

(1) Number of Pages.....12
(2) Date of repair.....5. 2. 1969
(3) Initials of the Referencer.....S. B.

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue. DEPARTMENT

G.O. No.	509	Press
B.P. No.		Mis.
Dated 19. 4. 1876 196 .		

Not to be folded or roughly handled

No. 101. Read the following Proceedings of the Board of Revenue, dated 22nd March 1876, No. 804, Forest No. 29 :—

Read the following papers:—

From Captain CAMPBELL WALKER, Officiating Inspector of Forests, to the Hon. D. F. CARMICHAEL, Secretary to Government, Revenue Department, dated Ootacamund, 19th November 1875, No. 677.

In accordance with the instructions conveyed in paragraph 3 of G.O., No. 1,016, dated 6th July 1875, I have the honor to forward statements showing the expenditure and estimated receipts of the existing plantation at Codur, from which it will be seen that the net profit at the end of forty years from date of commencement may be fairly reckoned at Rupees 21,000 after debiting the plantation with all charges including rent of land, interest on outlay, and percentage of supervision.

2. Mr. Yarde considers that an extension of, say, fifty acres would cost one-third less owing to the best system of planting being now thoroughly understood.

3. The outlay would therefore be Rupees 25,000 in round numbers up to the end of the fortieth year, whilst the receipts from planting entirely with Red Sanders trees (1,000 to the acre) to be sold at an average price of Rupees 2 each would be Rupees 1,00,000, representing a profit of Rupees 75,000.

4. Referring to the remarks of the Collector and Revenue Board on the subject of natural *versus* artificially-grown trees, the Government are aware that, as a rule, I deprecate expenditure on the latter if a supply of the former can be

Proceedings of the Madras Government, Revenue Department,
19th April 1876.

maintained and their growth improved by natural reproduction and conservancy, but the case of the Red Sanders is peculiar. I do not know on what data Mr. Horsley bases his statement that "the supply of the wood is now far in excess of the demand." Messrs. Yarde and Sheffield do not say so.

5. I would, however, only advocate the extension of the plantation if the adjoining land be thrown out of cultivation and can be obtained on moderate terms. On those conditions planting will have a twofold object, viz., the production of timber and renovation of the soil for recultivation with cereals.

ENCLOSURE No. 1.

Statement A.—Exhibiting actual Cost, &c., from 1st January 1865 to 31st December 1875 and estimated Expenditure up to 1904 on Codur Experimental Red Sanders Plantation.

Year.	Actual Cost of Plantation.	Interest at four per Cent. per Year.	Total.	Rent of Land at average in the neighbourhood.	Percentage of Deputy Conservator and that of his Office at Rupees 2.	Grand Total.
1	2	3	4	5	6	7
1st January 1865	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
31st December " 1865	151 9 8	6 0 9	157 10 5	50 0 0	43 3 2	250 13 7
Do. 1866	232 4 0	17 13 7	307 1 7	50 0 0	47 3 2	404 4 9
Do. 1867	799 1 0	50 8 5	849 9 5	50 0 0	49 3 2	948 12 7
Do. 1868	440 10 0	70 2 9	510 12 9	50 0 0	63 9 2	624 5 11
Do. 1869	751 4 9	103 0 9	854 5 6	50 0 0	68 6 5	972 11 11
Do. 1870	1,096 13 6	150 10 4	1,247 7 10	50 0 0	68 6 5	1,355 14 3
Do. 1871	558 5 3	179 0 1	737 5 4	50 0 0	68 6 5	855 11 9
Do. 1872	420 9 0	202 15 6	623 8 6	50 0 0	91 7 3	764 15 8
Do. 1873	442 2 2	228 12 4	670 14 6	50 0 0	102 0 0	822 14 6
Do. 1874	418 14 0	254 11 0	673 9 0	50 0 0	102 0 0	825 9 0
1st January 1875	217 4 0		615 9 10	50 0 0	102 0 0	767 9 10
31st July " 1875	217 4 0		615 9 10	50 0 0	102 0 0	767 9 10
1st August " 1875	217 4 0		615 9 10	50 0 0	102 0 0	767 9 10
31st December " 1875	217 4 0		615 9 10	50 0 0	102 0 0	767 9 10
Total...	5,695 15 4	1,542 1 4	7,237 14 8	550 0 0	805 13 1	8,593 11 9
One watchman at Rupees 6 per mensem from 1876 up to 1904, viz., Rupees 72 per annum, with compound interest ...						
Felling Expenses and Carting.						
12,998 Pterocarpus Santalinus posts, at 4 Annas						4,198 10 10
600 Tectona grandis posts, at 4 Annas						
50 Santalum Album posts, at 4 Annas						
1,000 Pterocarpus marsupium posts, at 4 Annas						3,247 0 0
6,800 Jungle-wood trees or 6,800,000 lbs., at 4 Annas per 1,000 lbs.						150 0 0
Carting the above to Railway, at 2 Annas per 1,000 lbs.						12 8 0
Digging and carting 324,700 lbs. dye-wood roots, at Rupees 2-4-0 per 1,000 lbs.						250 0 0
Collecting 426 cart-loads thinning, at 2 Annas						1,700 0 0
						850 0 0
						729 2 10
						58 8 0
						6,992 2 10
Add compound interest at four per cent. per annum on Rupees 8,593-11-9 for twenty-eight years, from 1876 to 1904						19,784 9 5
						17,176 5 3
Total expenditure at close of fortieth year...						36,960 14 8

* Anticipated expenditure.

Ootacamund,
19th November 1875.

(Signed) R. S. JAGO, Major, Deputy Conservator,
In temporary charge of the Office of Inspector of Forests.

Proceedings of the Madras Government, Revenue Department,
19th April 1876.

ENCLOSURE No. 2.

Statement B.—Exhibiting the anticipated Yield and Return at the end of forty Years of the Codur Experimental Red Sanders Plantation.

Description.	No.	Quantity in Lbs.	Rate.	Per.	Amount.	Remarks.
1	2	3	4	5	6	7
Pterocarpus Santalinus ...	12,998	...	RS. A. P. 3 0 0	Post or Tree.	RS. A. P. 36,964 0 0	
Tectona grandis ...	600	...	3 0 0	Do.	1,800 0 0	
Pterocarpus marsupium...	1,000	...	1 3 2½	Do.	1,200 0 0	Ten to a cart-load, License for wrought, Rupees 12.
Santalum Album ...	50	5,000	400 0 0	Ton ...	892 13 9	
Jungle-wood ...	6,800	6,800,000	2 2 0	1,000 lbs. ...	14,450 0 0	Rate as paid by Railway.
Dye-wood roots	...	324,700	8 0 0	1,000 lbs. ...	2,592 11 2	At 25 lbs. per tree.
Thinnings	21,438	4,328,000	0 6 0	1,000 lbs. ...	160 8 0	One cart-load of 1,000 lbs. per fifty trees.
Total...					58,060 0 11	
Deduct expenditure as per Statement A ...					36,960 14 8	
Balance in favor of Plantation ...					21,099 2 3	

Ootacamund,
19th November 1875.

(Signed) R. S. JAGO, Major, Deputy Conservator,
In temporary charge of the Office of Inspector of Forests.

No. 4,991.

REFERRED to the Collector of Cuddapah for report through the Board of Revenue.

FORT ST. GEORGE,
29th November 1875.

(Signed) L. A. CAMPBELL,
Under Secretary to Government, R.D.

From W. D. HORSLEY, Esq., Collector of Cuddapah, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated 19th January 1876, No. 13.

As directed by Government in their foot-note, dated 29th November 1875, to Captain Walker's letter, No. 677, dated 19th November 1875, I have the honor to report as follows.

2. In reference to paragraphs 1, 2, and 3 of Captain Walker's letter it is satisfactorily made out that a Red Sanders plantation of fifty acres would yield to the Government in forty years a profit of Rupees 75,000 estimating the yield at the prices which can be obtained for Red Sanders-wood naturally grown. I do not believe, however, that artificially-grown Red Sanders will fetch the same price, as trees in a plantation are generally deficient in heart-wood and consequently the wood is not so valuable. What the actual decrease in the value will be I do not know, and I am not aware that any experiments have been tried to test this. That wood artificially produced as at Codur is not so valuable as the natural production in the forests can very well be understood, as we know that the Red Sanders tree

requires a rocky, barren soil to bring it to perfection, while at Codur the plantation has no rock in it at all.

3. It is still doubtful whether a Red Sanders plantation will prove to be a profitable work. But, admitting that such a work will be profitable, I ask why Government should engage in a work which will yield nothing for, say, thirty years, when the forest may be made to yield at once, according to Captain Walker's estimate, certainly seventy-five per cent. on the outlay. He says the natural yield of Red Sanders in the Cuddapah Forests is not equal to the demand and that my assertion to the contrary is not supported by Mr. Yarde. That officer is thoroughly acquainted with the forests in this district, and I attach considerable value to his statements. Mr. Yarde says as follows:—

"I myself do not advocate planting, more especially this particular kind (Red Sanders), since it is to be had in large quantities in certain localities suited to their growth in the range of hills from Tirupatti right into Cuddapah Taluq. I do not consider for my district the demand in excess of what is to be obtained for some years yet to come. I have a small collection of roots on hand which as yet there seems to be no demand for. With improved conservancy the natural reproduction will increase, I have not the slightest doubt. Calculating approximately the forests of the Pullampett Taluq at one-fourth of the total area of square miles and one-eighth of that as Red Sanders-growing localities we can estimate it at thirty square miles. Deducting ten for the eastern range of hills (Ellikonda), where this species is not to be found so plentifully, twenty square miles on the western range (Palkonda) may not be an over estimate."

4. I can add nothing to the above in favor of my assertion.

TRANSFERRED to the Conservator of Forests.

(By order,)

MADRAS,
27th January 1876.

(Signed) C. A. GALTON,
Acting Secretary.

No. 219.

OFFICIAL MEMORANDUM.

[Reference accompanying report from the Collector of Cuddapah transferred by the Revenue Board.]

THE Conservator of Forests has the honor to forward the above for the consideration and orders of Government.

2. From the concluding paragraph of Mr. Horsley's letter it would appear that Mr. Yarde had altered or modified his opinion as it was chiefly at his suggestion and request that Captain Campbell Walker mooted the question of an extension of the Red Sanders plantation at Codur in his Cuddapah Inspection Report.

3. The advantage of the preparation of careful estimates of expenditure and results and full discussion before any planting operations are undertaken is fully exemplified in this instance.

4. The Conservator agrees with Mr. Horsley that plantation-grown wood would probably not be equal in quality to that found in the hill forests, but the proximity to a market and greatly increased yield in comparison with the area would perhaps counterbalance this. The present plantation was only undertaken as an experiment, and until results practically prove it financially a success he is not of opinion that it should be extended.

5. The proper conservation of the hill tracts under natural growth has hitherto been impossible without a Forest Act, and they have suffered very severely, cowherds, &c., going in with bill-hooks and cutting down the saplings and young trees by thousands, cattle and goats being very fond of the leaves. Under the Forest Act, which will now probably become law in this Presidency, the Conservator believes that these tracts can be so treated as to meet all demands and yield a handsome yearly revenue.

(Signed) R. H. BEDDOME, Lieutenant-Colonel,
Conservator of Forests.

16th February 1876.

To the Secretary to Government, Revenue Department,
through the Board of Revenue.

SUBMITTED to Government with reference to paragraph 3 of G.O., dated 6th July 1875, No. 1,016.

It appears that on reconsideration the Deputy Conservator does not advocate any extension of the Red Sanders plantation at Codur, and he expresses his concurrence in this opinion.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

No. 102.

ORDER THEREON, 19th April 1876, No. 509.

Forests, No. 9.

WITH the information now before them, the Government do not consider it desirable to extend the Red Sanders plantation at Codur.

(True Extract.)

(Signed) D. F. CARMICHAEL,
Secretary to Government.

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

Exd. A. Grubert.

509
4

FOREST, No. 29.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 22nd March 1876, No. 804.

Read the following papers:—

From Captain CAMPBELL WALKER, Officiating Inspector of Forests, to the Hon. D. F. CARMICHAEL, Secretary to Government, Revenue Department, dated Ootacamund, 19th November 1875, No. 677.

In accordance with the instructions conveyed in paragraph 3 of G.O., No. 1,016, dated 6th July 1875, I have the honor to forward statements showing the expenditure and estimated receipts of the existing plantation at Codur, from which it will be seen that the net profit at the end of forty years from date of commencement may be fairly reckoned at Rupees 21,000 after debiting the plantation with all charges including rent of land, interest on outlay, and percentage of supervision.

2. Mr. Yarde considers that an extension of, say, fifty acres would cost one-third less owing to the best system of planting being now thoroughly understood.

3. The outlay would therefore be Rupees 25,000 in round numbers up to the end of the fortieth year, whilst the receipts from planting entirely with red sanders trees (1,000 to the acre) to be sold at an average price of Rupees 2 each would be Rupees 1,00,000, representing a profit of Rupees 75,000.

4. Referring to the remarks of the Collector and Revenue Board on the subject of natural *versus* artificially-grown trees, the Government are aware that, as a rule, I deprecate expenditure on the latter if a supply of the former can be

Boft. of 11876

REVENUE.

THE BOARD OF REVENUE,

Co., do., do.,

Dated April 19th

Recd.

Encl.

G.O., 19th April 1876, No. 509

APRIL

No. 101-102.

Red Sanders Plantations at Codur in Coimbatore District.—Considering it undesirable to extend the—

maintained and their growth improved by natural reproduction and conservancy, but the case of the red sanders is peculiar. I do not know on what data Mr. Horsley bases his statement that "the supply of the wood is now far in excess of the demand." Messrs. Yarde and Sheffield do not say so.

5. I would, however, only advocate the extension of the plantation if the adjoining land be thrown out of cultivation and can be obtained on moderate terms. On those conditions planting will have a twofold object, viz., the production of timber and renovation of the soil for recultivation with cereals.

ENCLOSURE No. 1.

Statement A.—Exhibiting actual Cost, &c., from 1st January 1865 to 31st December 1875 and estimated Expenditure up to 1904 on Codur Experimental Red Sanders Plantation.

Year.	Actual Cost of Plantation.	Interest at four per Cent. per Year.	Total.	Rent of Land at average in the neighborhood.	Percentage of Deputy Conservator and that of his Office at Rupees 2.	Grand Total.
1	2	3	4	5	6	7
1st January 1865 ...	RS. A. P. 151 9 8	RS. A. P. 6 0 9	RS. A. P. 157 10 5	RS. A. P. 50 0 0	RS. A. P. 43 3 2	RS. A. P. 250 13 7
31st December " ...	289 4 0	17 13 7	307 1 7	50 0 0	47 3 2	404 4 9
Do. 1866 ...	799 1 0	50 3 5	849 9 5	50 0 0	49 3 2	948 12 7
Do. 1867 ...	440 10 0	70 2 9	510 12 9	50 0 0	63 9 2	624 5 11
Do. 1868 ...	751 4 9	103 0 9	854 5 6	50 0 0	68 6 5	972 11 11
Do. 1869 ...	1,086 12 6	150 10 4	1,237 7 10	50 0 0	68 6 5	1,355 14 3
Do. 1870 ...	558 5 3	179 0 1	737 5 4	50 0 0	68 6 5	825 11 9
Do. 1871 ...	420 9 0	202 15 6	623 8 6	50 0 0	91 7 2	764 16 8
Do. 1872 ...	442 2 2	228 12 3	670 14 6	50 0 0	102 0 0	822 14 6
Do. 1873 ...	418 14 9	254 11 0	673 9 0	50 0 0	102 0 0	825 9 0
1st January 1875 ...	217 4 0					
31st July " ...						
1st August " ...						
31st December " ...	*120 0 0	278 5 10	615 9 10	50 0 0	102 0 0	767 9 10
Total...	5,695 13 4	1,542 1 4	7,237 14 8	550 0 0	805 13 1	8,593 11 9
One watchman at Rupees 6 per mensem from 1876 up to 1904, viz., Rupees 72 per annum, with compound interest ...						4,193 10 10
Felling Expenses and Carting.						
12,993 <i>Pterocarpus Santalinus</i> posts, at 4 Annas ...						3,247 0 0
600 <i>Tectona grandis</i> posts, at 4 Annas ...						150 0 0
50 <i>Santalum Album</i> posts, at 4 Annas ...						12 8 0
1,000 <i>Pterocarpus marsupium</i> posts, at 4 Annas ...						250 0 0
6,800 Jungle-wood trees or 6,800,000 lbs., at 4 Annas per 1,000 lbs. ...						1,700 0 0
Carting the above to Railway, at 2 Annas per 1,000 lbs. ...						850 0 0
Digging and carting 324,700 lbs. dye-wood roots, at Rupees 2-4-0 per 1,000 lbs. ...						729 2 10
Collecting 423 cart-loads thinning, at 2 Annas ...						58 8 0
						6,992 2 10
Add compound interest at four per cent. per annum on Rupees 8,593-11-9 for twenty-eight years, from 1876 to 1904 ...						10,784 9 5
						17,176 5 3
Total expenditure at close of fortieth year...						36,950 14 8

* Anticipated expenditure.

OOTACAMUND,
19th November 1875.

(Signed) R. S. JAGO, Major, Deputy Conservator,
In temporary charge of the Office of Inspector of Forests.

ENCLOSURE No. 2.

Statement B.—Exhibiting the anticipated Yield and Return at the end of forty Years of the Codur Experimental Red Sanders Plantation.

Description.	No.	Quantity in Lbs.	Rate.	Per.	Amount.	Remarks.
1	2	3	4	5	6	7
<i>Pterocarpus Santalinus</i> ...	12,993	...	RS. A. P. 3 0 0	Post or Tree.	RS. A. P. 36,964 0 0	
<i>Tectona grandis</i> ...	600	...	3 0 0	Do.	1,800 0 0	
<i>Pterocarpus marsupium</i> ...	1,000	...	1 3 2½	Do.	1,200 0 0	Ten to a cart-load. License for wrought, Rupees 12.
<i>Santalum Album</i> ...	50	5,000	400 0 0	Ton ...	892 13 9	Rate at paid by Rail-way.
Jungle-wood ...	6,800	6,800,000	2 2 0	1,000 lbs. ...	14,450 0 0	At 25 lbs. per tree. One cart-load of 1,000 lbs. per fifty trees.
Dye-wood roots ...	...	324,700	8 0 0	1,000 lbs. ...	2,592 11 2	
Thinnings ...	21,438	4,328,000	0 6 0	1,000 lbs. ...	160 8 0	
Total...					58,060 0 11	
Deduct expenditure as per Statement A ...					36,960 14 8	
Balance in favor of Plantation ...					21,099 2 3	

OOTACAMUND,
19th November 1875.

(Signed) R. S. JAGO, Major, Deputy Conservator,
In temporary charge of the Office of Inspector of Forests.

No. 4,991.

REFERRED to the Collector of Cuddapah for report through the Board of Revenue.

Fort St. George.
29th November 1875.

(Signed) L. A. CAMPBELL,
Under Secretary to Government, R. D.

From W. D. HORSLEY, Esq., Collector of Cuddapah, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated 19th January 1876, No. 13.

As directed by Government in their foot-note, dated 29th November 1875, to Captain Walker's letter, No. 677, dated 19th November 1875, I have the honor to report as follows.

2. In reference to paragraphs 1, 2, and 3 of Captain Walker's letter it is satisfactorily made out that a red sanders plantation of fifty acres would yield to the Government in forty years a profit of Rupees 75,000 estimating the yield at the prices which can be obtained for red sanders-wood naturally grown. I do not believe, however, that artificially-grown red sanders will fetch the same price, as trees in a plantation are generally deficient in heart-wood and consequently the wood is not so valuable. What the actual decrease in the value will be I do not know, and I am not aware that any experiments have been tried to test this. That wood artificially produced as at Codur is not so valuable as the natural production in the forests can very well be understood, as we know that the red sanders tree requires a rocky, barren soil to bring it to perfection, while at Codur the plantation has no rock in it at all.

3. It is still doubtful whether a red sanders plantation will prove to be a profitable work. But, admitting that such a work will be profitable, I ask why Government should engage in a work which will yield nothing for, say, thirty years, when the forest may be made to yield at once, according to Captain Walker's estimate, certainly seventy-five per cent. on the outlay. He says the natural yield of red sanders in the Cuddapah Forests is not equal to the demand and that my assertion to the contrary is not supported by Mr. Yarde. That officer is thoroughly acquainted with the forests in this district, and I attach considerable value to his statements. Mr. Yarde says as follows:—

"I myself do not advocate planting, more especially this particular kind (red sanders), since it is to be had in large quantities in certain localities suited to their growth in the range of hills from Tirupatti right into Cuddapah Taluq. I do not consider for my district the demand in excess of what is to be obtained for some years yet to come. I have a small collection of roots on hand which as yet there seems to be no demand for. With improved conservancy the natural reproduction will increase, I have not the slightest doubt. Calculating approximately the forests of the Pullampett Taluq at one-fourth of the total area of square miles and one-eighth of that as red sanders-growing localities we can estimate it at thirty square miles. Deducting ten for the eastern range of hills (Ellikonda), where this species is not to be found so plentifully, twenty square miles on the western range (Palkonda) may not be an overestimate."

4. I can add nothing to the above in favor of my assertion.

TRANSFERRED to the Conservator of Forests.

(By order.)

MADRAS,
27th January 1876.

(Signed)

A. GALTON,
Acting Secretary.

No. 219.

OFFICIAL MEMORANDUM.

[Reference accompanying report from the Collector of Cuddapah transferred by the Revenue Board.]

THE Conservator of Forests has the honor to forward the above for the consideration and orders of Government.

2. From the concluding paragraph of Mr. Horsley's letter it would appear that Mr. Yarde had altered or modified his opinion as it was chiefly at his suggestion and request that Captain Campbell Walker mooted the question of an extension of the red sanders plantation at Codur in his Cuddapah Inspection Report.

3. The advantage of the preparation of careful estimates of expenditure and results and full discussion before any planting operations are undertaken is fully exemplified in this instance.

4. The Conservator agrees with Mr. Horsley that plantation-grown wood would probably not be equal in quality to that found in the hill forests, but the proximity to a market and greatly increased yield in comparison with the area

would perhaps counterbalance this. The present plantation was only undertaken as an experiment, and until results practically prove it financially a success he is not of opinion that it should be extended.

5. The proper conservation of the hill tracts under natural growth has hitherto been impossible without a Forest Act, and they have suffered very severely, cowherds, &c., going in with bill-hooks and cutting down the saplings and young trees by thousands, cattle and goats being very fond of the leaves. Under the Forest Act, which will now probably become law in this Presidency, the Conservator believes that these tracts can be so treated as to meet all demands and yield a handsome yearly revenue.

16th February 1876. (Signed) R. H. BEDDOME, Lieutenant-Colonel,
Conservator of Forests.

To the Secretary to Government, Revenue Department,
through the Board of Revenue.

SUBMITTED to Government with reference to paragraph 3 of G.O., dated 6th July 1875, No. 1,016.

2. It appears that on reconsideration the Deputy Conservator does not advocate any extension of the Red Sanders plantation at Codur, and the Conservator expresses his concurrence in this opinion.

(True Copies and Extract.)

Acting Secretary.

To the Secretary to Government, Revenue Department.

Copy to the Collector of Cuddapah.
,, to the Conservator of Forests.

Exd. A. Grubert.

Sp 1 July 1876-68

80/1299

Resum 1876. & for

Board of Revenue,

MADRAS.

PROCEEDINGS, 22ND MARCH 1876, No. 804.

Dy 29 9 11 12 16

Encl.

Received 30-3-76

MARCH.

Forest, No. 29.

Red Sanders Plantation at Coday—in Cuddapah District.—Submitting to Government Collector's report regarding —.

Do 509-19 29 June 1876 with notes.

88 509

with the suspension of the
before them. The fact is that the
is accurate so as to be in the
sawyer's plantation at Coday.

19 April 1876

14 St. John's Road, New York City
21 Old Convent Road, St. George's

64

4-4-76

744436 11/10/1896