M.R.O. 1—30,000—16-10-29.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1708 Press Mis.
358-359

Dated 15th. June 1869

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 15th June 1869.

No. 358. Read the following Proceedings of the Board of Revenue, dated 13th May 1869, No. 3,251:—

Read the following letter from the Collector of Madras, to the Acting Secretary to the Board of Revenue, dated Sydapet, 22nd March 1869, No. 78.

With reference to paragraph 2 of the Proceedings of the Board of Revenue, dated 14th May last, No. 3,540, I have the honour to forward, herewith, letter from the Acting Sub-Collector, transmitting a very interesting report by Dr. Thompson, Superintendent of the Jail at Chingleput, on his experimental cultivation of Carolina paddy.

2. Seed was distributed to several other parties in this district; but as, with the exception of Rajagopal Moodeli, Shotriemdar of Manoly, none of them have reported the results of their experiments in planting it, I send Dr. Thompson's report alone.

3. The Shotriemdar of Manoly says, that although he took every care and planted the eight measures of seed given to him, at apparently a favourable season, not one seed germinated, as it appears, however, that for some days after the seed was put down, there was continued rain; the seed may have rotted, and this, I think, the more likely, as I have noticed several times; that Carolina rice does not require much water, and would, in fact, be destroyed if flooded as ordinary rice usually is in this country; Carolina rice being, as observed in one of the Board's late Proceedings, more of a manavary crop than anything else.

Enclosure No. 1.

From the Acting Sub-Collector, to the Collector of Madras, dated Chingleput, 7th January 1869, No. 3.

I have the honour to forward a report by Dr. Thompson, Superintendent of the Jail at Chingleput, on his experimental cultivation of Carolina paddy. Three documents, four samples, and three plans (the latter to be returned) form enclosures.

2. On the 30th July last, nine measures of seed were forwarded to that officer. The results of the cultivation of one measure forms the subject of his report, from which it appears that the out-turn was 122 measures, or 122 per cent. gross profit on the seed sown.

3. Great credit is due to Dr. Thompson for the care which has marked the conduct of this experiment, and for the scientific knowledge which he has brought to bear upon the subject.

4. It will be observed that he recommends the immediate increase of the strength of the prisoners in the Jail with the view of carrying out the cultivation of this grain on a large scale on certain land in the vicinity of the Jail at Chingleput. The enclosures to his letter will put you in possession of the outline of the scheme.

5. I am not in a position to say whether Government would be prepared to consider Dr. Thompson's proposition in its entirety at present. Should it not be prepared to do so, I have the honour to suggest, provided the principle of the proposition be approved, that, after the demolition of the fort has been carried out, in accordance with the instructions already received from Government, about eighteen cawnies of land within the fort, attached to the present Jail, and supplied with water-holes, wells, and small tanks, will be available for a project such as that proposed by Dr. Thompson. A portion of this extent is at present cultivated by convict-labour with irrigated hay, and as it is on this same land that Dr. Thompson has carried out the experiment under notice, it seems to be well suited for the execution of the plan now suggested.

6. The advantages would be the following: the thing can be commenced at once; no extra expense to Government; the healthy and useful character of the labor; the great body of convicts

conditions

are cultivators by profession; the labour would be intramural; each convict on his release would carry a good opinion of the new grain to his village, and be in a position to aid its introduction there. According to Dr. Thompson's calculation the extent proposed would feed probably about 108 convicts out of the 150 generally in the Jail, leaving the value of the straw, husk, and bran for contingencies and to help to feed the other 42.

7. Although the other experiments at present being carried out in the sub-division have not been completed, I have taken the liberty of forwarding Dr. Thompson's report and project, owing to the new feature which the latter has given to the subject.

8. Dr. Thompson's opinion on the results of his experiment, as well as the deductions which he has drawn therefrom, will be considered, when submitting my general report on the other trials made during the past season, in the sub-division.

ENCLOSURE No. 2.

From D. R. THOMPSON, Esq., M.D., Superintendent of Jail, Chingleput, to the Sub-Collector of Madras District, dated——December 1868.

HAVING grown experimentally some of the Carolina paddy which you sent me with your letter, dated 30th July 1868, I have the honour now of being able to report upon it as requested by you.

2. As I had not seen the Carolina paddy grown before, and some of the results contained in the reports of previous attempts to grow it, which you sent me, not being very encouraging, I undertook the experiment with some diffidence, although very anxious to give it a fair trial; but as it germinated, grew, and matured so easily, I now feel rather surprised that there should have been so many unsuccessful attempts made to cultivate it in India. In short, there appears to be no more care required with this grain, than that which should be given to raise a good crop of indigenous rice.

3. In order that I might arrive at some reliable conclusion by a single trial, from which method of culture the greatest advantage in all points may be obtained, for, after practice, it was cultivated as a *dry* and *wet* crop, and these two methods were investigated further by sowing the seed broad-cast and by transplantation.

4. The surface-soil for about a foot and a half in depth, on which the crops were raised, was of made-up earth, (the place was a ditch that had been filled in with stones and rubbish,) and consisted of a kind of sandy clay, richly manured by the surface-silt from the bed of the tank, which is behind the fort. Two or three crops of hay had, however, been cut from the ground since it was last silted.

5. WET CULTIVATION.—The wet nursery and beds were prepared, as the Natives do, by trampling in leaves and their twigs, and when these were well blended with the mud, the seeds which had germinated, by being submitted to the usual process of soaking, were sown broad-cast into one wet bed and a nursery.

6. It would be as well to mention that an experienced cultivator examined the paddy you sent me, by pealing off the husk from a few grains, and advised me not to sow the seeds without having them first well dried, as a starchy white spot could be seen occupying about a third of the grain of rice which diminished the size of the germinal spot, and which, if not removed by drying, he said, the seed would either not grow, or, if it did, it would not reach maturity easily, or be so productive.

7. After the seed was dried, this spot was quite removed; the grains of rice became more transparent throughout their substance, and the germinal point was increased in size.

8. I do not know that this precaution is necessary in all cases; but it would be well, I think, to adopt it, as it is known that a good strong germination in plants, gives them a better chance to reach maturity. Wheat seed affected with the smut, for instance, will germinate and grow, but the most part of its produce will be diseased with the smut, or be entirely abortive.

9. The seed in the wet beds were sown on the 10th of August; a few days after these beds were covered with the thin blades of paddy plants, and in a month, from the date of sowing, these plants, were two feet high, and their roots measured nearly five inches in length.

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10. On the 10th of September, when the plants in the wet nursery were a month old, they were transplanted into No. 2 wet bed; the heat at the time was great, so that the plants withered much, and were in consequence thrown back for about a couple of weeks; but after recovering, they grew rapidly, and when the other bed was reaped on the 30th of November, they were in full ripe ears, and of nearly the same height. This bed was cut fourteen days after, and yielded 61½ measures, being an increase of 123 fold.

11. On the whole, these beds may be said to have grown without any trouble; they had simply to be watered daily, and when the grain had ripened, had to be protected from birds. They were, however, greatly blown about by strong winds and rain at the beginning of November, when the plants in the broad-cast bed being heavy with ears, fell to the ground, and suffered much in consequence.

12. DRY CULTIVATION.—These two beds and nursery, which are exactly of the same size as the wet bed and nursery, were well ploughed, cleared of weeds, and levelled.

13. On the 13th of August the nursery was sown with dry seed, the earth again ploughed, raked, and watered, and on the sixth day, a few young shoots were observed; after this time the bed was gradually covered, those plants evidently appearing first which were nearest the surface.

14. They were transplanted when a month and seven days old, and although seven days older at this time than the plants in the wet nusery were when they were transplanted, yet, these were not near so well grown or healthy-looking, and you may remember their pale and sickly appearance at the time you visited the Jail, and recommended that I might try and convert the crop into a wet one. Acting on your advice I did so, and the effect was great; they grew rapidly, became quite healthy, tillered well, and although much shorter than those in the wet bed, they were not behind in the quantity of grain produced, the ears being as numerous and equally as long when the crop was reaped, which was on the 21st December. It yielded 60½ measures, giving an increase of 121 fold.

15. The broad-cast bed was not sown until the 31st August; the seed took about seven days to germinate, and was also slow in growth. When they were a month old, they were very little better in appearance and size than the common Indian paddy; but after being converted into a wet crop, which was when the plants were nearly two months old, they grew rapidly, and tillered even better than all the others. They are now in car, and I expect will give the largest quantity of grain.

16. This experiment has not only convinced me that the grain is easy of culture, and can be grown at all times of the year if water is at hand, but I have also found that the plant is almost incredibly hardy.

17. In some of the reports sent to me it is said by the experimenters, that their transplanted crops failed in consequence of injury to the roots when removed from the nursery; but as I know that the order to which the cereals belong is characterised by the tenacious vitality of its plants, as is seen in the various grasses, I determined to put it to the test.

18. When the transplantation took place, twelve plants were treated in the following manner:—Six had their roots cut away from about the middle, and the other six had theirs removed entirely, which were cut off as near to the crown of the stem as was possible without injury to it; they were then planted without any particular care, and not a single plant of the twelve died; they grew and bore ears equally as well as the other transplanted plants in the same bed. Nothing can be more conclusive from this than the plants will almost sustain any kind of ill-usage, and still grow if cared for afterwards.

19. Although in this trial the transplanting in both cases was completely successful in regard to the quality of the paddy and size of the ears, I am inclined at present to give preference to the broad-cast method of culture; the former did not tiller so well, which is a matter of great importance in the increase obtained from a given crop.

20. But I must mention that I transplanted rather late; the plants were large, and in one case more than a month old, and were in consequence greatly thrown back; this may have prevented the tillering to some extent.

Conditions

21. I will, however, have the honour of addressing you on this important point again in a short time, when I trust I will be able to report more positively on the merits of transplanting, and if by an experiment, which is now being carried out, it can be proved that by early transplanting the tillering of the plants is not prevented, then I would with certainty recommend transplanting to be generally practised, even to the exclusion of the simple broad-cast method, as the plants, when they receive a check in their growth by transplanting, do not come up to such an height, and are much stronger in their stems and less liable to be broken and destroyed by the winds and rain.

22. To secure crops from the liability to injury from high winds, (a contingency to which the Carolina paddy is particularly exposed on account of its height of stem,) some have recommended to prune the plants by cutting away the upper broad leaves, or blades, a little before the ears appear, which is also a practice carried out in different parts of India on the common paddy; this practice is said to lighten the plant and lessen the extent of surface which is exposed to the winds.

23. But when the function of these parts of the plant is considered, it will be seen that the practice must be very injurious; the leaves assimilate the various products which are taken up by the roads, from the soil, into the juices which are required for the formation of the grains of rice; so that when they are removed, the rice must suffer either in quality or in quantity. A negative proof of this is observed in the gradual withering and drying up of the leaves, which immediately follow the ripening of the ears; they are, in short, of no further use, and die away. Again, if the leaves are cut, I find that the plant struggles as it were to repair the injury; new leaves rapidly spring up, and even those that are cut, shoot out to nearly their original length; and all this no doubt at the expense of the sap which was intended for the formation of the rice grain.

24. The remedy, therefore, in my opinion, is to be looked for by a proper regulation in the different districts, of the time for sowing. The plants attain maturity in from four to four-and-a-half months, and therefore should be sown, so that when in ears, which is at about the middle of the third month, the windy and stormy time of the season will have passed away; or if on account of having to take advantage of the necessary water-supply which the rain affords, this arrangement cannot be made, the remedy must be got from judicious transplanting, so as to give the plants strength to bear up with the winds.

25. Water-Supply.— I regret that although the water supplied daily to these beds was correctly registered, yet it does not afford sufficient data for estimating the quantity which would be required for a piece of ground of equal size in any other situation; the ground, as I have already said, is a ditch, which has been filled in with stones, so that the spaces between the stones form cavities for the reception of the water after it has percolated through the soil. The largest quantity supplied to a single bed in one day was 800 buckets (the dimensions of the bucket being cubic inches;) the average to the wet beds 200; but 250 were given daily when the ears were maturing. I think it very essential that beds should be kept constantly flooded when the ears are filling with rice, and that the water should be above the crowns of the plants; if the supply of water is small at this time, some loss will be sustained, as the grains in the upper spikelets mature before those in the lower ones are formed, and the latter in consequence become abortive.

26. On the other hand, during the second month, as little water as possible should be given, so as to check the upward growth, give time for tillering, and the formation of good broad leaves; it is also useful in destroying the water weeds, as shown in the report upon the culture of Carolina paddy in North America.

27. Produce.—The portion of ground occupied by each crop measures exactly 57 feet by 27 or 1,539 square feet, being about the ninth part of a quarter of a cawny, or by English measurement, the 28th part of an acre.

28. On each half a Madras measure was sown, although I believe three times as much of the Indian paddy would have been strewed by the natives on a piece of ground equal in size.

29. If in estimating the productive value of Carolina paddy the plants of this experiment be taken as a standard, a bed sown with half a measure should yield 260 measures in return, as the lowest average number of ears on a plant was four, and the average number of grains in each ear

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was 130, which when multiplied gives 520 half measures. But the quantity really obtained from the crops which were not destroyed by the winds was 61½ measures or 123 fold; so that by an inference drawn from this result, it would appear that about 8,126 grains, out of the number of grains of Carolina paddy contained in half a measure, viz., 16,666 did not come to maturity. In reality, however, only 5,090 seed grew, for this was the number of the stubble carefully counted on the bed after the crop was reaped, being less than half the quantity sown.

30. When the crop (123 fold or 61½ measures) is considered in reference to the extent of land on which it was grown, viz., 1,539 square-feet, (which I believe is of greater importance amongst the natives than the quantity of seed sown,) the out-turn is very large; at the above rate a cawny of land sown with Carolina paddy would yield 2,301 measures of paddy, which when boiled and pounded would produce 1,150 measures of rice, and this at the rate of seven measures for a Rupee to the crop (the bazaar selling price) would give 164 Rupees.

31. Nature of the grain.—If the stems of the plants are not broken, no appreciable loss takes place by any falling off of the grains from the ear, as the former are very strongly attached to the ear; so that in threshing, the whole of the paddy must be removed by the first operation. On the other hand, the husk is more easily separated from the rice than it is in the common paddy; this is of great advantage in the consideration of labour when it has to be pounded.

32. The rice produced after boiling it in the husk is larger, more translucent, and altogether nicer looking than even the Manavar Semba, (the best kind of Indian paddy,) and weighs an ounce-and-a-half more in each measure than the latter, as will be seen from the specimens of rice herewith sent, which were subjected to the same process of boiling, drying, and pounding to remove the husk, and from the following results tabularly arranged:—

Weight of one Chingleput measure of Paddy before boiling.

Manavar Semba	Ounces 42¾
Kar	do. 42½
Carolina	do. 43½

After boiling and drying.

Manavar Semba	Ounces 44
Kar	do. 44
Carolina	do. 44

Weight of rice obtained from the above (including broken rice).

Manavar	Ounces 32
Kar	do. 32
Carolina	do. 32½

Measurement of the Raw Rice.

Manavar	Measures ½ and $\frac{3}{16}$
Kar	do. ½ do. $\frac{3}{16}$
Carolina	do. ½ do. $\frac{3}{16}$

Quantity of Tower from the above.

Carolina	a little more than $\frac{3}{16}$ of a measure.
Kar	do. $\frac{4}{16}$ do.
Manavar	do. $\frac{5}{16}$ do.

Quantity of husk.

Carolina	Measures ½ and $\frac{3}{16}$
Manavar	do. ½ and $\frac{4}{16}$
Kar	do. ½ and $\frac{4}{16}$

33. From the foregoing observations the advantages to be derived from the introduction of the Carolina paddy are the following:—

The plants are exceedingly hardy, will flourish in situations where the common paddy will only grow well. From its tendency for tillering, the largeness of the ear, and the greater number of grains in each ear, it will produce more with less seed on a given piece of ground. The rice is

new and weighs heavier than any of the Indian varieties. The straw is better in quality, and far exceeds the other in quantity.

34. As the Carolina paddy possesses these advantages, it would be of great value to the people if it was properly introduced into India; and I am of opinion that a very good way of making a beginning on a large scale would be to get the different Jails in the Presidency to cultivate it; the benefits thus derived would be threefold; a large saving to Government, the prisoners would gain experience in its culture, and be induced, perhaps, to grow it when released from Jail, as most of them are cultivators; and it would leave the amount of grain now purchased for Jails in the market, and be perhaps the means of reducing the price of it also.

35. The total expenditure for dieting the prisoners in the Jails of the Presidency was Rupees 4,73,066 during the year ending 31st March 1868. Three-fourths of this amount at least is expended in rice and other grains, which would be saved if the prisoners are made to cultivate their own.

36. In continuation of this report, I do myself the honour, further of bringing to your notice, that I have for some time past had in mind, a project for employing convict-labour with this end in view.

37. The land which I have carefully examined, situated about half-a-mile to the west of the fort, seems very well adapted for carrying it out.

38. As I am willing and anxious to carry out this Farm project, I beg to offer my services to undertake to do it by the convict-labour of the Jail at Chingleput; but to conduct it with success, and with profit to Government, a larger number of convicts than there are at present at this station would be required.

39. I have given it much thought and consideration, and take the liberty, therefore, of forwarding with this, such estimates and plans as, in my opinion, would be necessary to house the number of prisoners required for the undertaking. These have been drawn up for me through the kindness of the Executive Engineer at this Station.

40. I find that from 4 to 500 convicts would do the work well, and feel confident that at least half a square-mile of land could be put thoroughly under cultivation in two years' time, and produce crops which would clear the outlay for this period.

41. The only real extra expenditure which would be incurred is, that for the new building, (as wherever the convicts are, they must be kept and guarded,) and such contingencies as the purchase of bullocks, ploughs, carts, etc.

42. In the estimate for the Jail establishment, an increased rate of payment is proposed, as the posts of the subordinates and servants would be more responsible ones, requiring greater vigilance and attention on their parts, to prevent the grain being stolen or destroyed.

43. The land in question is near to the Jail, is admirably situated with regard to its water-supply, having a deep broad nullah of water along its east border, which has never been seen dried, and a fine spring channel (just now silted up) which yields a plentiful supply of water for more than six months in the year running through its centre. I need scarcely add, that the night soil and urine of five hundred men, and the surface-silt from the bed of the tank behind the fort, properly applied to this land, would so enrich it, as to secure a yearly rotation of crops, and enhance the nutritive quality of the grain by increasing the quantity of gluten contained in it.

44. The average quantity of fæces and urine passed by one man per day, during this weather, is half a pound of the former and about three pounds of the latter; so that the excreta of one convict carefully collected during the year would be sufficient for a cawny of land.

45. The estimate for a new Jail is roughly calculated by the Executive Engineer at about 30,000 Rupees, after deducting convict-labour. This is a large amount, but a single crop of Carolina paddy from half a square-mile will more than clear it, the value of the latter being 38,988 Rupees, at the rate of 164 Rupees to the cawny for the rice alone, without taking the straw, tower, and husk into account.

46. The buildings now used by the convicts can be converted into barns for keeping the grain.

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ENCLOSURE No. 3.

Estimate of Present and Proposed Police Guard for the Jail at Chingleput to carry on a Farm project.

PRESENT GUARD FOR THE JAIL AT 1 CONSTABLE FOR EVERY 7 PRISONERS.				PROPOSED GUARD FOR THE JAIL AT 1 CONSTABLE FOR EVERY 10 PRISONERS.				
No.	Designation of Office.	Present Monthly salary.	Amount for the year.	Proposed No. of Guards.	Proposed Monthly salary.	Amount for the year.	Monthly difference.	Annual difference.
		RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
2	Head Constables ...	42 0 0	504 0 0	2	42 0 0	504 0 0		
3	Deputy-Constables ...	22 4 6	267 6 0	3	33 0 0	396 0 0		
21	Constables	136 1 9	1,633 5 0	40	300 0 0	3,600 0 0		
	Total...	200 6 3	2,404 11 0	.....	375 0 0	4,500 0 0	174 9 9	2,095 5 0

CHINGLEPUT JAIL,
26th December 1868.

(Signed) D. R. THOMPSON, M.D.,
Superintendent of the Jail.

Estimate of Present and Proposed Establishment for the Jail at Chingleput to carry on a Farm project.

PRESENT ESTABLISHMENT FOR THE JAIL CONTAINING 177 PRISONERS.				PROPOSED ESTABLISHMENT FOR A JAIL CONTAINING 450 PRISONERS.				
No.	Designation of Office.	Present Monthly salary.	Amount for the year.	Proposed No. of Officials.	Proposed Monthly salary.	Amount for the year.	Monthly difference.	Annual difference.
		RS. A. P.	RS. A. P.		RS A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1	Jailer	75 0 0	900 0 0	1	125 0 0	1,500 0 0		
1	Deputy-Jailer	20 0 0	240 0 0	1	50 0 0	600 0 0		
1	Jail Writer	35 0 0	420 0 0	1	70 0 0	840 0 0		
1	Head Warder	9 0 0	108 0 0	2, one on 25 Rs., the other on 20 Rs.	45 0 0	540 0 0		
8	Warders at 8 Rs. each.	64 0 0	768 0 0	8 Warders on 15 Rs. each.	120 0 0	1,340 0 0		
4	Warders at 7 Rs. each.	28 0 0	336 0 0	5 do. on 10 do.	50 0 0	600 0 0		
				5 do. on 8 do.	40 0 0	480 0 0		
	Total...	231 0 0	2,772 0 0	.....	500 0 0	6,000 0 0	269 0 0	3,228 0 0

CHINGLEPUT JAIL,
26th December 1868.

(Signed) D. R. THOMPSON, M.D.,
Superintendent of the Jail.

Estimate for the undermentioned articles that will be required for the Jail at Chingleput to carry on a Farm project.

Description.	Number required.	Cost for each.	Amount.	Total.
		RS. A. P.	RS. A. P.	RS. A. P.
V Carts	30	50 0 0	1,500 0 0	
Stone Carts	10	30 0 0	300 0 0	
Bullocks ... ... Pairs...	10	60 0 0	600 0 0	
Total ..	.....	.....	.....	2,400 0 0

CHINGLEPUT JAIL,
26th December 1868.

(Signed) D. R. THOMPSON, M.D.,
Superintendent of the Jail.

WITH this letter the Collector forwards a report (enclosed in a letter from the Acting Sub-Collector) from Dr. Thompson, lately Superintendent of the Jail at Chingleput, regarding certain experiments made by him in the cultivation of Carolina paddy.

2. The following is a brief outline of the measures taken by Dr. Thompson, and their results.

3. The cultivation appears to have been tried under various conditions, the seed being sown broad-cast as well as by transplantation, and the paddy cultivated both as wet and dry crops.

4. The quality of the soil in which these experiments were made is described as being, for a depth of a foot and a half, a kind of sandy clay, manured with surface-silt from the bed of an adjacent tank.

5. Preparation for wet cultivation was made in the ordinary native way, and Dr. Thompson's observations on the subject of drying the paddy well before using it for seed seem to be valuable.

They were sown in different beds and when (after the lapse of one month,) the plants were about two feet in height, those in one bed were transplanted.

The untransplanted crop was reaped in the latter end of November, (the seed having been sown in the middle of August,) and the transplanted crop in December.

6. No trouble was experienced in the cultivation, the beds merely requiring to be watered daily.

7. The experiment in dry cultivation was also made in two separate pieces of ground, but does not appear to have at first promised favourably, and both crops were therefore converted into wet.

8. The broad-cast crop was the most successful: it was converted into wet when the plants were nearly two months old.

9. From these experiments Dr. Thompson has formed his opinion that Carolina paddy is easy of cultivation, and can be cultivated at any season of the year, when water is at hand, and moreover that it is extremely hardy.

10. In proof of the latter, he states that he tried the experiment (when transplanting twelve plants) of cutting off half of the roots of six, and the entire roots of the rest, and yet all the plants grew.

11. He remarks on one objection to the plant, which is its great height as compared with Indian rice, which renders it liable to be injured by high winds, and suggests that care should be taken to sow the seeds at such a season, that the plants should attain their full height at a time when little wind is to be expected.

12. With regard to the water-supply, it appears that the crop should be flooded during the first month, but should receive little water during the second; exact data as to the quantity not however being given owing to the nature of the sub-soil which consists, where the experiments were made, of loose stones, through which the water percolated.

13. The extent of land occupied by each of the four experimental crops was about the 28th part of an acre, and the produce which was 123 fold of the seed sown, is very large. Dr. Thompson estimates that a cawny of land sown with this paddy would yield 2,301 measures, which when boiled and pounded, would produce 1,150 measures of rice, the value of which would be (at 7 measures per Rupee) Rupees 164.

14. As regards the quality of the rice, Dr. Thompson reports that it is altogether superior to the best kinds of Indian rice, and that the husk is much more easily removed.

15. A comparative Statement of the bulk and weight of Manavar, Kar, and Carolina paddy shows that the latter is decidedly superior, and Dr. Thompson sums up the advantages of the latter, which are, its extreme hardiness, the large size of the ears, and the greater number of grains in each, the superior quality and weight of the rice, and the superiority of the straw both in quality and quantity. He mentions, too, that the seed sown was only one-third of what would have been the case with ordinary paddy.

16. Dr. Thompson goes on to recommend further experiments on a larger scale, and the employment of convict-labour for the purpose, and he submits proposals for carrying out this plan at Chingleput.

17. The Board resolve to submit Mr. Fano's letter, with its enclosures, for the information and orders of Government.

They regard the report as very valuable, and observe that it tends to confirm their opinion* already expressed in favour of more extensive and systematic experiments in the cultivation of this grain.

* Proceedings, 8th March 1869, No. 1,544.

18. Dr. Thompson has now left Chingleput, and this alone is sufficient reason for not proposing that the scheme should be carried out even were it otherwise unobjectionable; the additional ground, however, which will be made available by the demolition of the fort might be profitably employed in experimenting on a larger scale in the immediate vicinity of the scheme of the present experiments, and with the aid of the convicts now at Chingleput.

19. The Board regret that steps were not taken to ensure the receipt of reports from the other parties to whom seed was supplied.

20. The fact established in respect to this kind of rice encourage the Board to recommend further exertions to endeavour to make its introduction general.

conditions

The Collector of Tanjore informs the Board, that it is likely to be extensively cultivated in that district; but he has not been able to supply any seed for distribution in other districts. The Board resolve, therefore, to urge Government to obtain a further supply of seed from America.

No. 359. ORDER THEREON, 15th June 1869, No. 1,708.

Miscellaneous.

THE Government have perused with interest, Dr. Thompson's report on the cultivation of Carolina paddy at Chingleput, and they consider that the success of the experiment is due in no small degree to the skill and attention which that Officer brought to bear upon it.

2. Attention to the conditions under which such satisfactory results have been obtained, may prove useful in conducting similar experiments hereafter.

3. The seed was sown in the month of August, having previously been well dried. The soil selected was sandy clay, enriched with silt from the bed of a tank, and where wet cultivation was employed, leaves were incorporated with the soil of the nursery-bed. But a larger share of success appears to have attended the cultivation of the paddy which was sown broad-cast on dry land, and which was not irrigated until two months had elapsed.

4. The result of this trial strengthens the opinion hitherto entertained by the Government, that the naturalisation of Carolina paddy is perfectly feasible, and that common care is alone requisite to the success of preliminary experiments. It is observed that, in most of the cases where the paddy has been cultivated under the supervision of a Government official, good crops have been obtained.

5. Paragraphs 5 and 6 of the Acting Sub-Collector Mr. Crole's letter, under date 7th January 1869, No. 3, which transmitted Dr. Thompson's report, will be referred to the Judicial Department.

6. The Board will be requested to state the quantity of the further supply of seed required from America.

(True Extract.)

(Signed) R. A. DALYELL,
Acting Secretary to Government.

To the Board of Revenue.
„ the Judicial Department.

Exd. G. A. Turton.

2. Attention to the conditions

Revenue Department.

No. 1708.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 15th June 1869.

Read the following. Proceedings of the Board of Revenue.

Submitting letter from Collector of Madras forwarding report of Doctor Thompson Superintendent Chingleput Jail on experimental cultivation of Carolina Paddy, and recommending to obtain further supply of seed from America.

} H. C. 13th May 1869 No. 3251.

The Government have pleasure in bringing to the favourable notice of the Secretary of State for India Dr. Thompson's report on the cultivation of Carolina paddy at Chingleput, and they consider that the success of the experiment is due in no small degree to the skill and energy which that officer brought to bear upon it.

2. Attention to the conditions

Govt. of Madras.

REVENUE.

Proceedings of THE BOARD OF REVENUE, &c., &c., &c.

Dated June 15th.

Read

&c. &c., 15th June 1869, No. 1,708.

JUNE.

Nos. 358-359.

Carolina Paddy—Report of its experimental cultivation by Dr. Thompson at Chingleput, reviewed. Board of Revenue to state the quantity of the further supply of seed required from America.

conditions under which such satisfactory results have been obtained may prove useful in conducting similar experiments hereafter.

3 The seed was sown in the months of August, having previously been well dried. The soil selected was sandy-clay, enriched with silt from the bed of a tank, and where wet cultivation was employed, leaves were incorporated with the soil of the nursery-bed. But a larger share of success appears to have attended the cultivation of the paddy which was sown broad-cast on dry land,

and

and which was not irrigated until two months had elapsed.

4 The result of this trial strengthens the opinion hitherto entertained by the Government that the naturalisation of Carolina paddy is perfectly feasible, and that common care is alone requisite to the success of preliminary experiments. It is observed that in most of the cases where the paddy has been cultivated under the supervision of a Government official, good crops have been obtained.

5 Paras 5 and 6 of Mr. Cole's letter under date 7th January 1869, No. 3, will be referred to the Judicial Department.

The

The acting Sub-Collector

which transmitted Dr Thompson's report

6 The Board will be
requested to state the quan-
tity of the further supply
of seeds required from America.

14 Cotton Folkes Dep. Rec. Dept 16
5 — Jmd. Dept 1