47	3,008	12·9	388		300	688	2,320
8- 9 ,, ..	22		44	59	2,596	11·5	298		259	557	2,039
9-10 ,, ..	23		46	96	4,416	10·2	450		441	891	3,525
10-11 ,, ..	5		10	122	1,220	9·3	113		122	235	985
11-12 ,, ..	8		16	104	1,664	8·6	143		166	309	1,355
12-13 ,, ..	3		8	111	666	8	52		66	118	548
13-14 ,, ..	4		2	144	1,152	7·5	86		115	201	951
14-15 ,, ..	1			144	288	7	20		28	48	240
15-16 ,, ..	3		6	206	1,236	6·6	81		123	204	1,032
Total ..	140	..	280	..	19,288	..	2,072	..	1,924	3,996	15,292
Karumarudu—											
6- 7 feet ..	10	2	20	36	720	24	172	10	72	244	476
7- 8 ,, ..	5		10	57	570	21·4	121		57	178	392
8- 9 ,, ..	6		12	84	1,008	19·2	193		100	293	715
9-10 ,, ..	3		6	91	546	17·1	95		54	149	397
10-11 ,, ..	3		6	95	570	15·2	86		57	143	427
Total ..	27	..	54	..	3,414	..	667	..	340	1,007	2,407
Vengai—											
6- 7 feet ..	4	2	8	24	192	14·5	27	10	19	46	146
7- 8 ,, ..	2		4	35	140	12·9	18		14	32	108
8- 9 ,, ..	2		4	40	160	11·5	18		16	34	126
9-10 ,, ..	3		6	78	468	10·2	47		46	93	375
10-11 ,, ..	1		2	88	176	9·3	16		17	33	143
18-19 ,, ..	2		4	200	800	5·5	44		80	124	676
Total ..	14	..	28	..	1,936	..	170	..	192	362	1,574
Manjakadambai—											
9-10 feet ..	1	2	2	77	154	14·2	21	10	15	36	118
Vagai—											
6- 7 feet ..	35	2	70	31	2,170	..	..	..	..	..	..
7- 8 ,, ..	29		58	49	2,842	..	..	..	..	..	..
8- 9 ,, ..	4		8	56	448	..	..	..	..	..	..
9-10 ,, ..	2		4	56	224	..	..	..	..	..	..
10-11 ,, ..	1		2	56	112	..	..	..	..	..	..
Total ..	71	..	142	..	5,796	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. IV, area 330 acres, area of the sample plot, 162 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet	Net volume in cubic feet.
Poovathi—											
6- 7 feet ..	2	2	4	29	116	..	..	..	..	..	..
7- 8 ,, ..	2		4	32	128	..	..	..	..	..	..
8- 9 ,, ..	1		2	35	70	..	..	..	..	..	..
9-10 ,, ..	3		6	38	228	..	..	..	..	..	..
Total ..	8	..	16	..	542	..	..	..	..	..	..
Thadashi—											
6- 7 feet ..	11	2	22	28	616	..	..	..	..	..	..
7- 8 ,, ..	2		4	32	128	..	..	..	..	..	..
8- 9 ,, ..	1		2	45	90	..	..	..	..	..	..
10-11 ,, ..	1		2	52	104	..	..	..	..	..	..
Total ..	15	..	30	..	938	..	..	..	..	..	..
Nirkadambai—											
6- 7 feet ..	3	2	6	37	222	..	..	..	..	..	..
7- 8 ,, ..	1		2	37	74	..	..	..	..	..	..
10-11 ,, ..	1		2	63	126	..	..	..	..	..	..
Total ..	5	..	10	..	422	..	..	..	..	..	..

Block No. IV, Mount Stuart.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.	Total volumes of mature and saleable timber.
	C. FT.	C. FT.	
A. Saleable species—			
Teak	633	3,179	
Rosewood	712	2,429	
Venteak	1,652	4,252	
Pillamarudu	2,297	12,995	
Karumarudu	476	1,931	
Vengai	146	1,428	
Manjakadambai	..	118	
Total ..	5,916	26,332	

	C.FT.
Teak	3,179
Rosewood	2,429
Other superior species ..	20,724
Total ..	26,332

B. Species at present unsaleable—			
Vagai	2,170	3,626	
Poovathi	116	426	
Thadashi	616	322	with bark.
Nirkadambai	222	200	
Total ..	3,124	4,574	

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. V, area 610 acres, area of the sample plot, 134 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	78	4·5	351	33	11,583	10·2	1,181	10	1,158	2,339	9,244
7– 8 ,, ..	72		324	52	16,848	10	1,684		1,684	3,368	13,480
8– 9 ,, ..	13		58	54	3,132	8·4	263		313	3,576	2,556
9–10 ,, ..	24		108	83	8,964	7·5	672		896	1,568	7,396
10–11 ,, ..	13		58	60	3,480	6·6	229		348	577	2,903
11–12 ,, ..	14		63	101	6,363	6·1	388		636	1,024	5,339
12–13 ,, ..	4		18	137	1,466	5·6	82		146	228	1,238
13–14 ,, ..	4		18	147	1,646	5·2	85		164	249	1,397
14–15 ,, ..	2		9	149	1,341	4·9	65		134	199	1,142
15–16 ,, ..	3		13	181	2,353	4·6	108		235	343	2,010
16–17 ,, ..	1		4	181	724	4·3	31		72	103	621
17–18 ,, ..	1		4	181	724	4·1	29		72	101	623
Total ..	109	..	1,028	..	58,624	..	4,817	..	5,858	10,675	47,949
Rosewood—											
6– 7 feet ..	3	4·5	13	42	546	19·5	106	..	54	160	386
7– 8 ,, ..	5		22	49	1,078	17·8	181	..	107	288	790
8– 9 ,, ..	2		9	82	738	16	118	..	73	191	547
10–11 ,, ..	2		9	94	846	12·9	109	..	84	193	653
Total ..	12	..	53	..	3,208	..	514	..	318	832	2,376
Venteak—											
6– 7 feet ..	14	4·5	63	40	2,520	7·4	186	..	252	438	2,082
7– 8 ,, ..	16		72	43	3,096	6·6	204	..	309	513	2,583
8– 9 ,, ..	5		22	61	1,342	5·8	77	..	134	211	1,131
9–10 ,, ..	4		18	92	1,656	5·2	86	..	165	251	1,405
10–11 ,, ..	2		9	66	594	4·8	28	..	59	87	507
Total ..	41	..	184	..	9,208	..	581	..	919	1,500	7,708
Pillamarudu—											
6– 7 feet ..	29	4·5	130	39	5,070	14·5	735	10	507	1,242	3,828
7– 8 ,, ..	36		162	47	7,614	12·9	982		761	1,743	5,871
8– 9 ,, ..	16		72	59	4,248	11·5	488		424	912	3,336
9–10 ,, ..	17		76	96	7,296	10·2	744		729	1,473	5,823
10–11 ,, ..	3		13	122	1,586	9·3	147		158	305	1,281
11–12 ,, ..	3		13	104	1,352	8·6	116		135	251	1,101
12–13 ,, ..	4		18	111	1,998	8	159		199	358	1,640
13–14 ,, ..	3		13	144	1,872	7·5	140		187	327	1,545
14–15 ,, ..	2		9	144	1,296	7	90		129	219	1,077
15–16 ,, ..	3		13	206	2,678	6·6	176		267	443	2,235
17–18 ,, ..	1		4	206	824	5·8	47		82	129	695
Total ..	117	..	523	..	35,834	..	3,824	..	3,578	7,402	28,432
Karumarudu—											
6– 7 feet ..	41	4·5	184	36	6,624	24	1,589	10	662	2,251	4,373
7– 8 ,, ..	55		247	57	14,079	21·4	3,012		1,407	4,419	9,660
8– 9 ,, ..	23		103	84	8,652	19·2	1,661		865	2,526	6,126
9–10 ,, ..	9		40	91	3,640	17·1	622		364	986	2,654
10–11 ,, ..	6		27	95	2,565	15·2	389		256	645	1,920
11–12 ,, ..	3		13	146	1,898	14·3	271		189	460	1,438
12–13 ,, ..	2		9	166	1,494	13·4	200		149	349	1,145
Total ..	139	..	623	..	38,952	..	7,744	..	3,892	11,636	27,316
Vagai—											
6–7 feet ..	10	4·5	45	31	1,395	..	..	..	..	..	..
7–8 ,, ..	12		54	49	2,646	..	..	..	..	..	..
8–9 ,, ..	1		4	56	224	..	..	..	..	..	..
Total ..	23	..	103	..	4,265	..	..	..	..	..	..
Vengai—											
6– 7 feet ..	7	4·5	31	24	744	14·5	107	10	74	181	563
7– 8 ,, ..	6		27	35	945	12·9	121		94	215	730
8– 9 ,, ..	4		18	40	720	11·5	82		72	154	566
9–10 ,, ..	1		4	78	312	10·2	31		31	62	250
11–12 ,, ..	3		13	100	1,144	8·6	98		114	212	932
13–14 ,, ..	2		9	91	819	7·5	61		81	142	677
14–15 ,, ..	1		4	200	480	7	33		48	81	399
Total ..	24	..	106	..	5,164	..	533	..	514	1,047	4,117

Calculations of the volume of marketable timber contained in standing trees in 1917, Mount Stuart forest, block No. V, area 610 acres, area of the sample plot, 134 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Manjakadambai—											
7– 8 feet ..	5	4·5	22	32	704	17·8	105	..	70	175	529
8– 9 ,, ..	2		9	32	288	16	46	..	28	74	214
10–11 ,, ..	2		9	81	729	12·9	94	..	72	166	563
11–12 ,, ..	1		4	52	208	12	24	..	20	44	164
Total ..	10	..	44	..	1,929	..	269	..	190	459	1,470
Poovathi—											
7– 8 feet ..	1	4·5	4	29	116	..	..	..	..	..	..
15–16 ,, ..	1		4	122	488	..	..	..	..	..	..
Total ..	2	..	8	..	604	..	..	..	..	..	..
Thadashi—											
6–7 feet ..	12	..	54	28	1,512	..	..	..	..	..	..
7–8 ,, ..	7	..	31	32	992	..	..	..	..	..	..
8–9 ,, ..	2	..	9	45	405	..	..	..	..	..	..
Total ..	21	..	94	..	2,909	..	..	..	..	..	..
Nirkadambai—											
7–8 feet ..	1	4.5	4	37	148	..	..	..	..	..	..
8–9 ,, ..	1		4	49	196	..	..	..	..	..	..
Total ..	2	..	8	..	344	..	..	..	..	..	..

Block No. V, Mount Stuart.

Names of species.	Total volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
	C.FT.	C.FT.
A. Saleable species—		
Teak	9,244	38,705
Rosewood	386	1,990
Venteak	2,082	5,626
Pillamarudu	3,828	24,604
Karumarudu	4,373	22,943
Vengai	563	3,554
Manjakadambai	529	741
Total ..	21,005	98,363
B. Species at present unsaleable—		
Vagai	1,395	2,870
Poovathi	..	604
Thadashi	1,512	1,397
Nirkadambai	..	344
Total ..	2,907	5,215

Total volumes of mature and saleable timber.

	C.FT.
Teak	38,705
Rosewood	1,990
Other superior species ..	57,668
Total ..	98,363

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest, block No. I, area 1,175 acres, area of the sample plot, 410 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		
						Percentage.	Quantity.	Percentage.	Quantity.	Total deductions in cubic feet.
Teak—										
6– 7 feet ..	136	2·8	380	45	17,100	10·2	1,744	10	1,710	3,454	13,646
7– 8 ,, ..	179		501	54	27,054	10	2,705		2,705	5,410	21,644
8– 9 ,, ..	65		182	85	15,470	8·4	1,299		1,547	2,846	12,624
9–10 ,, ..	44		123	94	11,562	7·5	867		1,156	2,023	9,539
10–11 ,, ..	51		142	121	17,182	6·6	1,134		1,718	2,852	14,330
11–12 ,, ..	49		137	163	22,331	6·1	1,362		2,233	3,595	18,736
12–13 ,, ..	19		53	182	9,646	5·6	540		964	1,504	8,142
13–14 ,, ..	13		36	234	8,424	5·2	438		842	1,280	7,144
14–15 ,, ..	19		53	224	11,872	4·9	581		1,187	1,768	10,104
15–16 ,, ..	13		36	310	11,160	4·6	513		1,116	1,629	9,531
16–17 ,, ..	7		19	380	7,220	4·3	310		722	1,032	6,188
17–18 ,, ..	9		25	431	10,775	4·1	441		1,077	1,518	9,257
18–19 ,, ..	3		8	525	4,200	3·9	163		420	583	3,617
19–20 ,, ..	4		11	523	5,753	3·7	212		575	787	4,966
Total ..	611	..	1,706	..	179,749	..	12,309	..	17,972	30,281	149,468
Vengai—										
6– 7 feet ..	10	2·8	28	38	1,064	14·5	154	10	106	260	804
7– 8 ,, ..	4		11	54	594	12·9	76		59	135	459
8– 9 ,, ..	3		8	60	480	11·5	55		48	103	377
9–10 ,, ..	1		2	61	122	10·2	12		12	24	98
11–12 ,, ..	2		5	54	270	8·6	23		27	50	220
13–14 ,, ..	1		2	144	288	7·5	21		28	49	239
Total ..	21	..	56	..	2,818	..	341	..	280	621	2,197
Rosewood—										
6– 7 feet ..	7	2·8	19	37	703	19·5	137	10	70	207	496
7– 8 ,, ..	7		19	58	1,102	17·8	196		110	306	796
8– 9 ,, ..	7		19	76	1,444	16	231		144	375	1,069
9–10 ,, ..	4		11	90	990	14·2	140		99	239	751
10–11 ,, ..	5		14	92	1,288	12·9	166		128	294	994
11–12 ,, ..	3		8	112	896	12	107		89	196	700
12–13 ,, ..	2		5	146	730	11·1	81		73	154	576
13–14 ,, ..	6		16	287	4,592	10·3	472		459	931	3,661
14–15 ,, ..	1		2	287	574	9·7	55		57	112	462
15–16 ,, ..	3		8	287	2,296	9·2	211		229	440	1,856
16–17 ,, ..	2		5	287	1,435	8·5	121		143	264	1,171
17–18 ,, ..	1		2	477	954	8·1	77		95	172	782
19–20 ,, ..	2		5	477	2,385	7·3	174		238	412	1,973
Total ..	50	..	133	..	19,389	..	2,168		1,934	4,102	15,287
Vagai—										
6– 7 feet ..	14	2·8	39	36	1,404	..	..	..	..	..	..
7– 8 , ..	18		50	57	2,850	..	..	..	..	..	..
8– 9 ,, ..	5		14	57	798	..		..	..	..	..
9–10 ,, ..	3		8	70	560	..	..	..	..	..	..
11–12 ,, ..	1		2	98	196	..	..	..	..	..	..
12–13 ,, ..	1		2	110	220	..	..	..	..	..	..
Total ..	42	..	115	..	6,028	..	..	..	..	..	..
Karumarudu—										
6– 7 feet ..	83	2·8	232	43	9,976	24	2,394	10	997	3,391	6,585
7– 8 ,, ..	86		240	56	13,440	21·4	2,876		1,344	4,220	9,220
8– 9 ,, ..	30		84	68	5,712	19·2	1,096		571	1,667	4,045
9–10 ,, ..	23		64	121	7,744	17·1	1,324		774	2,098	5,646
10–11 ,, ..	21		58	111	6,438	15·2	978		643	1,621	4,817
11–12 ,, ..	16		44	158	6,952	14·3	994		695	1,689	5,263
12–13 ,, ..	7		19	199	3,781	13·4	506		378	884	2,897
13–14 ,, ..	3		8	264	2,112	12·5	264		211	475	1,637
14–15 ,, ..	2		5	264	1,320	11·7	154		132	286	1,034
17–18 , ..	2		5	264	1,320	9 7	128		132	260	1,060
19–20 ,, ..	1		2	300	600	8·8	52		60	112	488
Total ..	274	..	761	..	59,395	..	10,766	..	5,937	16,703	42,692
Venteak—										
6– 7 feet ..	88	2·8	246	42	10,332	7·4	764	10	1,033	1,797	8,535
7– 8 ,, ..	92		257	56	14,392	6·6	949		1,439	2,388	12,004
8– 9 ,, ..	29		81	69	5,589	5·8	324		558	882	4,707
9–10 ,, ..	18		50	112	5,600	5·2	291		560	851	4,749
10–11 ,, ..	11		30	121	3,630	4·8	174		363	537	3,093
11–12 ,, ..	8		22	183	4,026	4·4	177		402	579	3,447
12–13 ,, ..	6		16	106	1,696	4	67		169	236	1,460
13–14 ,, ..	1		2	106	212	3·8	8		21	29	183
14–15 ,, ..	1		2	106	212	3·6	7		21	28	184
15–16 ,, ..	2		5	106	530	3·4	18		53	71	459
Total ..	256	..	711	..	46,219	..	2,779	..	4,619	7,398	38,821

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest, block No. I, area 1,175 acres, area of the sample plot, 410 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Pillamarudu—											
6- 7 feet ..	137	2·8	383	37	14,171	14·5	2,054	10	1,417	3,471	10,700
7- 8 ,, ..	151		422	48	20,256	12·9	2,613		2,025	4,638	15,618
8- 9 ,, ..	67		187	67	12,529	11·5	1,440		1,252	2,692	9,837
9-10 ,, ..	47		131	90	11,790	10·2	1,202		1,179	2,381	9,409
10-11 ,, ..	32		89	112	9,968	9·3	927		996	1,923	8,045
11-12 ,, ..	33		92	132	12,144	8·6	1,044		1,214	2,258	9,886
12-13 ,, ..	7		19	167	3,173	8 0	253		317	570	2,603
13-14 ,, ..	6		16	139	2,224	7·5	166		222	388	1,836
14-15 ,, ..	10		28	121	3,388	7·0	237		338	575	2,813
15-16 ,, ..	10		28	170	4,760	6 6	314		476	790	3,970
16-17 ,, ..	1		2	170	340	6·1	20		34	54	286
17-18 ,, ..	2		5	170	850	5·8	49		85	134	716
18-19 ,, ..	3		8	170	1,360	5·5	74		136	210	1,150
Total ..	506	..	1,410	..	96,953	..	10,393	..	9,691	20,084	76,869
Thadashi—											
6- 7 feet ..	48	2·8	134	38	5,092	..	..	..	..	..	..
7- 8 ,, ..	19		53	38	2,014	..	..	..	..	..	..
8- 9 ,, ..	1		2	63	126	..	..	..	..	..	..
9 10 ,, ..	2		5	54	270	..	..	..	..	..	..
Total ..	70	..	194	..	7,502	..	..	..	..	..	..
Poovathi—											
6- 7 feet ..	16	2·8	44	25	1,100	..	..	..	..	..	..
7- 8 ,, ..	38		106	55	5,830	..	..	..	..	..	..
8- 9 ,, ..	21		58	55	3,190	..	..	..	..	..	..
9-10 ,, ..	14		39	62	2,418	..	..	..	..	..	..
10-11 ,, ..	10		28	62	1,736	..	..	..	..	..	..
11-12 ,, ..	13		36	62	2,232	..	..	..	..	..	..
12-13 ,, ..	6		16	66	1,056	..	..	..	..	..	..
13-14 ,, ..	6		16	142	2,272	..	..	..	..	..	..
15-16 ,, ..	3		8	142	1,136	..	..	..	..	..	..
18-19 ,, ..	1		2	142	284	..	..	..	..	..	..
Total ..	128	..	353	..	21,254	..	..	..	..	..	..
Manjakadambai—											
6- 7 feet ..	1	2·8	2	44	88	19·5	17	10	8	25	63
7- 8 ,, ..	1		2	46	92	17·8	16		9	25	67
14-15 ,, ..	1		2	108	216	10·3	22		21	43	173
Total ..	3	..	6	..	396	..	55		38	93	303
Nirkadambai—											
6-7 feet ..	8	2·8	22	43	946	..	..	..	..	..	..
7-8 ,, ..	4		11	43	473	..	..	..	..	..	..
Total ..	12	..	33	..	1,419	..	..	..	..	..	..

Block No. I, Ulandi.

Names of species.	Volumes of 6–7 feet girth class trees. C. FT.	Total volumes of 7–8 feet girth class trees and over mature timber. C. FT.
A. Saleable species—		
Teak	13,646	1,35,822
Rosewood	496	14,791
Venteak	8,535	30,286
Pillamarudu	10,700	66,169
Karumarudu	6,585	36,107
Vengai	804	1,393
Manjakadambai	63	240
Total ..	40,829	2,84,808
B. Species at present unsaleable—		
Vagai	1,404	4,624
Poovathi	1,100	20,154
Thadashi	5,092	2,410
Nirkadambai	946	473
Total ..	8,542	27,661

Total volumes of mature and saleable timber.

	C. FT.
Teak	1,35,822
Rosewood	14,791
Other superior species ..	1,34,195
Total ..	2,84,808

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest, block No. II, area 859 acres, area of the sample plot, 205 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of gross volume in the compartment in cubic feet.	Deductions to be made from the gross total				Total deductions in cubic feet.	Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.			
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6– 7 feet ..	54	4·1	221	44	9,724	10·2	991	10	972	1,963	7,761
7– 8 ,, ..	68		278	59	16,402	10·0	1,640		1,640	3,280	13,122
8– 9 ,, ..	29		118	72	8,496	8·4	713		849	1,562	3,934
9–10 ,, ..	20		82	97	7,954	7·5	596		795	1,391	6,563
10–11 ,, ..	25		102	127	12,954	6·6	854		1,295	2,149	10,805
11–12 ,, ..	19		77	140	10,780	6·1	657		1,078	1,735	9,045
12–13 ,, ..	10		41	188	7,708	5·6	431		770	1,201	6,507
13–14 ,, ..	4		16	190	3,040	5·2	158		304	462	2,578
14–15 ,, ..	4		16	226	3,616	4·9	177		361	538	3,078
15–16 ,, ..	10		41	272	11,152	4·6	512		1,115	1,627	9,525
16–17 ,, ..	2		8	329	2,632	4·3	113		263	376	2,256
17–18 ,, ..	1		4	392	1,568	4·1	64		156	220	1,348
19–20 ,, ..	9		36	435	15,660	3·7	579		1,566	2,145	13,515
Total ..	255	..	1,040	..	111,686	..	7,485	..	11,164	18,649	93,037
Venteak—											
6– 7 feet ..	81	4·1	332	43	14,276	7·4	1,056	10	1,427	2,483	11,793
7– 8 ,, ..	133		545	64	34,880	6·6	2,302		3,488	5,790	29,090
8– 9 ,, ..	44		180	104	18,720	5·8	1,085		1,872	2,957	15,763
9–10 ,, ..	35		143	94	13,442	5·2	698		1,344	2,042	11,400
10–11 ,, ..	20		82	113	9,266	4·8	444		926	1,370	7,896
11–12 ,, ..	12		49	134	6,566	4·4	288		656	944	5,622
12–13 ,, ..	3		12	172	2,064	4·0	82		206	288	1,776
13–14 ,, ..	2		8	204	1,632	3·8	62		163	225	1,407
14–15 ,, ..	1		4	227	908	3·6	32		90	122	786
15–16 ,, ..	2		8	227	1,816	3·4	61		181	242	1,574
16–17 ,, ..	1		4	227	908	3 2	29		90	119	789
Total ..	334	..	1,367	..	104,478	..	6,139	..	10,443	16,582	87,896
Kosewood—											
6– 7 feet ..	13	4·1	53	44	2,332	19·5	454	10	233	687	1,645
7– 8 ,, ..	17		69	63	4,347	17·8	773		434	1,207	3,140
8– 9 ,, ..	12		49	70	3,430	16·0	548		343	891	2,539
9–10 ,, ..	10		41	118	4,838	14·2	686		483	1,169	3,669
10–11 ,, ..	12		49	137	6,713	12·9	865		671	1,536	5,177
11–12 ,, ..	2		8	141	1,128	12·0	135		112	247	881
12–13 ,, ..	2		8	156	1,248	11·1	138		124	262	986
13–14 ,, ..	4		16	154	2,464	10·3	253		246	499	1,965
14–15 ,, ..	4		16	155	2,480	9·7	240		248	488	1,992
15–16 ,, ..	8		32	155	4,960	9·2	456		496	952	4,008
16–17 ,, ..	2		8	155	1,240	8·5	105		124	229	1,011
17–18 ,, ..	2		8	182	1,456	8·1	117		145	262	1,194
18–19 ,, ..	1		4	190	760	7·7	58		76	134	626
19–20 ,, ..	3		12	199	2,388	7·3	174		238	412	1,976
Total ..	92	..	373	..	39,784	..	5,002	..	3,973	8,975	30,809
Pillamarudu—											
6– 7 feet ..	124	4·1	508	46	23,368	14·5	3,388	10	2,336	5,724	17,644
7– 8 ,, ..	192		787	56	44,072	12·9	5,685		4,407	10,092	33,980
8– 9 ,, ..	94		385	73	28,105	11·5	3,232		2,810	6,042	22,063
9–10 ,, ..	70		287	90	25,830	10·2	2,634		2,583	5,217	20,613
10–11 ,, ..	53		217	104	22,568	9·3	2,098		2,256	4,354	18,214
11–12 ,, ..	66		270	123	33,210	8·6	2,856		3,321	6,177	27,033
12–13 ,, ..	15		61	158	9,638	8 0	771		963	1,734	7,904
13–14 ,, ..	22		90	163	14,670	7·5	1,100		1,467	2,567	12,103
14–15 ,, ..	9		36	172	6,192	7·0	433		619	1,052	5,140
15–16 ,, ..	8		32	217	6,944	6 6	458		694	1,152	5,792
18–19 ,, ..	1		4	230	920	5·5	50		92	142	778
Total ..	654	..	2,677	..	215,517	..	..	..	21,548	44,253	171,264
Karumarudu—											
6– 7 feet ..	30	4·1	123	49	6,027	24·0	4,446	10	602	2,048	3,979
7– 8 ,, ..	27		110	78	8,580	21·4	1,836		858	2,694	5,886
8– 9 ,, ..	11		45	83	3,735	19·2	717		373	1,090	2,645
9–10 ,, ..	10		41	94	3,854	17·1	659		385	1,044	2,810
10–11 ,, ..	5		20	136	2,720	15·2	413		272	685	2,035
11–12 ,, ..	4		16	159	2,544	14·3	363		254	617	1,927
12–13 ,, ..	1		4	200	800	13·4	107		80	187	613
13–14 ,, ..	2		8	195	1,560	12·5	195		156	351	1,209
14–15 ,, ..	2		8	274	2,192	11·7	256		219	475	1,717
15–16 ,, ..	1		4	269	1 076	11·1	119		107	226	850
17–18 ,, ..	1		4	358	1,432	9·7	138		143	281	1,151
Total ..	94	..	833	..	34,520	..	6,249	..	3,449	9,698	24,822

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. II, area 859 acres; area of the sample plot, 205 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Poovathi—											
6– 7 feet ..	29	4·1	118	23	2,714	..	..	..	..	..	..
7– 8 ,, ..	58		237	38	9,006	..	..	..	..	..	..
8– 9 ,, ..	25		102	50	5,100	..	..	..	..	..	..
9–10 ,, ..	17		69	64	4,416	..	..	..	..	..	..
10–11 ,, ..	12		49	84	4,116	..	..	..	..	..	..
11–12 ,, ..	12		49	76	3,724	..	..	..	..	..	..
12–13 ,, ..	4		16	84	1,344	..	..	..	..	..	..
13–14 ,, ..	1		4	90	360	..	..	..	..	..	..
15–16 ,, ..	1		4	95	380	..	..	..	..	..	..
Total ..	159	..	648	..	31,160	..	..	..	..	..	..
Vengai—											
6– 7 feet ..	7	4·1	28	38	1,064	14·5	154	10	106	260	804
7– 8 ,, ..	3		12	49	588	12·9	75		58	133	455
8– 9 ,, ..	1		4	60	240	11·5	27		24	51	189
10–11 ,, ..	1		4	80	320	9·3	29		32	61	259
12–13 ,, ..	1		4	169	676	8·0	54		67	121	555
Total ..	13	..	52	..	2,888	..	339	..	287	626	2,262
Vagai—											
6– 7 feet ..	22	4·1	90	40	3,600	..	..	..	..	..	..
7– 8 ,, ..	18		73	56	4,088	..	..	..	..	..	..
8– 9 ,, ..	4		16	58	928	..	..	..	..	..	..
9–10 ,, ..	3		12	70	840	..	..	..	..	..	..
10–11 ,, ..	1		4	98	392	..	..	..	..	..	..
11–12 ,, ..	3		12	98	1,176	..	..	..	..	..	..
Total ..	51	..	207	..	11,024	..	..	..	..	..	..
Thadashi—											
6– 7 feet ..	36	4·1	147	34	4,998	..	..	..	..	..	..
7– 8 ,, ..	18		73	37	2,701	..	..	..	..	..	..
8– 9 ,, ..	3		12	60	720	..	..	..	..	..	..
9–10 ,, ..	1		4	62	248	..	..	..	..	..	..
Total ..	58	..	236	..	8,667	..	..	..	..	..	..
Manjakadambai—											
6– 7 feet ..	4	4·1	16	42	672	19·5	131	10	67	198	474
7– 8 ,, ..	1		4	66	264	17·8	46		26	72	192
12–13 ,, ..	1		4	138	552	11·1	61		55	116	436
Total ..	6	..	24	..	1,488	..	238	..	148	386	1,102
Nirkadambai—											
6– 7 feet ..	3	4·1	12	43	516	..	..	..	..	..	..
7– 8 ,, ..	4		16	43	688	..	..	..	..	..	..
8– 9 ,, ..	1		4	72	288	..	..	..	..	..	..
9–10 ,, ..	3		12	104	1,248	..	..	..	..	..	..
11–12 ,, ..	1		4	112	448	..	..	..	..	..	..
Total ..	12	..	48	..	3,188	..	..	..	..	..	..

Block No. II, Ulandi.

Names of species.	Volume of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class and over mature timber.
	C. FT.	C. FT.
A. Saleable species—		
Teak	7,761	85,276
Rosewood	1,645	29,164
Venteak	11,793	76,103
Pillamarudu	17,644	153,620
Karimarudu	3,979	20,843
Vengai	804	1,458
Manjakadambai	474	628
Total ..	44,100	367,092
B. Species at present unsaleable—		
Vagai	3,600	7,424
Poovathi	2,714	28,446
Thadashi	4,998	3,669
Nirkadambai	516	2,672
Total ..	11,828	42,211

Total volumes of mature and saleable timber.

	C. FT.
Teak	85,276
Rosewood	29,164
Other superior species ..	252,652
Total ..	367,092

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. III, area 490 acres; area of the sample plot, 205 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total				Net volume in cubic feet.
						On account of bark.		On account of internal and other defects as a margin of safety.		Total deductions in cubic feet.	
						Percentage.	Quantity.	Percentage.	Quantity.		
Teak—											
6- 7 feet ..	90	2·3	207	45	9,315	10·2	950	10	931	1,881	7,434
7- 8 ,, ..	110		253	54	13,662	10·0	1,366		1,366	2,732	10,930
8- 9 ,, ..	51		117	85	9,945	8·4	835		994	1,829	8,116
9-10 ,, ..	42		96	94	9,024	7·5	676		902	1,578	7,446
10-11 ,, ..	31		71	121	8,591	6·6	567		859	1,426	7,165
11-12 ,, ..	22		50	163	8,150	6·1	497		815	1,312	6,838
12-13 ,, ..	9		20	182	3,640	5·6	203		364	567	3,073
13-14 ,, ..	11		25	234	5,850	5·2	304		585	889	4,961
14-15 ,, ..	4		9	224	2,016	4·9	98		201	299	1,717
15-16 ,, ..	12		27	310	8,370	4·6	385		837	1,222	7,148
16-17 ,, ..	3		6	380	2,280	4·3	98		228	326	1,954
17-18 ,, ..	3		6	431	2,586	4·1	106		258	364	2,222
18-19 ,, ..	1		2	525	1,050	3·9	40		105	145	905
19-20 ,, ..	1		2	523	1,046	3·7	38		104	142	904
Total ..	390	..	891	..	85,525	..	6,163	..	8,549	14,712	70,813
Rosewood—											
6- 7 feet ..	15	2·3	34	37	1,258	19·5	145	10	125	270	988
7- 8 ,, ..	9		20	58	1,160	17·8	206		116	322	838
8- 9 ,, ..	3		6	76	456	16·0	72		45	117	339
9-10 ,, ..	9		20	90	1,800	14·2	255		180	435	1,365
10-11 ,, ..	10		23	92	2,116	12·9	272		211	483	1,633
11-12 ,, ..	4		9	112	1,008	12·0	120		100	220	788
14-15 ,, ..	1		2	208	416	9·7	40		41	81	335
15-16 ,, ..	2		4	287	1,148	9·2	105		114	219	929
16-17 ,, ..	2		4	287	1,148	8·5	97		114	211	937
Total ..	55	..	122	..	10,510	..	1,312	..	1,046	2,358	8,152
Venteak—											
6- 7 feet ..	43	2·3	98	42	4,116	7·4	304	10	411	715	3,401
7- 8 ,, ..	63		144	56	8,064	6·6	532		806	1,338	6,726
8- 9 ,, ..	15		34	69	2,346	5·8	136		234	370	1,976
9-10 ,, ..	12		27	112	3,024	5·2	157		302	459	2,565
10-11 ,, ..	9		20	121	2,420	4·8	116		242	358	2,062
11-12 ,, ..	3		6	183	1,098	4·4	48		109	157	941
13-14 ,, ..	1		2	106	212	3·8	8		21	29	183
16-17 ,, ..	1		2	230	460	3·2	14		46	60	400
Total ..	147	..	333	..	21,740	..	1,315	..	2,171	3,486	18,254
Pillamarudu—											
6- 7 feet ..	96	2·3	220	37	8,140	14·5	1,180	10	814	1,994	6,146
7- 8 ,, ..	131		301	48	14,448	12·9	1,863		1,444	3,307	11,141
8- 9 ,, ..	58		133	67	8,911	11·5	1,024		891	1,915	6,996
9-10 ,, ..	58		133	90	11,970	10·2	1,220		1,197	2,417	9,553
10-11 ,, ..	21		48	112	5,376	9·3	499		537	1,036	4,340
11-12 ,, ..	19		43	132	5,676	8·6	488		567	1,055	4,621
12-13 ,, ..	13		29	167	4,843	8·0	387		484	871	3,972
13-14 ,, ..	7		16	139	2,224	7·5	166		222	388	1,836
14-15 ,, ..	2		4	121	484	7·0	33		48	81	403
15-16 ,, ..	2		4	170	680	6·6	44		68	112	568
17-18 ,, ..	1		2	170	340	5·8	19		34	53	287
18-19 ,, ..	1		2	170	340	5·5	18		34	52	288
Total ..	409	..	935	..	63,432	..	6,941	..	6,340	13,281	50,151
Vagai—											
6-7 feet ..	8	2·3	18	36	648	..	..	..	..	..	..
7-8 ,, ..	16		36	57	2,052	..	..	..	..	..	..
8-9 ,, ..	4		9	57	513	..	..	..	..	..	..
Total ..	28	..	63	..	3,213	..	..	..	..	..	..
Karumarudu—											
6- 7 feet ..	54	2·3	124	43	5,332	24·0	1,279	10	533	1,812	3,520
7- 8 ,, ..	64		147	56	8,232	21·4	1,761		823	2,584	5,648
8- 9 ,, ..	27		62	68	4,216	19·2	809		421	1,230	2,986
9-10 ,, ..	28		64	121	7,744	17·1	1,324		774	2,098	5,646
10-11 ,, ..	11		25	111	2,775	15·2	421		277	698	2,077
11-12 ,, ..	10		23	158	3,634	14·3	519		363	882	2,752
12-13 ,, ..	3		6	199	1,194	13·4	159		119	278	916
13-14 ,, ..	3		6	264	1,584	12·5	198		158	356	1,228
Total ..	200	..	457	..	34,711	..	6,470	..	3,468	9,938	24,773

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. III, area 490 acres; area of the sample plot, 205 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vengai—											
6– 7 feet ..	3	2·3	6	38	228	14·5	33	10	22	55	173
7– 8 ,, ..	5		11	54	594	12·9	76		59	135	459
8– 9 ,, ..	2		4	60	240	11·5	27		24	51	189
9–10 ,, ..	1		2	61	122	10·2	12		12	24	98
10–11 ,, ..	1		2	80	160	9·3	14		16	30	130
12–13 ,, ..	1		2	102	204	8·0	16		20	36	168
Total ..	13	..	27	..	1,548	..	178	..	153	331	1,217
Manjakadambai—											
7– 8 feet ..	3	2·3	6	46	276	17·8	49	10	27	76	200
8– 9 ,, ..	2		4	94	376	16·0	60		37	97	279
9–10 ,, ..	1		2	110	220	14·2	31		22	53	167
10–11 ,, ..	1		2	160	320	12·9	41		32	73	247
12–13 ,, ..	4		9	181	1,629	11·1	180		162	342	1,287
16–17 ,, ..	1		2	312	624	8·5	53		62	115	509
18–19 ,, ..	1		2	374	748	7·7	57		74	131	617
Total ..	13	..	27	..	4,193	..	471	..	416	887	3,306
Poovathi—											
6– 7 feet	7	2·3	16	25	400	..	..	..	..	..	..
7– 8 ,, ..	7		16	55	880	..	..	..	..	..	..
8– 9 ,, ..	11		25	55	1,375	..	..	..	..	..	..
9–10 ,, ..	8		18	62	1,116	..	..	..	..	..	..
10–11 ,, ..	4		9	62	558	..	..	..	..	..	..
11–12 ,, ..	3		6	62	372	..	..	..	..	..	..
12–13 ,, ..	2		4	66	264	..	..	..	..	..	..
13–14 ,, ..	1		2	142	284	..	..	..	..	..	..
15–16 ,, ..	1		2	142	284	..	..	..	..	..	..
17–18 ,, ..	1		2	142	284	..	..	..	..	..	..
Total ..	45	..	100	..	5,817	..	..	..	..	..	..
Thadashi—											
6– 7 feet	24	2·8	55	38	2,090	..	..	..	..	..	..
7– 8 ,, ..	15		34	38	1,292	..	..	..	..	..	..
8– 9 ,, ..	1		2	63	126	..	..	..	..	..	..
10–11 ,, ..	1		2	80	160	..	..	..	..	..	..
Total ..	41	..	93	..	3,668	..	..	..	..	..	..

Block No. III, Ulandi.

Names of species.	Volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	7,434	63,379
Rosewood	988	7,164
Venteak	3,401	14,853
Pillamarudu	6,146	44,005
Karumarudu	3,520	21,253
Vengai	173	1,044
Manjakadambai	..	3,306
Total ..	21,662	155,004
B. Species at present unsaleable—		
Vagai	648	2,565
Poovathi	400	5,417
Thadashi	2,090	1,578
Total ..	3,138	9,560

Total volumes of mature and saleable timber.

	C. FT.
Teak	63,379
Rosewood	7,164
Other superior species ..	84,461
Grand total ..	155,004

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. IV, area 583 acres, area of the sample plot, 205 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	82	2·8	229	45	10,305	10·2	1,051	10	1,030	2,081	8,224
7– 8 ,, ..	172		481	54	25,974	10·0	2,597		2,597	5,194	20,780
8– 9 ,, ..	57		159	85	13,515	8·4	1,135		1,351	2,486	11,029
9–10 ,, ..	45		126	94	11,844	7·5	888		1,184	2,072	9,772
10–11 ,, ..	44		123	121	14,883	6·6	982		1,488	2,470	12,413
11–12 ,, ..	46		128	163	20,864	6·1	1,272		2,086	3,358	17,506
12–13 ,, ..	23		64	182	11,648	5·6	652		1,164	1,816	9,832
13–14 ,, ..	16		44	234	10,296	5·2	535		1,029	1,564	8,732
14–15 ,, ..	6		16	224	3,584	4·9	175		358	533	3,051
15–16 ,, ..	17		47	310	14,570	4·6	670		1,457	2,127	12,443
16–17 ,, ..	9		25	380	9,500	4·3	408		950	1,358	8,142
17–18 ,, ..	8		22	431	9,482	4·1	388		948	1,336	8,146
18–19 ,, ..	4		11	525	5,775	3·9	225		577	802	4,973
19–20 ,, ..	4		11	523	5,753	3·7	212		575	787	4,966
Total ..	533	..	1,486	..	167,993	..	11,190	..	16,794	27,984	140,009
Rosewood—											
6– 7 feet ..	1	2·8	2	37	74	19·5	14	10	7	21	53
7– 8 ,, ..	1		2	58	116	17·8	20		11	31	85
8– 9 ,, ..	4		11	76	836	16·0	133		83	216	620
9–10 ,, ..	3		8	90	720	14·2	102		72	174	546
11–12 ,, ..	1		2	112	224	12·0	26		22	48	176
Total ..	10	..	25	..	1,970	..	295	..	195	490	1,480
Venteak—											
6– 7 feet ..	21	2·8	58	42	2,436	7·4	180	10	243	423	2 013
7– 8 ,, ..	27		75	56	4,200	6·6	277		420	697	3,503
8– 9 ,, ..	24		67	69	4,623	5·8	268		462	730	3,893
9–10 ,, ..	7		19	112	2 128	5·2	110		212	322	1,806
10–11 ,, ..	6		16	121	1,936	4·8	92		193	285	1,651
11–12 ,, ..	2		5	183	915	4·4	40		91	131	784
Total ..	87	..	240	..	16,238		967	..	1,621	2,588	13,650
Thadashi—											
6–7 feet ..	11	2·8	30	38	1,140	..	..	..	..	..	..
7–8 ,, ..	12		33	38	1,254	..	..	..	..	..	..
8–9 ,, ..	1		2	63	126	..	..	..	..		..
Total ..	24	..	65	..	2,520	..	..	..	..	..	..
Pillamarudu—											
6– 7 feet ..	67	2·8	187	37	6,919	14·5	1,003	10	691	1,694	5,225
7– 8 ,, ..	97		271	48	13,008	12·9	1,678		1,300	2,978	10,030
8– 9 ,, ..	43		120	67	8,040	11·5	924		804	1,728	6,312
9–10 ,, ..	36		100	90	9,000	10·2	918		900	1,818	7,182
10–11 ,, ..	10		28	112	3,136	9·3	291		313	604	2,532
11–12 ,, ..	20		56	132	7,392	8·6	635		739	1,374	6,018
12–13 ,, ..	2		5	167	835	8·0	66		83	149	686
13–14 ,, ..	2		5	139	695	7·5	52		69	121	574
16–17 ,, ..	1		2	170	340	6·1	20		34	54	286
Total ..	278	..	774	..	49,365	..	5,587	..	4,933	10,520	38,845
Karumarudu—											
6– 7 feet ..	64	2·8	179	43	7,697	24·0	1,847	10	769	2,616	5,081
7– 8 ,, ..	78		218	56	12,208	21·4	2,612		1,220	3,832	8,376
8– 9 ,, ..	33		92	68	6,256	19·2	1,201		625	1,826	4,430
9–10 ,, ..	30		84	121	10,164	17·1	1,738		1,016	2,754	7,410
10–11 ,, ..	12		33	111	3,663	15·2	556		366	922	2,741
11–12 ,, ..	24		67	158	10,586	14·3	1,513		1,058	2,571	8,015
12–13 ,, ..	3		8	199	1,592	13·4	213		159	372	1,220
13–14 ,, ..	2		5	264	1,320	12·5	165		132	297	1,023
14–15 ,, ..	1		2	264	528	11·7	61		52	113	415
15–17 ,, ..	1		2	264	528	10·3	54		52	106	422
Total ..	248	..	690	..	54,542	..	9,960	..	5,449	15,409	39,133
Vagai—											
6– 7 feet ..	11	2·8	30	36	1,080	..	..	..	..	..	..
7– 8 ,, ..	9		25	57	1,425	..	..	..	..	..	..
8– 9 ,, ..	11		2	57	114	..	..	..	..	..	..
9–10 ,, ..	1		2	70	140	..	..	..	..	..	..
Total ..	22	..	59	..	2,759	..	..	..	..	..	..

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. IV, area 583 acres, area of the sample plot, 205 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vengai—											
6– 7 feet ..	9	2·8	25	38	950	14·5	137	10	95	232	718
7– 8 ,, ..	21		58	54	3,132	12·9	404		313	717	2,415
8– 9 ,, ..	9		25	60	1,500	11·5	172		150	322	1,178
9–10 ,, ..	10		28	61	1,708	10·2	174		170	344	1,364
10–11 ,, ..	1		2	80	160	9·3	14		16	30	130
11–12 ,, ..	7		19	54	1,026	8·6	88		102	190	836
12–13 ,, ..	1		2	102	204	8·0	16		20	36	168
13–14 ,, ..	2		5	144	720	7·5	54		72	126	594
Total ..	60	..	164	..	9,400	..	1,059	..	938	1,997	7,403
Manjakadambai—											
6– 7 feet ..	3	2·8	8	44	352	19·5	68	10	35	103	249
7– 8 ,, ..	8		22	46	1,012	17·8	180		101	281	731
8– 9 ,, ..	2		5	94	470	16·0	75		47	122	348
9–10 ,, ..	4		11	110	1,210	14·2	171		121	292	918
10–11 ,, ..	1		2	160	320	12·9	41		32	73	247
11–12 ,, ..	5		14	140	1,960	12·0	235		196	431	1,529
12–13 ,, ..	3		8	181	1,448	11·1	160		144	304	1,144
14–15 ,, ..	1		2	108	216	10·3	22		21	43	173
15–16 ,, ..	3		8	312	2,496	9·2	229		249	478	2,018
17–18 ,, ..	2		5	360	1,800	8·1	145		180	325	1,475
18–19 ,, ..	1		2	374	748	7·7	57		74	131	617
Total ..	33	...	87	..	12,032	..	1,383	..	1,200	2,583	9,449
Poovathi—											
6– 7 feet ..	5	2·8	14	25	350	..	..	..	..	..	..
7– 8 ,, ..	12		33	55	1,815	..	..	..	..	..	..
8– 9 ,, ..	3		8	55	440	..	..	..	..	..	..
9–10 ,, ..	5		14	62	868	..	..	..	..	..	..
10–11 ,, ..	1		2	62	124	..	..	..	..	..	..
11–12 ,, ..	6		16	62	992	..	..	..	..	..	..
12–13 ,, ..	1		2	66	132	..	..	..	..	..	..
Total ..	33	..	89	..	4,721	..	..	..	..	..	..
Nirkadambai—											
6– 7 feet ..	1	2·8	2	43	86	.	..	..	..	..	..
7– 8 ,, ..	1		2	43	86	..	..	..	..	..	..
8– 9 ,, ..	1		2	72	144	..	..	..	..	..	..
9–10 ,, ..	1		2	104	208	..	..	..	..	..	..
10–11 ,, ..	1		2	104	208	..	..	..	..	..	..
17–18 ,, ..	1		2	200	400	..	..	..	..	..	
Total ..	6	..	12	..	1,132	..	..	..	..	..	..

Block No. IV, Ulandi.

Names of species.	Volumes of 6–7 feet girth class trees.	Total volumes of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	8,224	1,31,785
Rosewood	53	1,427
Venteak	2,013	11,637
Pillamarudu	5,225	33,620
Karumarudu	5,081	34,052
Vengai	718	6,685
Manjakadambai	249	9,200
Total ..	21,563	2,28,406
B. Species at present unsaleable—		
Vagai	1,080	1,679
Poovathi	350	4,371
Thadashi	1,140	1,380
Nirkadambai	86	1,046
Total ..	2,656	8,476

Total volumes of mature and saleable timber.	C. FT.
Teak	131,785
Rosewood	1,427
Other superior species ..	95,194
Grand total ..	228,406

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. V, area 750 acres, area of the sample plot, 205 acres.

Girth class and species	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6- 7 feet ..	7	3·6	25	44	1,100	10·2	112	10	110	222	878
7- 8 ,, ..	17		61	59	3,599	10·0	359		359	718	2,881
8- 9 ,, ..	7		25	72	1,800	8·4	151		180	331	1,469
9-10 ,, ..	5		18	97	1,746	7·5	130		174	304	1,442
10-11 ,, ..	5		18	127	2,286	6·6	150		228	378	1,908
11-12 ,, ..	3		10	140	1,400	6·1	85		140	225	1,175
Total ..	44	..	157	..	11,931	..	987	..	1,191	2,178	9,753
Rosewood—											
6- 7 feet ..	12	3·6	43	44	1,892	19·5	368	10	189	557	1,335
7- 8 ,, ..	12		43	63	2,709	17·8	482		270	752	1,957
8- 9 ,, ..	4		14	70	980	16·0	156		98	254	726
9-10 ,, ..	3		10	118	1,180	14·2	167		118	285	895
10-11 ,, ..	7		25	137	3,425	12·9	441		342	783	2,642
11-12 ,, ..	4		14	141	1,974	12·0	236		197	433	1,541
12-13 ,, ..	1		3	156	468	11·1	51		46	97	371
13-14 ,, ..	1		3	154	462	10·3	47		46	93	369
14-15 ,, ..	1		3	155	465	9·7	45		46	91	374
17-18 ,, ..	1		3	182	546	8·1	44		54	98	448
Total ..	46	..	161	..	14,101	..	2,038	..	1,406	3,443	10,65
Thadashi—											
6-7 feet ..	33	3·6	118	34	4,012	..	..	..	..	..	..
7-8 ,, ..	11		39	37	1,443	..	..	..	..	..	..
Total ..	44	..	157	..	5,455	..	..	..	..	..	..
Venteak—											
6- 7 feet ..	40	3·6	144	43	6,192	7·4	458	10	619	1,077	5,115
7- 8 ,, ..	49		176	64	11,264	6·6	743		1,126	1,869	9,395
8- 9 ,, ..	35		126	104	13,104	5·8	760		1,310	2,070	11,034
9-10 ,, ..	25		90	94	8,460	5·2	439		846	1,285	7,175
10-11 ,, ..	8		28	113	3,164	4·8	151		316	467	2,697
11-12 ,, ..	8		28	134	3,752	4·4	165		375	540	3,212
12-13 ,, ..	1		3	172	516	4·0	29		51	71	445
13-14 ,, ..	2		7	204	1,428	3·8	54		142	196	1,232
14-15 ,, ..	4		14	227	3,178	3·6	114		317	431	2,747
15-16 ,, ..	2		7	227	1,589	3·4	54		158	212	1,377
Total ..	174	..	623	..	52,647	..	2,958	..	5,260	8,218	44,429
Pillamarudu—											
6- 7 feet ..	105	3·6	378	46	17,388	14·5	2,443	10	1,738	4,181	13,207
7- 8 ,, ..	114		410	56	22,960	12·9	2,961		2,296	5,257	17,703
8- 9 ,, ..	64		230	73	16,790	11·5	1,930		1,679	3,609	13,181
9-10 ,, ..	66		237	90	21,330	10·2	2,175		2,133	4,308	17,022
10-11 ,, ..	31		111	104	11,544	9·3	1,073		1,154	2,227	9,317
11-12 ,, ..	23		82	123	10,086	8·6	867		1,008	1,875	8,211
12-13 ,, ..	12		43	158	6,794	8·0	543		679	1,222	5,572
13-14 ,, ..	8		28	163	4,564	7·5	342		456	798	3,766
14-15 ,, ..	5		18	172	3,096	7·0	216		309	525	2,571
15-16 ,, ..	7		25	217	5,425	6·6	358		542	900	4,525
16-17 ,, ..	1		3	221	663	6·1	40		66	106	557
Total ..	436	..	1,565	..	120,640	..	12,948	..	12,060	25,008	95,632
Karumarudu—											
6- 7 feet ..	41	3·6	147	49	7,203	24·0	1,728	10	720	2,448	4,755
7- 8 ,, ..	63		226	78	17,628	21·4	3,772		1,762	5,534	12,094
8- 9 ,, ..	41		147	83	12,201	19·2	2,342		1,220	3,562	8,639
9-10 ,, ..	41		147	94	13,818	17·1	2,362		1,381	3,743	10,075
10-11 ,, ..	22		79	136	10,744	15·2	1,633		1,074	2,707	8,037
11-12 ,, ..	22		79	159	12,561	14·3	1,796		1,350	3,152	9,409
12-13 ,, ..	10		36	200	7,200	13·4	964		720	1,684	5,516
13-14 ,, ..	6		21	195	4,095	12·5	511		409	920	3,175
14-15 ,, ..	2		7	274	1,918	11·7	224		191	415	1,503
15-16 ,, ..	8		28	269	7,532	11·1	836		753	1,589	5,943
16-17 ,, ..	2		7	358	2,506	19 3	258		250	508	1,998
17-18 ,, ..	3		10	362	3,620	9·7	351		362	713	2,907
18-19 ,, ..	1		3	372	1,116	9·3	103		111	214	902
Total ..	262	..	937	..	102,142	..	16,880	..	10,309	27,189	74,953

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi forest section, block No. V, area 750 acres; area of the sample plot, 205 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Vengai—											
6- 7 feet ..	1	3·6	3	38	114	14·5	16	10	11	27	87
7- 8 ,, ..	3		10	49	490	12·9	63		49	112	378
9-10 ,, ..	1		3	61	183	10·2	18		18	36	147
10-11 ,, ..	3		10	80	800	9·3	74		80	154	646
Total ..	8	..	26	..	1,587	..	171	..	158	329	1,258
Vagai—											
6- 7 feet ..	15	3·6	54	40	2,160	..	..	..	..	..	..
7- 8 ,, ..	6		21	56	1,176	..	..	..	..	..	..
8- 9 ,, ..	1		3	57	171	..	..	..	..	..	..
9-10 ,, ..	1		3	70	210	..	..	..	..	..	..
10-11 ,, ..	1		3	98	294	..	..	..	..	..	..
Total ..	24	..	84	..	4,011	..	..	..	..	..	..
Poovathi—											
6- 7 feet ..	21	3·6	75	23	1,725	..	..	..	..	..	..
7- 8 ,, ..	37		133	38	5,054	..	..	..	..	..	..
8- 9 ,, ..	17		61	50	3,050	..	..	..	..	..	..
9-10 ,, ..	15		54	64	3,456	..	..	..	..	..	..
10-11 ,, ..	8		28	84	2,352	..	..	..	..	..	..
11-12 ,, ..	5		18	76	1,368	..	..	..	..	..	..
13-14 ,, ..	2		7	90	630	..	..	..	..	..	..
15-16 ,, ..	1		3	112	336	..	..	..	..	..	..
Total ..	106	..	379	..	17,971	..	..	..	..	..	..
Nirkadambai—											
6-7 feet ..	2	3·6	7	43	301	..	..	..	..	..	..
7-8 ,, ..	1		3	43	129	..	..	..	..	..	..
Total ..	3	..	10	..	430	..	..	..	..	..	..
anjakadambai—											
6- 7 feet ..	1	3·6	3	42	126	19·5	24	10	12	36	90
8- 9 ,, ..	1		3	94	282	16·0	45		28	73	209
10-11 ,, ..	1		3	160	480	12·9	61		48	109	371
11-12 ,, ..	1		3	118	354	12·0	42		35	77	277
12-13 ,, ..	1		3	138	414	11·1	45		41	86	328
Total ..	5	..	15	..	1,648	..	215	..	163	378	1,275

Block No. V, Ulandi.

Names of species.	Volumes of 6–7 feet girth class trees. C. FT.	Total volumes of 7–8 feet girth class trees and above mature timber. C. FT.
A. Saleable species—		
Teak	878	8,875
Rosewood	1,335	9,323
Venteak	5,115	39,314
Pillamarudu	13,207	82,425
Karumarudu	4,755	70,198
Vengai	87	1,171
Manjakadambai	90	1,185
Total ..	25,467	212,491
B. Species at present unsaleable—		
Vagai	2,160	1,851
Poovathi	1,725	16,246
Thadashi	4,012	1,443
Nirkadambai	301	129
Total ..	8,198	19,669

Total volumes of mature and saleable timber.

	C. FT.
Teak	8,875
Rosewood	9,323
Other superior species.	194,293
Total ..	212,491

with bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi Forest Section, Block No. VI, area 764 acres; area of the sample plot, 205 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the compartment in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Teak—											
7- 8 feet ..	1	3·7	3	59	170	10·0	17	10	17	34	143
11-12 ,, ..	1		3	140	42	6·1	25		42	67	353
Total ..	2	..	6	..	597	..	42	..	59	101	496
Rosewood—											
6- 7 feet ..	10	3·7	37	44	1,628	19·5	317	10	162	479	1,149
7- 8 ,, ..	17		62	63	3,906	17·8	695		390	1,085	2,821
8- 9 ,, ..	4		14	70	980	16·0	156		98	254	726
9-10 ,, ..	11		40	118	4,720	14·2	670		472	1,142	3,578
10-11 ,, ..	5		18	137	2,466	12·9	318		246	564	1,902
11-12 ,, ..	5		18	141	2,538	12·0	304		253	557	1,981
12-13 ,, ..	1		3	156	468	11·1	51		46	97	371
13-14 ,, ..	1		3	154	462	10·3	47		46	93	369
14-15 ,, ..	2		7	155	1,085	9·7	105		108	213	872
15-16 ,, ..	2		7	155	1,085	9·2	99		108	207	878
16-17 ,, ..	1		3	155	465	8·5	39		46	85	380
17-18 ,, ..	1		3	182	546	8·1	44		54	98	448
Total ..	60	..	215	..	20,349	..	2,845	..	2,029	4,874	15,475
Vagai—											
6- 7 feet ..	19	3·7	70	40	2,800	..	..	..	..	..	..
7- 8 ,, ..	11		40	56	2,240	..	..	..	..	..	..
8- 9 ,, ..	4		14	58	812	..	..	..	..	..	..
11-12 ,, ..	1		3	98	294	..	..	..	..	..	..
Total ..	35	..	127	..	6,146	..	..	..	..	..	..
Venteak—											
6- 7 feet ..	80	3·7	296	43	12,728	7·4	941	10	1,272	2,213	10,515
7- 8 ,, ..	75		277	64	17,728	6·6	1,170		1,772	2,942	14,786
8- 9 ,, ..	37		136	104	14,144	5·8	820		1,414	2,234	11,910
9-10 ,, ..	14		51	94	4,794	5·2	249		479	728	4,066
10-11 ,, ..	11		40	113	4,520	4·8	216		452	668	3,852
11-12 ,, ..	5		18	134	2,412	4·4	106		241	347	2,065
12-13 ,, ..	1		3	172	516	4·0	20		51	71	445
13-14 ,, ..	1		3	204	612	3·8	23		61	84	528
Total ..	224	..	824	..	57,454	..	3,545	..	5,742	9,287	48,167
Pillamarudu—											
6- 7 feet ..	94	3·7	347	46	15,962	14·5	2,314	10	1,596	3,910	12,052
7- 8 ,, ..	97		358	56	20,048	12·9	2,586		2,004	4,590	15,458
8- 9 ,, ..	73		270	73	19,710	11·5	2,266		1,971	4,237	15,473
9-10 ,, ..	61		225	90	20,250	10·2	2,065		2,025	4,090	16,160
10-11 ,, ..	30		111	104	11,544	9·3	1,073		1,154	2,227	9,317
11-12 ,, ..	23		83	123	10,209	8·6	877		1,020	1,897	8,312
12-13 ,, ..	14		51	158	8,058	8·0	644		805	1,449	6,609
13-14 ,, ..	12		44	163	7,172	7·5	537		717	1,254	5,918
14-15 ,, ..	4		14	172	2,408	7·0	168		240	408	2,000
15-16 ,, ..	4		14	217	3,038	6·6	200		303	503	2,535
16-17 ,, ..	1		3	221	663	6·1	40		66	106	557
17-18 ,, ..	1		3	223	669	5·8	38		66	104	565
19-20 ,, ..	2		7	214	1,498	5·5	82		149	231	1,267
Total ..	416	..	1,530	..	121,229	..	12,890	..	12,116	25,006	96,223
Karumarudu—											
6- 7 feet ..	46	3·7	170	49	8,330	24·0	1,999	10	833	2,832	5,498
7- 8 ,, ..	32		118	78	9,204	21·4	1,969		920	2,889	6,315
8- 9 ,, ..	17		62	83	5,146	19·2	988		514	1,502	3,644
9-10 ,, ..	9		33	94	3,102	17·1	530		310	840	2,262
10-11 ,, ..	7		25	136	3,400	15·2	516		340	856	2,544
11-12 ,, ..	11		40	159	6,360	14·3	909		636	1,545	4,815
12-13 ,, ..	8		29	200	5,800	13·4	777		580	1,357	4,443
13-14 ,, ..	3		11	195	2,145	12·5	268		214	482	1,663
14-15 ,, ..	2		7	274	1,918	11·7	224		191	415	1,503
15-16 ,, ..	3		11	269	2,959	11·1	328		295	623	2,336
Total ..	138	..	506	..	48,364	..	8,508	..	4,833	13,341	35,023
Vengai—											
6- 7 feet ..	6	3·7	22	38	836	14·5	121	10	83	204	632
7- 8 ,, ..	10		37	49	1,813	12·9	233		181	414	1,399
8- 9 ,, ..	3		11	60	660	11·5	75		66	141	519
9-10 ,, ..	2		7	61	427	10·2	43		42	85	342
10-11 ,, ..	3		11	80	880	9·3	81		88	169	711
11-12 ,, ..	1		3	54	162	8·6	13		16	29	133
Total ..	25	..	91	..	4,778	..	566	..	476	1,042	3,736

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi Forest Section, Block No. VI, area 764 acres; area of the sample plot, 205 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the compartment.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions.	Net volume in cubic feet.
Poovathi—											
6–7 feet ..	11	3·7	40	23	920	..	..	..	..	..	..
7–8 ,, ..	14		51	38	1,938	..	..	..	..	..	..
8–9 ,, ..	6		22	50	1,100	..	..	..	..	..	..
9–10 ,, ..	4		14	64	896	..	..	..	..	..	..
10–11 ,, ..	7		25	84	2,100	..	..	..	..	..	..
11–12 ,, ..	6		22	76	1,672	..	..	..	..	..	..
12–13 ,, ..	2		7	84	588	..	..	..	..	..	..
13–14 ,, ..	1		3	90	270	..	..	..	..	..	..
Total ..	51	..	184	..	9,484	..	..	..	..	..	..
Manjakadambai—											
6–7 feet ..	4	3·7	14	42	588	19·5	114	10	58	172	416
7–8 ,, ..	8		29	66	1,914	17·8	340		191	531	1,383
8–9 ,, ..	4		14	94	1,316	16	210		131	341	975
9–10 ,, ..	2		7	108	756	14·2	107		75	182	574
11–12 ,, ..	1		3	118	354	12	42		35	77	277
12–13 ,, ..	2		7	138	966	11·1	107		96	203	763
13–14 ,, ..	3		11	185	2,035	10·3	209		203	412	1,623
14–15 ,, ..	1		3	108	324	9·7	31		32	63	261
15–16 ,, ..	1		3	312	936	9·2	86		93	179	757
Total ..	26	..	91	..	9,189	..	1,246	..	914	2,160	7,029
Thadashi—											
6–7 feet ..	27	3·7	99	34	3,366	..	..	..	..	..	..
7–8 ,, ..	15		55	37	2,035	..	..	..	..	..	..
9–10 ,, ..	1		3	62	186	..	..	..	..	..	..
Total ..	43	..	157	..	5,587	..	..	..	..	..	..
Nirkadambai—											
6–7 feet ..	3	3·7	11	43	473	..	..	..	..	..	..
7–8 ,, ..	2		7	43	301	..	..	..	..	..	..
8–9 ,, ..	1		3	72	216	..	..	..	..	..	..
10–11 ,, ..	1		3	104	312	..	..	..	..	..	..
Total ..	7	..	24	..	1,302	..	..	..	..	..	..

Block VI.—Ulandi.

Names of species.	Volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	C. FT.	C. FT.
Teak	..	496
Rosewood	1,149	14,326
Venteak	10,515	37,652
Pillamarudu	12,052	84,171
Karumarudu	5,498	29,525
Vengai	632	3,104
Manjakadambai	416	6,613
Total ..	30,262	1,75,867
B. Species at present unsaleable—		
Vagai	2,800	3,346
Poovathi	920	8,564
Thadashi	3,366	2,221
Nirkadambai	473	829
	7,559	14,960

Total volume of mature and saleable timber.

	C. FT.
Teak	496
Rosewood	14,326
Other superior species ..	161,065
Total ..	175,887

With bark.

Calculations of the volume of marketable timber contained in standing trees in 1917, Ulandi Forest Section, Block No. VII, area 319 acres, area of the sample plot, 205 acres.

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of the gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Teak—											
6– 7 feet ..	32	1·5	48	44	2,112	10·2	215	10	211	426	1,686
7– 8 ,, ..	40		60	59	3,540	10·0	354		354	708	2,832
8– 9 ,, ..	22		33	72	2,376	8·4	199		237	436	1,940
9–10 ,, ..	21		31	97	3,007	7·5	225		300	525	2,482
10–11 ,, ..	14		21	127	2,667	6·6	176		266	442	2,225
11–12 ,, ..	19		28	140	3,920	6·1	239		392	631	3,289
12–13 ,, ..	6		9	188	1,692	5·6	94		169	263	1,429
13–14 ,, ..	5		7	190	1,330	5·2	69		133	202	1,128
14–15 ,, ..	3		4	226	904	4·9	44		90	134	770
15–16 ,, ..	3		4	272	1,088	4·6	50		108	158	930
16–17 ,, ..	1		1	329	329	4·3	14		32	46	283
17–18 ,, ..	1		1	392	392	4·1	16		39	55	337
19–20 ,, ..	3		4	435	1,740	3·7	64		174	238	1,502
Total ..	170	..	251	..	25,097	..	1,759	..	2,505	4,264	20,833
Rosewood—											
6– 7 feet ..	3	1·5	4	44	176	19·5	34	10	17	51	125
7– 8 ,, ..	3		4	63	252	17·8	44		25	69	183
8– 9 ,, ..	3		4	70	280	16·0	44		28	72	208
9–10 ,, ..	1		1	118	118	14·2	16		11	27	91
11–12 ,, ..	1		1	141	141	12·0	16		14	30	111
13–14 ,, ..	2		3	154	462	10·3	47		46	93	369
15–16 ,, ..	2		3	155	465	9·2	42		46	88	377
Total ..	15	..	20	..	1,894	..	243	..	187	430	1,464
Venteak—											
6– 7 feet ..	18	1·5	27	43	1,161	7·4	85	10	116	201	960
7– 8 ,, ..	21		31	64	1,984	6·6	130		198	328	1,656
8– 9 ,, ..	15		22	104	2,288	5·8	132		228	360	1,928
9–10 ,, ..	8		12	94	1,128	5·2	58		112	170	958
10–11 ,, ..	2		3	113	339	4·8	16		33	49	290
11–12 ,, ..	1		1	134	134	4·4	5		13	18	116
14–15 ,, ..	1		1	227	227	3·6	8		22	30	197
Total ..	66	..	97	..	7,261	..	434	..	722	1,156	6,105
Pillamarudu—											
6– 7 feet ..	67	1·5	100	46	4,600	14·5	667	10	460	1,127	3,473
7– 8 ,, ..	115		172	56	9,632	12·9	1,242		963	2,205	7,427
8– 9 ,, ..	62		93	73	6,789	11·5	780		678	1,458	5,331
9–10 ,, ..	46		69	90	6,210	10·2	633		621	1,254	4,956
10–11 ,, ..	24		36	104	3,744	9·3	348		374	722	3,022
11–12 ,, ..	25		37	123	4.551	8·6	391		455	846	3,705
12–13 ,, ..	6		9	158	1,422	8·0	113		142	255	1,167
13–14 ,, ..	8		12	163	1,956	7·5	146		195	341	1,615
14–15 ,, ..	5		7	172	1,204	7·0	84		120	204	1,000
15–16 ,, ..	1		1	217	217	6·6	14		21	35	182
Total ..	359	..	536	..	40,325	..	4,418	..	4,029	8,447	31,878
Vagai— c											
6-7 feet ..	6	1·5	9	40	360	..	..	..	..	..	..
7-8 ,, ..	7		10	56	560	..	..	..	..	..	..
8-9 ,, ..	7		10	58	580	..	..	..	..	..	..
Total ..	20	..	29	..	1,500	..	..	..	..	..	..
Karumarudu—											
6– 7 feet ..	47	1·5	70	49	3,430	24·0	823	10	343	1,166	2,264
7– 8 ,, ..	76		114	78	8,892	21·4	1,902		889	2,791	6,101
8– 9 ,, ..	44		66	83	5,478	19·2	1,051		547	1,598	3,880
9–10 ,, ..	26		39	94	3,666	17·1	626		366	992	2,674
10–11 ,, ..	25		37	136	5,032	15·2	764		503	1,267	3,765
11–12 ,, ..	25		37	159	5,883	14·3	841		588	1,429	4,454
12–13 ,, ..	5		7	200	1,400	13·4	187		140	327	1,073
13–14 ,, ..	2		3	195	582	12·5	73		58	131	454
14–15 ,, ..	2		3	274	822	11·7	96		82	178	644
15–16 ,, ..	4		6	269	1,614	11·1	179		161	340	1,274
Total ..	256	..	382	..	36,802	..	6,542	..	3,677	10,219	26,583

Calculation of the volume of marketable timber contained in standing trees in 1917, Ulandi Forest Section, Block No. VII, area 319 acres, area of the sample plot, 205 acres—*cont.*

Girth class and species.	Number of trees in the sample plot.	Multiplier.	Total number of trees in the block.	Volume of timber in average tree in cubic feet.	Total of gross volume in the block in cubic feet.	Deductions to be made from the gross total: On account of bark. Percentage.	On account of bark. Quantity.	On account of internal and other defects as a margin of safety. Percentage.	On account of internal and other defects as a margin of safety. Quantity.	Total deductions in cubic feet.	Net volume in cubic feet.
Thadashi—											
6– 7 feet ..	24	1·5	36	34	1,224	..	..	..	..	..	..
7– 8 ,, ..	8		12	37	444	..	..	..	..	..	..
8– 9 ,, ..	1		1	60	60	..	..	..	..	..	..
9–10 ,, ..	1		1	62	62	..	..	..	..	..	..
Total ..	34	..	50	..	1,790	..	..	..	..	..	..
Povathi—											
6– 7 feet ..	10	1·5	15	23	345	..	..	..	..	..	..
7– 8 ,, ..	15		22	38	836	..	..	..	..	..	..
8– 9 ,, ..	9		13	50	650	..	..	..	..	..	..
9–10 ,, ..	5		7	64	448	..	..	..	..	..	..
10–11 ,, ..	1		1	84	84	..	..	..	..	..	..
11–12 ,, ..	7		10	76	760	..	..	..	..	..	..
12–13 ,, ..	1		1	84	84	..	..	..	..	..	..
13–14 ,, ..	1		1	90	90	..	..	..	..	..	..
Total ..	49	..	70	..	3,297	..	..	..	..	..	..
Manjakadambai—											
7–8 feet ..	1	1·5	1	66	66	17·8	11	10	6	17	49
8–9 ,, ..	1		1	94	94	16·0	15		9	24	70
Total ..	2	..	2	..	160	..	26	..	15	41	119
Nirkadambai—											
6– 7 feet ..	2	1·5	3	43	129	..	..	..	..	..	..
7– 8 ,, ..	3		4	43	172	..	..	..	..	..	..
12–13 ,, ..	1		1	181	181	..	..	..	..	..	..
Total ..	6	..	8	..	482	..	..	..	..	..	..

Block No. VII.—Ulandi.

Names of species.	Volume of 6–7 feet girth class trees.	Total volume of 7–8 feet girth class trees and over mature timber.
A. Saleable species—	c. ft.	c. ft.
Teak	1,686	19,147
Rosewood	125	1,339
Venteak	960	5,145
Pillamarudu	3,473	28,405
Karumarudu	2,264	24,319
Manjakadambai	..	119
Total ..	8,508	78,474
B. Species at present unsaleable—		
Vagai	360	1,140
Poovathi	345	2,952
Thadashi	1,224	566
Nirkadambai	129	353
Total ..	2,058	5,011

Total volume of mature and saleable timber.

	C. FT.
Teak	19,147
Rosewood	1,339
Other superior species ..	57,988
Total ..	78,474

With bark.

APPENDIX (*b*) 3 (*a*).

CONTROL BOOK FORMS.

Control Book for the Mount Stuart Working Circle.

Form A.—Control of felling, dragging and transport of timber logs to the sale depots.

Prescription of the working plan.				Results of working.				
Year of working.	Felling, logging and barking all trees of the eight superior species from 7 feet girth—estimated yield cubic feet, coupe number.	Dragging to tram line depot all logs felled in the previous year, actual number of logs, and their cubical contents and species.	Transport from tram line depot of logs dragged during the year.	Year of working and month's outturn.	Felling, logging and barking according to species, giving total number of logs and cubical contents, coupe number.	Dragging according to species, number of logs and cubical contents of each species.	Transport from tram line depot to sale depot according to species, number of logs and cubical contents.	Remarks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				April .. May .. June .. Etc.				

Form B.—Control of preparation of spokes and felloes and agricultural implements and exploitation of bamboos.

Prescription of working plan.					Results of operations.					
Year.	Preparation of spokes and felloes and agricultural implements delivered at tram line depot. As many as possible should be made of the former and of the latter according to the demand.	Transport to sale depot of spokes and felloes and implements made during the year.	Felling of bamboos and delivery at tram line depot. To meet the demand.	Transport of bamboos to the sale depot.	Year.	Actual number of spokes and felloes and implements made.	Actual number of spokes and felloes and implements transported to sale depot.	Actual number of bamboos felled and delivered at tram line depot.	Actual number of bamboos trammed to sale depot.	Remarks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

Form C.—Control book to show the sales at the Sale Depot.

Sales of timber from the Mount Stuart Working Circle at the Pollachi sale depot during the year.

Species.	Number of logs.	Cubic feet.	April.			May.		
			At depot rates.	By auction.	Total.	At depot rates.	By auction.	Total.
			RS.	RS.	RS.	RS.	RS.	RS.
Teak								
Rosewood								
Karumarudu								
Pillamarudu								
Venteak								
Irul								
Manjakadambai								
Vengai								
....								
....								
....								
....								
....								
....								
....								
Spokes and felloes ..								
Bamboos								
Agricultural implements.								
Total : Progressive total.								
Total ..								

APPENDIX (*b*) 3 (*b*).

DETAILS OF FIGURES ON WHICH THE STOCK MAP IS BASED.

Marketable timber, i.e., over 7 feet girth.

Old compartment number.	Species.	Quantity in cubic feet.	Acres.	Volume per acre in cubic feet.
	(1) Tekadi leased forests.			
I	A. Teak	61,235	306	200
	B. Seven other superior species	158,086	306	516
II	A. Teak	54,110	419	129
	B. Seven other superior species	78,447	419	187
III	A. Teak	56,618	380	148
	B. Seven other superior species	59,913	380	157
IV	A. Teak	21,144	302	70
	B. Seven other superior species	56,109	302	185
V	A. Teak	8,196	255	32
	B. Seven other superior species	22,124	255	86
VI	A. Teak	29,641	321	92
	B. Seven other superior species	28,310	321	88
VII	A. Teak	79,587	394	202
	B. Seven other superior species	95,663	394	240
VIII	A. Teak	48,461	288	168
	B. Seven other superior species	45,991	288	159
IX	A. Teak	31,305	290	105
	B. Seven other superior species	36,194	290	124
X	A. Teak	52,442	437	120
	B. Seven other superior species	140,350	437	323
XI	A. Teak	167,114	540	309
	B. Seven other superior species	206,364	540	382
XII	A. Teak	74,449	338	220
	B. Seven other superior species	37,359	338	110
XIII	A. Teak	48,682	251	193
	B. Seven other superior species	42,289	251	167
XIV	A. Teak	58,902	300	196
	B. Seven other superior species	62,299	300	207
XV	A. Teak	13,957	298	46
	B. Seven other superior species	63,759	298	213
XVI	A. Teak	28,099	277	101
	B. Seven other superior species	60,511	277	218
XVII	A. Teak	20,666	297	69
	B. Seven other superior species	28,897	297	97
XVIII	A. Teak	18,411	376	49
	B. Seven other superior species	22,940	376	61
XIX	A. Teak	27,522	462	59
	B. Seven other superior species	46,904	462	101
XX	A. Teak	28,016	312	89
	B. Seven other superior species	43,317	312	138
XXI	A. Teak	14,130	380	37
	B. Seven other superior species	25,674	380	67
XXII	A. Teak	41,517	350	118
	B. Seven other superior species	47,642	350	136

DETAILS OF FIGURES ON WHICH THE STOCK MAP IS BASED—*cont.*

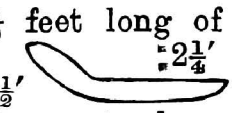
Marketable timber, i.e., over 7 feet girth—cont.

Old compartment number.	Species.	Quantity in cubic feet.	Acres.	Volume per acre in cubic feet.
	(1) Tekadi leased forests—*cont.*			
XXIII	A. Teak	31,878	302	105
	B. Seven other superior species	41,200	302	136
XXIV	A. Teak	148,701	575	258
	B. Seven other superior species	180,060	575	313
XXV	A. Teak	69,700	316	220
	B. Seven other superior species	62,279	316	197
XXVI	A. Teak	56,551	354	159
	B. Seven other superior species	148,331	354	419
XXVII	A. Teak	187,359	603	310
	B. Seven other superior species	170,431	603	282
XXVIII	A. Teak	19,304	386	50
	B. Seven other superior species	45,571	386	118
XXIX	A. Teak	13,281	396	33
	B. Seven other superior species	52,330	396	132
XXX	A. Teak	21,355	280	76
	B. Seven other superior species	31,019	280	110
XXXI	A. Teak	12,861	323	39
	B. Seven other superior species	41,918	323	129
XXXII	A. Teak	7,393	288	25
	B. Seven other superior species	26,863	288	93
XXXIII	A. Teak	39,714	525	75
	B. Seven other superior species	47,648	525	90
XXXIV	A. Teak	16,765	334	50
	B. Seven other superior species	11,337	334	33
A	A. Teak	18,828	362	52
	B. Seven other superior species	49,913	362	137
* 1	A. Teak	94,224	440	214
	B. Seven other superior species	48,031	440	109
2	A. Teak	63,104	828	76
	B. Seven other superior species	108,234	828	130
3	A. Teak	19,904	382	52
	B. Seven other superior species	38,152	382	99
4	A. Teak	3,179	330	9
	B. Seven other superior species	23,153	330	70
5	A. Teak	38,705	610	63
	B. Seven other superior species	59,658	610	97
	Ulandi.			
1	A. Teak	135,822	1,175	115
	B. Seven other superior species	148,986	1,175	126
2	A. Teak	85,276	859	99
	B. Seven other superior species	281,816	859	328
3	A. Teak	63,379	490	129
	B. Seven other superior species	91,625	490	186
4	A. Teak	131,785	583	226
	B. Seven other superior species	96,621	583	165
5	A. Teak	8,875	750	11
	B. Seven other superior species	203,616	750	271
6	A. Teak	496	764	0·6
	B. Seven other superior species	175,391	764	229
7	A. Teak	19,147	319	60
	B. Seven other superior species	59,327	319	185

* Block in old Mount Stuart Working Circle.

APPENDIX (*c*).

Statement showing agricultural timber required locally and the species which ryots prefer them made of.

Name of implement or part thereof	Species of timber the ryots will take.	Size and shape.
A. Country plough—		
I Body	1, 2, 3, 4	$3\frac{1}{2}$ to $3\frac{3}{4}$ feet long of this shape  with $1\frac{1}{2}'$ diameter not less than 8″ to 9″.
II Handle for country plough.	All kinds of wood	3′ to 3′ 6″ × 0 4″ × 0 2″.
III Shaft pole for country plough.	3, 5, 6, 7, 8	11′ 0″ × 0 4″ × 0 3″.
B. Mhote materials—		
I Timber on which the pulley frames rest.	1, 2, 3, 4, 5, 6, 16	5′ 0″ × 1′ 0″ × 0′ 6″.
II Long uprights	Do.	5′ 0 × 0′ 4″ × 0′ 3″.
III Sleepers or horizontal beams to which the long uprights are fixed.	9, 10 and 16	12′ 0″ to 16′ 0″ × 0′ 9″ × 0′ 9″.
IV Pulley	1, 2, 4 and 9	Circular wood with $1\frac{1}{2}$ feet diameter × 0′ 6″ thickness.
V Rollers	All kinds of wood	3′ 0″ × 0′ 5″ or 0′ 4″ or 0′ 6″ square or circular wood with the above diameter.
C. Wood for carts—		
I Wood for side frames ...	3, 12, 13, 14	9′ 0″ × 0′ 6″ × 0′ 3″.
II Central shaft beam ...	1, 2, 8	16′ 0 × 0′ 6″ × 0′ $3\frac{1}{2}$″.
III Hubs	2, 5, 11	15′ to 16′ long circular wood with 1′ diameter.
IV Axle tree for single bullock carts.	All kinds of wood	4′ 0″ to 4′ 3″ × 0′ 9″ × 0′ 5″.
V Axle tree for double bullock carts.	Do.	4′ 6″ × 1′ 0 × 0′ 6″.
Yokes	Acrid roots of banyan tree.	6′ 0″ × 7′ 0″ long circular wood.
Spokes and felloes ...	8, 6, 11 and 17 16.	5′ to 6″ in diameter.

Reference to names of timber trees.

1. Vogai (Black Wallnut)	Albizzia lebbek.
2. Babul (Karuvelam)	Acacia arabica.
3. Velnagai	Anogeissus latifolia.
4. Velvelam	Acacia leucophlœa.
5. Karumporasu	Chloroxylon swietenia.
6. Selai Unjal	Acacia suma.
7. Pillamarudu	Terminalia paniculata.
8. Thadasu	Grewia tiliæfolia.
9. Vengai	Pterocarpus marsupium.
10. Irul	Xylia dolabriformis.
11. Portia	Thespesia populnea.
12. Irumbagam	Hopea parviflora.
13. Malai vembu	Melia composita.
14. Kadambai	Adina cordifolia or Stephegyne parvifolia.
15. Vembu	Neem, Azadirachta indica.
16. Teak	Tectona grandis.
17. Zyziphus jujuba	.....

APPENDIX (*d*).

Statement of expenditure incurred on Mount Stuart Working Plan, South Coimbatore Division.

Month.	A-viii (*d*)	B-i (*b*).	B-i (*c*).	B-i (*d*).	B-i (*e*).	B-ii.	B-iii.	Total.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
July 1916 ..	95 3 6	810 0 0	265 0 0	231 5 4	7 2 2	574 3 6	130 2 0	2,113 0 6
August ,, ..	244 12 0	810 0 0	149 9 7	254 3 8	12 0 0	527 15 7	192 14 6	2,191 7 4
September ,, ..	354 7 10	810 0 0	285 11 7	232 4 2	10 4 1	168 8 4	119 12 0	1,981 0 0
October ,, ..	1,084 15 8	1,214 8 3	278 7 6	235 10 10	10 5 3	239 15 10	34 2 0	3,098 1 4
November ,, ..	451 1 8	150 0 0	225 0 0	260 8 0	12 0 0	284 1 8	51 7 0	1,434 2 9
December ,, ..	262 0 3	150 0 0	225 0 0	293 7 3	10 13 4	265 9 8	20 2 3	1,227 0 6
January 1917 ..	410 15 11	150 0 0	236 9 9	206 8 0	11 0 0	248 4 10	65 10 0	1,329 0 4
February ,, ..	656 9 9	150 0 0	172 8 0	205 0 10	9 2 1	56 7 8	9 13 10	1,259 10 2
March ,, ..	717 9 6	150 0 0	153 12 0	231 12 7	8 11 11	310 2 6	12 9 6	} 1,637 10 0
A-vi (*e*)	53 0 0	..	..	..	..	..	..	
April 1917 ..	284 2 1	150 0 0	172 8 0	236 13 8	9 15 0	165 15 4	87 3 3	1,106 9 4
May ,, ..	344 4 9	150 0 0	252 6 4	242 14 4	9 4 3	63 6 0	34 0 0	1,096 3 8
June ,, ..	157 10 7	150 0 0	190 0 10	223 14 9	9 0 0	148 0 10	9 9 0	888 4 0
July ,, ..	428 4 6	150 0 0	334 7 5	221 2 8	8 15 6	322 4 3	93 15 0	1,559 1 4
August ,, ..	151 4 7	300 0 0	138 10 1	218 14 9	8 11 10	27 3 3	190 14 8	1,035 11 2
September ,, ..	308 6 6	150 0 0	201 6 0	220 4 0	8 14 0	72 15 5	49 6 0	1,011 3 11
October ,, ..	180 1 0	150 0 0	224 8 9	217 10 5	8 10 2	91 12 9	24 12 0	897 7 1
November ,, ..	311 13 8	150 0 0	135 0 0	195 10 9	6 14 1	215 10 11	28 1 0	1,053 2 5
December ,, ..	317 4 4	150 0 0	70 0 0	196 8 0	7 0 0	103 4 10	19 9 10	863 11 0
January 1918 ..	287 14 10	150 0 0	170 3 5	151 0 10	8 3 8	252 1 2	13 11 9	1,033 3 8
February ,, ..	304 6 8	150 0 0	225 0 0	187 14 10	9 11 5	334 6 8	17 8 6	1,229 0 1
March ,, ..	..	58 14 10	167 2 4	210 2 8	5 6 7	46 0 0	..	487 10 5
Total ..	..	..	..	..	..	..	..	28,532 5 0

NOTE.—The party arrived at Coimbatore and started work in July 1916. Therefore the expenditure from July onwards has been taken. The cost of tents and other furniture purchased has been excluded.

Resolution—Forest No. 10, dated 10th March 1919.

The Board sanctions the working-plan for the Mount Stuart forests (including the Tekadi leased forests) in the South Coimbatore division subject to the recommendations of the Conservator of Forests, Western Circle.

2. The working-plan provides for elephant-capturing operations in the Mount Stuart forests. This provision does not extend to the Tekkadi forests as the lease deed executed in favour of the Raja of Kollengode prohibits the capture of elephants within these forests. The Board agrees with the Conservator that in the interest of the protection of the young tree growth it is essential that the operations should be extended to the leased forests. The Collector of Malabar is requested to negotiate with the Raja for the amendment of the lease deed in this respect and to report the result to the Board.

3. The Conservator recommends the postponement of the felling operations under the working-plan until the existing stock in the forests has been cleared. The Board (in its Proceedings Rout. No. 1254, dated 30th September 1918) has already approved this proposal and has sanctioned the introduction of the other prescriptions of the plan in advance of formal sanction. The Board now formally sanctions the Conservator's proposal to start the fellings from 1919–20.

4. The plan provides for concentrated regeneration operations in respect of teak alone. The Conservator, however, recommends that other valuable species also should be similarly treated. He has also proposed certain modifications in the prescription regarding the selection of areas for regeneration and cultural operations. The Conservator's proposals are approved.

5. According to the plan the work of clearing lantana should be carried out at the rate of 100 acres a year, the whole forest thus being cleared in fifty years, which is the period of the plan. The Conservator, however, proposes that the work should be completed in fifteen years and that for this purpose a detailed scheme of annual compartments of extraction should be drawn up. The Board agrees with the Conservator and requests the District Forest Officer to prepare such a scheme for the approval of the Conservator.

6. *Establishment.*—The Conservator recommends the employment of all the establishments provided for in the working-plan except one deputy ranger whom the District Forest Officer proposed to employ on the maintenance of the Ghat road

below Top Slip to Sethumadai. Part of the additional staff, viz., three deputy rangers and the depot and range clerical establishment, has already been sanctioned during the current year on the temporary scale — B.Ps. Forest Rout. No. 1254, dated 30th September 1918, and Rout. No. 1373, dated 21st October 1918—and one more deputy ranger is provided for in the temporary scale for the next year, 1919-20. The Conservator is requested to submit proposals separately for the employment of the remaining staff and to report whether it may not be on the temporary scale for the present. As there appears to be no provision in the budget for next year for the additional establishments, the Conservator should also report how the additional cost can be met during the next year.

7. The Board endorses with pleasure the Conservator's remarks in paragraph 28 of his letter and commends Mr. Wood for the ability and thoroughness with which he has compiled this useful working-plan. The Board will address Government separately on the subject of a working-plan allowance for Mr. Wood.

(True extract)

H. R. PATE,
Secretary

(True copy)

S. AMIRTHASWAMI PILLAI,
Forest Assistant.

To the District Forest Officer, South Coimbatore.
,, the Conservator of Forests, Western Circle, with four maps returned.
,, the Collector of Coimbatore.
,, the Collector of Malabar.
,, H. F. A. Wood, Esq., Conservator of Forests, Central Circle.
,, the Conservators of Forests, Northern, Central and Southern Circles.
,, the Principal, Madras Forest College, Coimbatore.
,, the Agents to the Governor, Ganjām and Vizagapatam.
,, the Secretary to Government, Revenue (Special) Department.

One spare copy to each District Forest Officer.

16746