Educational (1896) Department.

ORDINARY PRINTED.

G.O., No. 646

DATED 16-10-96

INDEXED.

[Despatch Abstract.]

College of Agriculture.

Recording, with remarks, report on the working of the — during 1895-96.

BACK PAPERS.

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Government {1896} of Madras.

EDUCATIONAL.

Recd. } 1896. *Enclosures*

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G.O., No. 646, 16th October 1896.

OCTOBER.

College of Agriculture.

Recording, with remarks, report on the working of the — during 1895-96.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

Read—the following papers :—

From the Honourable Mr. D. DUNCAN, M.A., D.Sc., LL.D., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 15th September 1896, No. 10134.

I have the honour to submit, for the information of Government, a copy of my Proceedings, No. 10116 of the 14th instant, reviewing the report on the working of the College of Agriculture during the session 1895–96.

Enclosure.

Proceedings of the Director of Public Instruction, No. 10116, dated 14th September 1896.

Read the following letter from W. KEESS, Esq., M.A., M.R.A.C., Acting Principal, Madras College of Agriculture, to the Director of Public Instruction, dated Saidapet, 1st May 1896, No. 303 :—

I have the honour to submit the report of the College of Agriculture for the official year 1895–96. The report has been prepared in accordance with the instructions issued in your Proceedings, No. 4535, dated 17th April 1896. On former occasions, the report on the College was drawn up for the session (July—April), and that on the Farm and Veterinary Hospital for the official year; but in obedience to the orders issued in G.O., No. 759, Educational, dated 8th October 1894, the present report deals only with matters which have occurred during the past official year. As the session terminates on the 30th April while the lectures end about the middle of April (the latter half of April being devoted to examinations), the present and future reports on the College will practically cover a full session. So far as the work of the College is concerned, the alteration of the period dealt with in the report is of little consequence; but with regard to the Government Examinations held at the end of each session, the case is very different, for, under the new arrangement, a year must elapse before they can be mentioned in the report and eighteen months before they can be dealt with in your Proceedings reviewing the report. Comments on examinations held a year and a half previous are liable to lose their force.

2. *Staff.*—There were no changes in the *personnel* of the staff.

Between 22nd November 1895 and 20th December 1895, Mr. S. H. Collins, Assistant Agricultural Chemist to the Government of India, delivered a course of 22 lectures to the students of class III. During the periods mentioned below, Veterinary Lieutenant Clarke, Superintendent, Civil Veterinary Department, instructed the students of classes II and III in Veterinary Science :—

	Class II.	Class III.
18th October 1895 to 14th November 1895 ...	Seven lectures.	Seven lectures and nine hospital classes.
18th February 1896 to 26th March 1896 ...	Eleven lectures.	Eleven lectures and ten hospital classes.

3. *Strength.*—There were 44 students on the rolls on the 31st March 1896, against 47 on the corresponding date in the previous year. The decrease is due to several causes. Four Sudra students (two of them stipendiaries) who joined class I had to leave owing either to their inability to live at Saidapet or to ill-health occasioned by the hardships which residence at Saidapet entailed on them. There is no doubt that Sudras, coming from a distance, are at a disadvantage in a small village like Saidapet. A Brahman can live on the farm and mess at the hostel, whereas a Sudra, unless he is fortunate enough to have a fellow casteman living at Saidapet, must either set up an establishment of his own or reside in a cottage and cook his own meals. The former course entails expense which the average student cannot meet,

while the latter inflicts considerable hardship on a man who has to attend lectures and classes at stated times. I don't think it is practicable to start a hostel for Sudras, for, they are divided into a number of sections which will not mess together. It seems desirable therefore that the orders regarding the encouragement of Sudras at the College should be reconsidered. Another cause which contributed to the fall in numbers is the non-appointment of any stipendiary students by the Mysore Government.

	Class I.		Class II.		Class III.		Total.	
	31st March 1895	31st March 1896.	31st March 1895.	31st March 1896.	31st March 1895.	31st March 1896.	31st March 1895.	31st March 1896.
Europeans and Eurasians ..	..	..	..	..	1	..	1	..
Native Christians	..	..	..	..	1	..	1	..
Muhammadans	..	..	1	..	..	1	1	1
Brahmans	7	6	9	7	16	11	32	24
Non-Brahman caste Hindus.	8	7	2	8	2	4	12	19
Total ..	15	13	12	15	20	* 16	47	44

* Includes two students who rejoined the College with a view to complete the diploma.

4. The annexed statement shows the distribution of students according to the districts from which they come. The decrease in the number of students from Mysore has been dwelt upon in the previous paragraph.

Districts.	Class I.	Class II.	Class III.	Total.
Vizagapatam	..	..	1	1
Gódávari	..	1	..	1
Nellore	..	..	1	1
Cuddapah	..	1	..	1
North Arcot	..	..	1	1
Madras	1	..	..	1
Chingleput	..	1	..	1
South Arcot	..	2	..	2
Tanjore	1	1	2	4
Trichinopoly	..	1	..	1
Madura	1	2	1	4
Tinnevelly	1	1	2	4
Salem	1	..	1	2
Coimbatore	2	1	3	6
Malabar	1	1	..	2
South Canara	..	..	1	1
Mysore	1	..	2	3
Coorg	2	2	1	5
Travancore	1	..	..	1
Cochin	1	..	..	1
Kattywar	..	1	..	1
Total ..	13	15	16	44

5. There were only five district stipendiary students in class I on the 31st March. The two vacant scholarships were originally filled by Sudras, one of whom left as he could not manage to live at Saidapet and the other as he lost his health owing to the conditions of his residence at Saidapet. When these men left the College, it was too late in the session to appoint others to the vacancies.

Names of students.	Districts.	Nominated by	Sections of the population.	Educational qualifications.
1. S. Ramachandran	Tanjore	Collectors ..	Brahman	Matriculation.
2. S. Subramania Aiyar	Coimbatore ..		Do.	F.A.
3. K. Sankunni Nair	Malabar		Non-Brahman ..	Matriculation.
4. N. A. Srinivasachari	Tinnevelly		Brahman	Do.
5. C. S. Viswanathayya ..	Bellary	Principal ..	Do.	Do.
Vacant	North Arcot ..	....	....	....
Do.	Kistna	....	....	....

6. *Examinations.*—The following table gives the results of the Government Technical Examinations held in April 1895. The percentages of passes in April 1894 and the names of the teachers responsible for the different subjects are added.

Subjects.	Number presented in April 1895.	Number passed in April 1895.	Percentage of passes in April 1895.	Percentage of passes in April 1894.	Names of responsible teachers (April 1895).
Agriculture, Advanced	17	4	23·5	41·7	W. Keess, G. Krishna Prabhu, C. Krishna Menon, R. Ramaswami Aiyar, T. V. Narayana Rao.
Veterinary Science, Intermediate, Stage I.*	16	10	62·5	58·8	S. L. D'Silva, T. V. Narayana Rao.
Veterinary Science, Intermediate, Stage II.*	13	11	84·6	61·5	S. L. D'Silva.
Inorganic Chemistry, Intermediate.	15	6	40·0	37·5	W. Keess.
Organic	23	19	82·6	35·3	Do.
Botany, Special	15	15	100·0	81·3	G. Krishna Prabhu.
Physiography, Intermediate ..	21	8	38·1	61·1	Do.
Surveying and Levelling, Intermediate.	13	10	76·9	84·2	R. V. Subramania Aiyar.
Agricultural Engineering, Intermediate.	12	8	66·7	90·9	Do.

* The Superintendent, Civil Veterinary Department, also took part in the instruction.
Note.—Six students secured the diploma in agriculture in April 1895, against four in April 1894.

Only two points need notice—

(1) *The decrease in the percentage of passes in Agriculture, Advanced.*—I understand that most of the failures occurred at the practical and oral examinations. I am very dissatisfied at the manner in which the oral and practical examinations in Agriculture, Advanced, were conducted in April 1895, and I brought the matter to your notice in my letter No. 477, dated 2nd August 1895; but the matter has not yet been disposed of. The class which appeared was above the average and contained men about whose passing I never had any doubt. In the oral and practical examination, marked division (*c*) in the syllabus, for which 40 per cent. of the total marks on the practical side were allotted, each candidate was allowed *six* or *seven* minutes. This portion is supposed to include examination on the following:—

Arable farming with reference to—
(1) General practice.
(2) Agricultural excursions.

The general practice of arable farming forms a large portion of the instruction during the whole *three* years' course. It includes also the greater portion of Agricultural Chemistry. The agricultural excursions were two in number—one to the Anantapur district and the other to the Coimbatore district. I don't believe the man exists in the whole world who could in six or seven minutes satisfactorily test a student's knowledge of such an immense variety of subjects. I am also very much dissatisfied with the method in which the examination in *live stock* was conducted. The time allowed was far too short. Whatever the results may be, I consider such examinations quite useless, and likely to reduce the value of the diploma.

(2) *The great increase in the percentage of passes in Organic Chemistry.*—This simply shows that *very* unequal standards are maintained at the Technical Examinations. The same syllabus was in use at both examinations, the same teacher (myself) prepared the candidates and the attainments of the two sets of candidates were practically the same. The only explanation I can offer for the astonishing increase is the change which occurred in the examinership. In this connection I may state that the varying standards at the Technical Examinations constitute the greatest difficulty which the staff of this College has to contend with in preparing the candidates. Examinations in Veterinary Science form a conspicuous exception. In spite of frequent changes in the examinership, a level standard has been maintained over a number of years.

7. *Course of Studies.*—During the year under report, special syllabuses in "Organic Chemistry" and "Surveying and Levelling" were introduced instead of the Intermediate syllabuses in these subjects. The Intermediate syllabus in Agricultural Engineering was revised and to a certain extent simplified.

The new syllabus in Organic Chemistry is undoubtedly an improvement on the old one, especially as regards that portion which deals with practical work. Under the old syllabus, the practical work consisted of what may be described as "test-tube practice," but under the new syllabus, it consists of testing of vegetable and mineral oils, sugars, starch, &c., manufacture of indigo, extraction of sugar from sugarcane juice and other operations.

The special syllabus in "Surveying and Levelling" was introduced under G.O., No. 882, Educational, dated 16th November 1895. It was drawn up by the committee called under G.O., No. 464, Educational, dated 5th June 1895, with a view to decreasing the number of hours spent by students in preparing themselves for examination in Surveying and Levelling. I fear I cannot report favourably on the innovation for the following reasons:—

First.—Although the hours of work shown in the annual report may be decreased, the men have to devote as many hours out of class to the subject as they did in former years.

Second.—The scales prescribed for the plans to be submitted are too small, especially for the Plane Table and Compass Surveys, which occupy only *eight square inches* of paper. The scales are those used for the preparation of Revenue Survey plans, but are not altogether suitable for class purposes.

The syllabus prescribes that each student should do his field work and plotting separately. In this way the new syllabus is an improvement on the old one, but such an improvement could have been effected by a note to the old syllabus.

The Intermediate syllabus in Agricultural Engineering was revised by the same committee as mentioned above and with the same object in view, viz., to enable the College authorities to reduce the number of hours devoted to the subject. No doubt the alterations made by the committee tend to simplify the subject, but unless the Commissioner for Government Examinations undertakes to correspondingly reduce the standard of the examination, the committee's labours will be in vain. In a subject like Agricultural Engineering, the syllabus simply indicates a standard. The examination really fixes it. I shall address the Commissioner on this subject, which is one of considerable importance.

The order in which the different subjects were gone through is given below. It does not essentially differ from that adopted in previous years. Experience has shown that the work is properly arranged, though the pressure on the time of class II is still excessive owing to the "Plot Cultivation," which the syllabus in Agriculture, Advanced, prescribes, preventing the morning hours of the class being filled up with other work.

First year.

Agriculture, Advanced, Part I (portion).
Inorganic Chemistry, Intermediate (portion).
Botany, Special (whole).
Physiography, Intermediate (whole).
Surveying and Levelling, Special (portion).
Veterinary Science, Intermediate, Stage I (introductory to second year's work).

Second year.

Agriculture, Advanced, Part I (continued).
Do. do. Part II (portion).
Veterinary Science, Intermediate, Stage I (whole).
Inorganic Chemistry, Intermediate (completed).
Organic Chemistry, Special (whole).
Surveying and Levelling, Special (concluded).
Agricultural Engineering, Intermediate (portion).

Third year.

Agriculture, Advanced, Part I (completed).
Do. do. Part II (do.).
Veterinary Science, Intermediate, Stage II (whole).
Agricultural Engineering, Intermediate (concluded).

8. The following statement shows the hours devoted to lectures and out-of-door instruction. It does not include the time spent on work of all sorts which is done out-of-hours, and such work at this College takes up a great deal of time.

The statement is prepared for the session. Were it prepared for the financial year, the hours shown against each subject would include time spent on that subject by two different sets of students during two different sessions. Unless the statement is prepared for the session, it might just as well be left out. I have accordingly so prepared it and hope, if I have committed an irregularity, that the whole of this paragraph will be expunged from the report.

The reduction in the time devoted to Surveying and Levelling is due to the introduction of the special syllabus and is more apparent than real, for work out of class has been substituted for work in class. The reduction will be more marked in future sessions as the new syllabus was only introduced after a certain portion of the session had passed.

Considering the standard of the examination in Agricultural Engineering, no sensible reduction in the hours devoted to it was possible during the session in spite of a simpler syllabus. In fact, unless the Commissioner for Government Examinations insists on the standard of examination not being continuously raised, the number of hours devoted to Agricultural Engineering must be increased.

Subjects.	Lectures.	Hours of practical instruction.	Remarks.
Class I.			
Agriculture, Advanced, Part I	59	99	
Botany, Special	107	88½	Class usually taken in two batches for practical instruction.
Inorganic Chemistry, Intermediate	63	35½	
Physiography, Intermediate	130	..	
Veterinary Science, Intermediate, Stage I.	33	1	Introductory to second year's work.
Surveying and Levelling, Special	24	77	
Museum classes	..	30	
Class II.			
Agriculture, Advanced, Part I	62	46½	Excludes plot cultivation.
Do. do ,, II	31	..	
Veterinary Science, Intermediate, Stage I.	95	62	Eighteen of the lectures by the Superintendent, Civil Veterinary Department.
Inorganic Chemistry, Intermediate	79	74½	
Organic Chemistry, Special	67	27½	A large portion of the practical work not shown, as it was done out-of-hours.
Surveying and Levelling, Special	33	94	Excludes two full days and one half-day spent in the field.
Agricultural Engineering, Intermediate	59½	..	Some of the lectures were in reality practical classes.
Class III.			
Agriculture, Advanced, Part I	115½	129	Excludes 25 days spent on Agricultural excursions, of which 7 days were occupied in travelling and resting, and 18 days in work. Excludes also one full day spent at the water-lift trial.
Do. do. ,, II	96½	17½	Excludes hours in which the class worked in batches at oil-cake analysis, sugar-testing, &c. 22 of the lectures by Mr. S. H. Collins, Assistant Agricultural Chemist to the Government of India.
Agricultural Engineering, Intermediate	78½	110	Division between lectures and practical instruction is approximate. Excludes one full day and two half-days spent on excursions.
Veterinary Science, Intermediate, stage II.	88	95½	Eighteen of the lectures by the Superintendent, Civil Veterinary Department. Of the hours of practical instruction, 28½ hours were taken by the Superintendent, Civil Veterinary Department.
Museum classes	..	25	

9. *Practical work—Agriculture.*—The rainfall of the year was more favourable to the performance of practical work on the farm than during 1894–95.

Class I was instructed in ploughing and other field operations. A certain amount of land was reserved for the practical instruction of the class and was utilized when nothing could be done on any other part of the farm. Field and museum classes were also held.

The practical work of class II consisted chiefly of "plot cultivation." In my last report, I said: "I am not in favour of continuing this portion of the prescribed work, as it hampers the whole of the arrangements during the second year and the men follow a system of agriculture suitable only to very small areas. I shall address you separately on the subject and shall propose 'field cultivation' instead of 'plot cultivation'." As the season began favourably, I decided to give plot cultivation another year's trial. I am, however, confirmed in my previous opinion and shall address you separately about the matter. The usual field classes were held.

Class III made two agricultural excursions—one under the supervision of M.R.Ry. T. V. Narayana Rao, sub. *pro tem.* 5th Assistant, and the other under that of M.R.Ry. Ramaswami Aiyar, sub. *pro tem.* 4th Assistant. The first excursion was made during October 1895 to the Cuddapah district, and the second during January 1896 to the Coimbatore district. The charges incurred were as follow:—

Cuddapah Excursion.

	Rs.	A.	P.
Assistant	34	2	0
Students and muchee	87	8	0
	121	10	0

Coimbatore Excursion.

	Rs.	A.	P.
Assistant	55	10	0
Students and muchee	140	4	6
	195	14	6

Field and museum classes were also held.

Both classes II and III took an active part in the sugar-boiling operations on the farm and thoroughly learnt the procedure of making good jaggery. An experienced man was hired for the occasion. The jaggery made was subsequently tested in the laboratory and found to be an excellent sample.

As practical work in connection with Part II, Agriculture, Advanced syllabus, Class III went through the following:—

(1) Standardizing an acid.
(2) ,, an alkali.
(3) Proximate analysis of an oil-cake.
(4) Determination of grape-sugar by Fehling's solution.
(5) Determination of cane-sugar by the polariscope.
(6) Rough examination of a soil.

All the above are, I consider, most useful. The last three are not prescribed, but the men took much interest in them, especially in the polariscope work.

Veterinary Science.—The practical work of class II consisted chiefly of dissections; that of class III, of hospital practice.

Surveying and Levelling.—For the first portion of the session, the men worked according to the Intermediate syllabus and for the remaining portion, according to the special syllabus. Of the four plans submitted, two were done to the scales which were in vogue during previous years, and two to the scales prescribed in the special syllabus. I have already remarked that the latter scales are too small.

Agricultural Engineering.—The introduction of the new syllabus made little or no difference to the practical work.

Organic Chemistry.—The introduction of a special syllabus revolutionised the practical work in this subject (*vide* my remarks in paragraph 7).

Other subjects.—The practical work in other subjects is prescribed in detail in the various syllabuses and the method of going through the work does not admit of variation. No special remarks are therefore necessary.

10. *Veterinary Hospital.*—The number of patients decreased as shown below :—

	1895–96.	1894–95.
Horses and ponies	135	160
Cattle	145	167
Other animals (chiefly dogs)	100	119

The decrease in equine patients and "other animals" is due to the competition of private practitioners. The fall in the number of cattle patients is explained by the fact that there was no outbreak of cattle disease in the neighbourhood of the hospital. Last year the farm supplied 31 patients suffering from "foot and mouth disease." Excluding these cases, the number of cattle really rose.

The expenditure and income of the hospital were Rs 1,073–11–1 and Rupees 541–2–1, against Rs. 1,175–3–8 and Rs. 531–7–6 during 1894–95. There was consequently a decrease of Rs. 111–3–2 in the net cost of the hospital.

A report by Mr. D'Silva, Second Assistant, who was in charge of the Veterinary Hospital during the year, and the usual tabular statement are appended to the report.

11. *College Farm.*—The farm is maintained for educational purposes, and not for profit or experiment. Under these circumstances, I consider the report on the farm occupies too large a portion of this report. Some years ago a few paragraphs were devoted to the farm, and these were, I think, sufficient, but nearly every review by the Board of Revenue of previous reports has called for further information, and I think the time has come when some steps should be taken to curtail this portion of the report. In paragraph 6 of its last review, the Board required grain and the like to be shown in pounds. All the transactions of the farm are in Madras measures and the books are so kept. No other course is practicable. In order to prepare the statement shown in paragraph 14, it was necessary to reduce Madras measures to pounds. The preparation of the statement from the cultivation book was most laborious and fully occupied the Farm Manager and Bailiff for five whole days. I think something should be done to ease those who have to prepare these lengthy statements. Farms maintained for purely educational purposes in other parts of the world seem to be managed without all this clerical labour and I do not see why the Saidapet Farm should require exceptional treatment.

12. Though the rainfall was deficient and the rain held off at inconvenient times, the year under report was more favourable than 1894–95.

Statement showing the monthly rainfall registered at the College Farm, Saidapet, during 1895–96.

Month.	Actual rainfall, 1895–96.	Average rainfall collected at Saidapet during the previous 25 years.
	INS.	INS.
April	...	0·30
May	0·83	2·22
June	0·82	2·54
July	4·80	4·08
August	3·24	5·04
September	4·85	5·34
October	10·57	11·22
November	11·43	14·85
December	5·26	5·24
January	...	0·45
February	...	0·45
March	...	0·28
Total ...	41·80	51·51

13. The net cost of the farm was Rs. 391–6–7 against Rs. 859–12–8 during the previous year. Considering how the farm is handicapped in its financial arrangements by being attached to the College for educational purposes, I consider that M.R.Ry. R. Ramasawmi Aiyar, Fourth Assistant and Farm Manager, and M.R.Ry. J. Chelvaranga Raju, Bailiff, are worthy of commendation.

Financial statement of the College Farm, Saidapet, for 1895–96.

Farm Receipts.

				Rs.	A.	P.
Field produce				1,474	12	1
Live-stock—	Rs.	A.	P.			
Sale of cows, calves, sheep, &c.	318	12	0			
Sale of milk, butter, ghee, &c.	1,341	1	1			
Covering fees	98	0	0			
				1,757	13	1
Wood and "miscellaneous"				884	15	6
Total ...				4,117	8	8

Farm Charges.

				Rs.	A.	P.
Cattle food—						
Groundnut-cake, &c.	811	1	5			
Dholl husk	277	12	9			
Wheat bran	176	0	3			
Salt	43	2	0			
Paddy straw	86	8	0			
Rice, ragi, &c.	9	9	9			
				1,404	2	2
Manure				85	15	0
Seeds and plants				99	1	8
Cooly labour				2,345	1	7
Machines, implements, &c.				255	13	10
Workshop				24	15	0
Estate improvements				104	13	5
Contingencies				100	15	6
Live-stock				88	1	1
Total ...				4,508	15	3

14. The next statement gives the cropping of the farm. It will be observed that the students saw a sufficient variety of cultivation. In the Board's review of my last report, a tabular statement was shown summarising the yields of various kinds of produce. I think it necessary to point out that the same crop is often raised under dissimilar conditions and the total yield shows really little or nothing. For instance, in the Board's statement, paddy grown *dry* on very poor soil and paddy raised under *irrigation* on a fair soil are treated alike. The real method of judging the crops raised on the farm is to compare them with the crops raised by the ordinary ryot under similar conditions of soil, rainfall, irrigation, &c. This is a matter of observation, and as the result of personal observation, I consider that in most cases there was no comparison. Of course, some crops grown on the farm cannot be seen in the neighbourhood of Saidapet, and in their case, comparison is impossible, but in other cases it is possible. For instance, the sugarcane grown near Saidapet could not compare with that grown on the farm, and the same may be said of paddy and other crops.

Before giving the cropping statement, I think it is necessary to add a few notes on the various fields :—

No. 1.—Very sandy and difficult to cultivate ; subject to cattle trespass.
No. 2 —Western portion sandy and subject to trespass.
No. 3.—Mere sand ; subject to the trespass of the slaughter-house cattle.
Nos. 4 *and* 5.—Soil poor.
No. 8.—Very difficult to cultivate ; subject to the trespass of the slaughter-house cattle.
No. 13.—New land brought under cultivation.
No. 16.—Crop treated purely as a dry crop; western portion of the field is nothing but sand ; crop entirely depends upon rainfall.
No. 17.—Pure sand.
No. 19.—Newly brought under cultivation ; soil slightly saltish.
No. 25.—Subject to the trespass of Fánepet cattle.
No. 26.—The southern strip of this field is pure sand and is on a higher level than the northern strip, and as such the crop entirely depends on rainfall.

Number of fields.	Area in acres.	Crop.	When sown.	When harvested.	Total cost of cultivation.	Total yield.		Yield per acre.				Remarks.
						Grain in pounds.	Straw, hay, or green fodder in tons.	Grain in pounds.	Value of grain.	Straw, hay, or green fodder in tons.	Value of straw, hay, or green fodder.	
					Rs. A. P.				Rs. A. P.		Rs. A. P.	
No. 1. South-Western.	1·25	Yellow cholum for fodder.	31st Oct. 1895.	6th Jan. 1896.	11 13 4	..	1½ hay	..	..	·84 hay	25 3 2	Hay estimated at Rs. 30 per ton.
No. 1. South-Western.	·75	Yellow cholum for grain.	Do.	6th Feb. ,,	7 1 8	260	¾ straw	346⅔	6 10 8	1	8 0 0	Grain estimated at 52 lb. a rupee and straw valued at Rs. 8 per ton.
No. 1. North-Western.	1·50	Horse-gram for grain.	Do.	2nd Mar. ,,	7 9 0	493	*Nil.*	328½	7 8 11	*Nil.*	..	Grain valued at 43½ lb. per rupee.
No. 1. Eastern.	3·50	Dholl and varagu mixed.	29th Aug. 1895.	Varagu on 23rd Feb. 1896; dholl standing.	28 9 6	Varagu 1,292	1·11 straw	369⅛	4 9 2	·32 varagu straw.	1 1 5	Grain valued at 80¾ lb. per rupee and straw at Rs. 3–8–0 per ton. Dholl standing in the field.
No. 2. West ,,	2·56	Varagu and dholl mixed.	19th Sept. 1894.	Varagu on 1st Mar. 1895 and dholl on 6th April 1895.	35 7 0	Varagu shown in previous year's report and dholl 616.	*Nil.*	240⅝	6 14 0	..	..	Yield of varagu and its straw has been shown in previous year's report. Dholl valued at 35 lb. per rupee.
No. 2. West ..	2·50	1st-crop horse-gram for green manuring.	29th July 1895.	Ploughed in for manure on 17th Sept. 1895.	10 11 0	..	..	..	..	..	..	Crop ploughed in for manure.
No. 2. West ..	2·50	2nd-crop cholum for grain.	7th Oct. ,,	27th Feb. 1896.	17 6 6	1,664	3 straw and ½ green fodder.	665⅝	12 12 10	1½ straw	9 9 7	Grain estimated at 52 lb. a rupee and straw at Rs. 8 per ton. The crop, being thick, it was thinned out and ½ ton of green fodder was obtained and valued at Rs. 15 per ton.
No. 2. East ..	2·00	Ground-nut ..	5th Aug. ,,	26th Mar. ,,	57 8 0	1,960	3 haulms	980	33 5 1	1½ haulms	7 8 0	Yield stated is the weight after deducting the quantity given for picking (⅓ of the yield). Ground-nut sold at Rs. 17 per candy of 500 lb. and haulms valued at Rs. 5 per ton.
No. 3. West ..	1·00	1st-crop yellow cholum for fodder.	2nd April ,,	Various cuttings.	74 5 6	*Nil.*	8·76 green fodder.	*Nil.*	..	8·76 green fodder.	131 6 5	Green fodder valued at Rs. 15 a ton.
No. 3. West ..	1·00	Black gram ..	3rd Nov. ,,	8th Feb. 1896.	11 15 0	400	*Nil.*	400	14 7 8	*Nil.*	..	Green sold at 27⅝ lb. a rupee.
No. 3. West ..	0·80	Ground-nut ..	6th Aug. ,,	31st Mar. ,,	28 15 0	600	*Nil.*	750	25 8 0	*Nil.*	..	Yield stated is the weight after deducting the quantity given for picking (⅓ of the yield). Ground-nut sold at Rs. 17 per candy of 500 lb.
No. 3. East ..	2·00	Guniea grass ..	30th Sept. ,,	Various cuttings.	10 4 0	*Nil.*	2 green fodder.	*Nil.*	..	1 green fodder.	11 3 2	Green fodder valued at 200 lb. a rupee. The crop was treated as a purely dry crop.
No. 4	1·90	1st-crop horse-gram for hay.	18th July ,,	30th Oct. 1895.	8 6 0	*Nil.*	2½ hay	*Nil.*	..	1⅙ hay	55 4 2	Hay valued at Rs. 30 per ton.
No. 4	1·90	2nd-crop black-gram.	9th Nov. ,,	8th Feb. 1896.	17 4 0	860	*Nil.*	452⅛	16 6 1	*Nil.*	..	Gram sold at 27⅝ lb. per rupee.

Number of fields.	Area in acres.	Crop.	When sown	When harvested.	Total cost of cultivation.	Total yield.		Yield per acre.				Remarks.
						Grain in pounds.	Straw, hay, or green fodder in tons.	Grain in pounds.	Value of grain.	Straw, hay, or green fodder in tons.	Value of straw, hay, or green fodder.	
					Rs. A. P.				Rs. A. P.		Rs. A. P.	
No. 5	1·80	1st-crop horse-gram and cholum mixed.	25th July 1895	Ploughed in for manure on 30th Aug. 1895.	13 4 6	..	..	..	..	..	..	The crop failed and hence it was ploughed in for manure.
No. 5	1·80	2nd-crop yellow cholum.	24th Sept. ,,	Ploughed in on 31st Oct. 1895.	8 7 0	..	..	..	..	..	..	The crop failed and hence it was ploughed in for manure.
No. 5	1·80	Green-gram ..	11th Nov. ,,	1st Feb. 1896.	12 8 0	468	*Nil.*	260	10 0 0	*Nil.*	..	Grain sold at 26 lb. per rupee.
No. 6	1·60	1st-crop ragi irrigated.	Transplanted on 8th July 1895.	25th Sept. 1895.	76 14 0	2,640	5 straw	1,650	35 0 0	3⅛	21 14 0	Grain sold at 50 lb. a rupee and straw valued at Rs. 7 per ton.
No. 6	1·60	2nd-crop yellow cholum for grain.	1st Nov. ,,	2nd Mar. 1896.	29 8 6	2,015	3 straw and 1⅛ green fodder.	1,259⅜	24 3 6	1⅛ straw.	15 0	Grain estimated at 52 lb. a rupee and straw valued at Rs. 8 per ton and green fodder valued at Rs. 15 per ton. The crop, being thick, it was thinned out and 1⅛ tons of green fodder obtained.
No. 7. West ..	1·00	1st-crop. Sea Island Cotton and Carter's horse tooth maize	Shown in previous year's report.	Shown in previous year's report.	..	..	Shown in previous year's report.				..	Only three rows of cotton were allowed to stand for seed and the rest cut down. Seed cotton obtained from three rows measuring about 10 cents is 112 lb. This means about 300 lb. of clean lint per acre.
No. 7. East ..	0·75	2nd-crop ground-nut.	7th Aug. 1895.	Still in the field.	27 2 0	..	..	..	..	..	..	.....
No. 7. East ..	0·75	Yellow cholum for grain.	5th Dec. ,,	19th Mar. 1896.	12 15 0	117	1⅛ straw.	156	3 0 0	2⅝	19 3 2	The poor yield is due to the late sowing of crop. Grain valued at 52 lb. a rupee and straw at Rs. 8 per ton.
No. 8	2·70	Varagu and dholl mixed.	8th Aug. ,,	Varagu on 10th Feb. 1896 and dholl still on the ground.	25 4 0	969 varagu.	·84	358⅝	4 7 1	·31	1 1 4	Dholl standing in the field. Varagu (grain) sold at 80¾ lb. per rupee and straw estimated at Rs. 3½ per ton. As pointed out in previous year's report, this field is subject to trespass by slaughter-house cattle.
No. 9	1·14	1st-crop indigo ..	5th Feb. ,,	31st July 1895.	45 4 6	..	7½ for green manure.	..	..	6·58	46 1 0	The green manure valued at Rs. 7 per ton.
No. 9	1·14	2nd-crop gingelly ..	7th Jan. 1896.	Still in field.	23 7 0	..	..	..	..	..	..	The crop is still standing and the heavy charges of cultivation is chiefly due to the practice given to students in ploughing before the field was sown.
No. 10	1·12	1st-crop ragi irrigated.	Transplanted on 28th June 1895.	11th Sept. 1895.	43 15 0	1,836	3 straw	1,639⅝	32 12 7	2·68	18 12 2	Grain valued at 50 lb. a rupee and straw at Rs. 7 per ton.
No. 10	1·12	2nd-crop cholum (Coimbatore).	8th Nov. 1895.	26th Feb. 1896.	16 11 6	416	2½ straw and 1·36 of green fodder.	371⅜	7 2 4	2·	16 0 0	Grain estimated at 52 lb. a rupee and straw at Rs. 8 per ton. Since the crop was sown thick, it was thinned out and 1·36 tons of green fodder were obtained valued at Rs. 15 per ton.

Number of fields.	Area in acres.	Crop.	When sown.	When harvested.	Total cost of cultivation.	Total yield.		Yield per acre.				Remarks.
						Grain in pounds.	Straw, hay, or green fodder in tons.	Grain in pounds.	Value of grain.	Straw, hay, or green fodder in tons.	Value of straw, hay, or green fodder.	
					Rs. A. P.				Rs. A. P.		Rs. A. P.	
No. 11 North	1·70	1st-crop yellow cholum for fodder.	16th Mar. 1895.	Various ..	91 9 6	*Nil.*	10·65 green fodder.	*Nil.*	..	6·26	93 14 5	Green fodder valued at Rs. 15 per ton.
		2nd-crop ragi irrigated.	Transplanted on 25th June 1895.	9th Sept. 1895.	94 12 0	1,581	5 straw.	930	18 9 7	2·94	20 9 3	Grain valued at 50 lb. per rupee and straw at Rs. 7 per ton. The low yield is due to want of timely watering and rain.
		3rd-crop white cholum for grain.	5th Dec. 1895.	16th March 1896.	38 12 0	429	4 straw.	$252\frac{9}{17}$	5 0 9	$2\frac{6}{17}$	18 13 2	Grain valued at 52 lb a rupee and straw at Rs. 8 per ton. The poor yield is due to late sowing of crop.
South	·50	Plantains	Shown in previous report.	Various ..	14 9 0	1,920 green plantains.	..	3,840 green plantains.	60 0 0	..	..	The crop was simply kept for showing specimen to students; plantains sold at 64 lb. a rupee. In addition to this, Rs. 6 worth of leaves were sold.
No. 12	·50	Yellow cholum for fodder.	8th June 1895.	Various ..	16 6 6	*Nil.*	$1\frac{1}{4}$ green fodder.	..	..	3 green fodder.	45 0 0	Green fodder valued at Rs. 15 per ton. Afterwards given for plot cultivation of students of class II.
	·80	Ragi under irrigation	Transplanted on 14th Aug. 1895.	1st Oct. 1895 ..	24 12 0	330	2 straw.	$362\frac{1}{2}$	7 4 0	$2\frac{1}{2}$	17 8 0	Grain valued at 50 lb. a rupee and straw at Rs. 7 per ton. The crop did not receive any manure and the seedlings were rather old when transplanted.
	1·00	English and Indian vegetables.	From 7th Sept. 1895 till 5th Feb. 1896.	Various ..	111 10 3	..	..	..	..	..	..	Sold vegetables worth Rs. 120. A portion of the crop is still on the field. Some of the English vegetables failed owing to an insect attack.
	1·00	....	....	....	..	..	..	..	..	..	..	Reserved for practice in ploughing for students.
No. 13 A	1·15	White and yellow cholum.	13th Nov. 1895.	9th Mar. 1895.	21 0 7	832	$1\frac{1}{4}$ straw and $\frac{1}{2}$ green fodder.	$723\frac{1}{2}$	10 0 9	$1\frac{1}{20}$	10 6 11	Grain valued at 52 lb. per rupee and straw at Rs. 8 per ton; obtained also $\frac{1}{4}$ ton of green fodder valued at Rs. 15 per ton by thinning the crop.
B	0·50	Indian and English vegetables.	From 9th Dec. 1895 to 28th Feb. 1896.	Various ..	31 11 0	..	..	..	..	..	..	Sold vegetables worth Rs. 20–10–10. Major portion of the crop remains in the field.
No. 14 A	2·70	1st-crop (60 days) Sumba paddy.	23rd Jan. 1895.	23rd Apr. 1896.	52 4 0	1,376	3 straw.	$509\frac{13}{17}$	10 6 11	$1\frac{1}{5}$	11 10 8	Grain sold at $48\frac{2}{3}$ lb. per rupee and straw valued at Rs. 10–8–0 per ton.
		2nd-crop (white kar).	Transplanted on 30th Jan. 1895.	Crop standing on the field.	..	..	..	..	..	..	..	Crop standing in the field.
B	·40	Sugarcane (Coimbatore.	18th Aug. 1894.	Various from 5th Oct. 1895.	54 0 0	..	..	..	..	..	..	Sold canes worth Rs. 25 and jaggery $656\frac{1}{2}$ lb. at $16\frac{2}{3}$ lb. per rupee. Besides this 10,000 sets have been obtained for planting in field No. 18 valued at Rs. $2\frac{1}{2}$ per thousand.
No. 15	1·15	1st crop (chillies).	26th Jan. 1896.	Various ..	14 9 6	..	..	..	..	..	..	Sold chillies worth Rs. 18–4–0.
		2nd crop (chillies).	24th Jan. ,,	Crops still in the field.	..	..	..	..	..	..	..	Crops standing in the field.

Number of fields.	Area in acres.	Crop.	When sown.	When harvested.	Total cost of cultivation.	Total yield.		Yield per acre.				Remarks.
						Grain in pounds.	Straw, hay, or green fodder in tons.	Grain in pounds.	Value of grain.	Straw, hay, or green fodder in tons.	Value of straw, hay, or green fodder.	
					Rs. A. P.				Rs. A. P.		Rs. A. P.	
No. 16	1·50	Chinnasumba paddy (drilled by country drill).	19th Sept. 1895.	4th Feb. 1896.	31 2 6	3,800	$2\frac{1}{2}$ straw.	$2,533\frac{1}{3}$	51 13 7	$1\frac{2}{3}$ straw.	17 8 0	Grain sold at $48\frac{2}{3}$ lb. per rupee and straw valued at Rs. 10–8–0 per ton.
	3·50	Pisini (dry paddy) broad-casted.	16th ,, ,,	9th Jan. ,,	39 13 0	1,960	$2\frac{5}{8}$ straw.	$542\frac{6}{7}$	9 8 5	$\frac{4}{7}$ straw.	7 14 0	Grain sold at 57 lb. per rupee and straw estimated at Rs. 10–8–0 per ton. Crop suffered from want of rain in December.
No. 17	1·50	1st-crop horse-gram for fodder.	1st Aug. ,,	11th Nov. 1895.	15 10 0	*Nil.*	1 hay.	*Nil.*	..	$\frac{2}{3}$ hay.	20 0 0	Horse-gram and hay estimated at Rs. 30 per ton.
		2nd-crop horse-gram for grain.	4th Dec. ,,	26th Mar. 1896.	9 5 6	406	*Nil.*	$270\frac{3}{5}$	6 3 7	*Nil.*	..	Grain valued at $43\frac{1}{2}$ lb. per rupee.
No. 18 North	0·75	Paddy, chinnasumba, transplanted.	Transplanted on 13th Oct. 1895.	17th Jan. ,,	32 4 0	1,900	1 straw.	$2,533\frac{1}{3}$	51 13 7	$1\frac{1}{3}$ straw.	14 0 0	Grain sold at $48\frac{2}{3}$ lb. per rupee and straw valued at Rs. 10–8–0 per ton.
	0·25	Sugarcane	15th Oct. 1895.	Still on the ground.	..	..	..	..	..	..	..	Crop standing in the field.
South	1·00	Do.	21st June ,,	Sold in auction on the 5th Feb. 1896.	103 5 0	*Nil.*	..	..	..	..	289 0 0	The crop sold by auction 8 months after planting and realized Rs. 289.
No. 19	1·00	Pisini (dry variety) broad-casted.	6th Nov. ,,	17th Jan. 1896.	18 10 0	855	$1\frac{1}{4}$ straw	855	15 0 0	$1\frac{1}{4}$	18 2 0	Grain sold at 57 lb. per rupee and straw valued at Rs. 10–8–0 per ton.
No. 20	1·60	Sirumani transplanted.	Transplanted on 11th Oct. 1895.	25th Feb. ,,	74 2 0	3,990	$2\frac{1}{2}$ straw	$2,493\frac{3}{4}$	55 10 11	$1\frac{2}{3}$ straw.	16 6 6	Grain sold at $44\frac{1}{4}$ lb. per rupee and straw at Rs. 10–8–0 per ton.
No. 21	1·00	Sirumani drilled (dry) by country drill.	31st Aug. 1895.	18th ,, ,,	30 11 0	2,413	$1\frac{1}{2}$ straw	2,413	53 14 1	$1\frac{1}{2}$ straw.	15 12 0	Grain sold at $44\frac{1}{4}$ lb. per rupee and straw at Rs. 10–8–0 per ton.
No. 22 East	1·25	Neelan samba broad-casted (dry).	30th ,, ,,	20th ,, ,,	28 14 0	3,116	$1\frac{1}{4}$ straw	$2,492\frac{8}{5}$	48 5 5	1 straw.	10 8 0	Grain sold at $51\frac{4}{5}$ lb. per rupee and straw valued at Rs. 10–8–0 per ton.
West	3·00	Sirumani drilled (dry) by country drill.	29th ,, ,,	19th ,, ,,	41 10 0	4,674	6 straw	1,558	34 12 7	2	21 0 0	Grain sold at $44\frac{1}{4}\frac{1}{4}$ lb. per rupee and straw valued at Rs. 10–8–0 per ton. Crop suffered from want of rain just after the ear heads appeared.
No. 25	3·00	1st-crop yellow cholum for fodder.	27th July ,,	Various ..	10 6 0	*Nil.*	$3\frac{3}{4}$ green fodder.	*Nil.*	..	$1\frac{1}{2}$ green fodder.	18 12 0	Green fodder valued at Rs. 15 per ton.
		2nd-crop horse-gram for grain.	3rd Dec. ,,	9th Mar. 1896.	15 10 6	551	*Nil.*	$183\frac{7}{8}$	4 3 8	*Nil.*	..	Grain valued at $43\frac{3}{5}$ lb. per rupee. Crop was sown rather late and the poor yield is due to it.
No. 26 North	1·30	Chinna samba drilled (dry) by country drill.	20th Sept. ,,	17th Jan. ,,	30 2 0	2,508	$1\frac{1}{2}$ straw	$1,929\frac{8}{13}$	39 7 10	$1\frac{2}{3}$ straw.	12 1 10	Grain sold at $48\frac{2}{3}$ lb. per rupee and straw valued at Rs. 10–8–0 per ton.
South	2·00	Pisini dry (broad-casted).	15th ,, ,,	16th ,, ,,	30 7 0	1,216	$1\frac{1}{4}$ straw	608	10 10 8	$\frac{3}{4}$ straw	7 14 0	Grain sold at 57 lb. per rupee. Straw estimated at Rs. 10–8–0 per ton. The crop is a purely dry crop and the soil is very sandy.

[Fields not specially mentioned are plantations.]

Crops.	Area sown.	Outturn. Grain or seed. Amount.	Grain or seed. Per acre.	Straw or fodder. Amount.	Straw or fodder. Per acre.	Remarks.
Cereals.	ACS.	LB.	LB.	TON.	TON.	
Paddy	22·30	27,748	1,416	24·62	1·25	2·70 acres standing.
Cholam	9·57	5,733	599	16·30 / 3·66	1·70 / 0·38	Green fodder.
Ragi	5·22	6,387	1,223	15·00	2·87	
Varagu	8·76	V 2,261	365	1·95	0·31	2·56 acres of varagu standing.
Dholl		D. 616	241	..	..	6·20 „ of dholl „
Pulses.						
Horse gram	6·00	1,450	241	..	..	
Green gram	1·80	468	260	..	..	
Black gram	2·90	1,260	434	..	..	
Industrial.						
Sugar cane	1·65	656¼ of jaggery and Rs. 314 worth of canes.	1,041 of jaggery and Rs. 62½ worth of sugar cane or Rs. 289 worth of canes only.	..	..	0·25 acre standing.
Gingelly	1·14	..	..	..	..	Standing.
Ground-nut	3·80	2,560	914	3 haulms.	1·50 haulms.	1·00 acre standing.
Sundries.						
Plantains	0·50	1,920 Green plantains.	3,840	..	..	
Chillies	0·30	RS. A. P. 18 4 0 worth.	RS. A. P. 122 1 4 worth.	..	..	0·15 acre standing.
English and Indian vegetables.	1·50	140 10 10 worth.	93 2 6	..	..	Portion standing.
Fodder.						
Green—						
Cholum	6·20	..	..	24·66	3·98	
Guinea grass	2·00	..	..	2·00	1·00	
Dry—						
Horse gram	3·40	..	..	3·50	1·03	
Cholum (hay)	1·25	..	..	1·50	1·20	
Green Manure.						
Indigo	1·14	..	..	..	..	
Horse gram	2·50	..	..	..	..	
Horse gram and cholum	1·80	..	..	..	..	
Cholum	1·80	..	..	..	..	

15. Though the number of cows in milk remained stationary, there was a slight increase in the yield of milk. The average yield decreased from 9·40 lb. to 8·91 lb. I attach little or no importance to the average yield as calculated for the purposes of this report.

Statement showing the yield of milk in the College Farm herd during 1895–96.

Name of cow.	Age.	Yield in 1895 in Madras measures of 100 cubic inches.	Yield in 1895 in Pounds.	Number of days cow yielded.	Average per day in Madras measures.	Average per day in Pounds.
1. Narayani	8 years	448·13	1,671·52	184	2·44	9·10
2. Tara	7 „	925·75	3,453·05	296	3·13	11·68
3. Meenakshi	15 „	556·13	2,074·36	227	2·36	8·80
4. Sahib's cow	12 „	404·38	1,508·34	241	1·68	6·27
5. Meenakshi No. II	7 „	506·00	1,887·38	227	2·22	8·28
6. Swarnam	6 „	345·63	1,289·20	177	1·95	7·27
7. Kamalam	6 „	394·88	1,472·90	214	1·85	6·90
8. Kalyani	12 „	1,066·63	3,978·53	310	3·44	12·83
9. Kalyani No. III	6 „	420·63	1,568·95	203	1·58	5·89
10. Parvati	5 „	300·38	1,120·42	146	2·06	7·68
11. Alamelu	5 „	267·00	995·91	139	1·93	7·20
12. Seetha	6 „	271·00	1,010·83	111	2·44	9·10
Total	..	5,906·54	22,031·39	2,475	..	..

The daily average per head for the whole herd $= \frac{5,906{\cdot}54}{2,475} = 2{\cdot}39$ Madras measures $= 8{\cdot}91$ lb.

16. The following statement shows the number and value of stock at the commencement and end of the year 1895–96 :—

Description.	Commencement. Number of animals.	Commencement. Value.	End. Number of animals.	End. Value.
		RS.		RS.
1. Cows	10	855	11	750
2. Heifers	4	140	3	75
3. Heifer calves	6	66	6	75
4. Bulls	11	935	10	680
5. Bullocks	6	430	7	375
6. Bull calves	3	35	4	55
Sheep.				
1. Rams	7	50	6	30
2. Ewes	21	84	18	72
3. Gimmers	1	3	10	30
4. Lambs	21	21	16	16
Total	..	2,619	..	2,158

17. The following statements give the information usually supplied regarding the livestock of the farm :—

Value of labour to be charged against stock.

	RS.
One milkman on Rs. 7–4–0 per mensem	87
One man attending on cows on Rs. 5–8–0 per mensem	66
Do. do on bulls on „ 4–0–0 „	48
One boy attending on sheep on „ 2–0–0 „	24
Do. cleaning byres on „ 2–8–0 „	30
Total	255

Value of farm-grown fodder consumed by stock.

						Rs.	A.	P.
2 tons of guinea grass (green)	at 200 lb. a rupee				...	22	6	5
28·32 ,, of cholum fodder (green)	at Rs	15	0	0 per ton	..	424	12	9
3·50 ,, of horsegram hay	at ,,	30	0	0 ,,		105	0	0
1·05 ,, of cholum hay	at ,,	30	0	0 ,,	...	31	8	0
21·38 ,, of paddy straw	at ,,	10	8	0 ,,	...	224	7	0
16·30 ,, of cholum straw	at ,,	8	0	0 ,,	...	130	6	5
1·95 ,, of varagu straw	at ,,	3	8	0 ,,	..	5	13	7
15·00 ,, of ragi straw	at ,,	7	0	0 ,,	...	105	0	0
3·00 ,, of groundnut haulms	at ,,	5	0	0 ,,	...	15	0	0
						1,064	6	2

	Rs.	A.	P.			
Deduct fodder in stock on 1st April 1896—						
9 tons of paddy straw at Rs. 10–8–0 per ton.	94	8	0			
16·30 ,, of cholum straw at ,, 8–0–0 ,,	130	6	5			
				224	14	5
Net value of farm-grown fodder consumed by stock during 1895–96				839	7	9

Value of services rendered by livestock on the Farm.

	Rs.	A.	P.		Rs.	A.	P.
Field No. 1	30	8	6	Field No. 13 ...	18	10	0
,, 2	37	8	0	,, 14 ...	71	10	0
,, 3	77	2	0	,, 16 ...	42	0	0
,, 4	12	4	0	,, 17 ...	10	12	6
,, 5	22	12	0	,, 18 ...	11	2	0
,, 6	57	15	0	,, 19 ...	6	12	0
,, 7	20	0	6	,, 20 ...	28	2	0
,, 8	8	4	0	,, 21 ...	10	12	0
,, 9	30	3	0	,, 22 ...	20	0	0
,, 10 ...	32	4	0	,, 25 ..	15	4	6
,, 11	107	3	0	,, 26 ...	20	4	0
,, 12	82	6	0	Total ...	773	11	0

One hundred and eight tons of *farmyard manure*, valued at Rs. 3 per ton, were obtained.

Bull service.—Seven farm cows and 196 outside cows were served by farm bulls during the year.

Value of service rendered by livestock to College, Botanical Gardens, &c., Rs. 200.

18. *Botanical Gardens.*—The gardens were maintained in proper order. The plots in the upper terrace were utilized for growing specimens of the crops of the Presidency. Each plot was labelled and I was glad to observe that, during December and January, this part of the gardens attracted a fairly large number of visitors. The cost of the gardens was Rs. 920–12–3 against Rs. 909–0–9 in the previous year.

19. *The Hostel.*—On 31st March, ten students of the College of Agriculture and twelve students of the Teachers' College were messing in the Brahman hostel maintained on the farm. A full report on the hostel was submitted in my letter No. 671, dated 15th November 1895, and a plan was furnished with my letter No. 613, dated 23rd October 1895.

20. *Former students.*—The annexed statement gives the occupations of former students. I hear good accounts of several of those who are engaged in farming and especially of two men, one of whom is farming on a large scale in Cochin and the other supplying the people of Trichinopoly with milk raised on his own land. There is no doubt that in future years, the occupation of farmer will be a favourite one with the richer class of students. Of course, the poorer students must look for employment to Government as well as to private individuals. During the year, I circulated among Collectors and District Officers a statement showing the names of the ex-students who

were seeking employment and giving full particulars, but as far as I can judge, my efforts to secure suitable employment for ex-students have not met with much success. I shall try again.

1. Farming and coffee-planting		28
2. Superintendents of plantations, farms, estates and gardens		16
3. Agricultural implements and dairy trade		1
4. Teachers of Agriculture—		
(*a*) Employed in the Madras College of Agriculture . ..		5
(*b*) Employed elsewhere		12
5. Agricultural Department—		
(*a*) Madras		5
(*b*) Bombay		2
(*c*) North-Western Provinces		1
(*d*) Native States		21
6. Veterinary Department—		
(*a*) Madras Civil Veterinary Department		12
(*b*) Native States		2
7. Private Veterinary Practice		3
8. Revenue Inspectors		39
9. Revenue Department—		
(*a*) Deputy Tahsildars		3
(*b*) English and Vernacular Head Clerks and Head Accountants.		4
(*c*) Accountants and clerks below Rs. 50		46
(*d*) Attached to Revenue Settlement Parties		4
10. Irrigation Department—		
(*a*) Government		5
(*b*) Native States		2
11. Forest Department—		
(*a*) Madras.	(i) Extra Assistant and Sub-Assistant Conservators	2
	(ii) Rangers	10
	(iii) Foresters	11
(*b*) Other Provinces and Native States		15
12. Merchants and Managers of Trading Firms		12
13. Local Fund Overseers		4
14. Sanitary Inspectors		3
15. Barristers, High Court Vakils and Pleaders		8
16. Medical Department		2
17 Commissariat Department		7
18. Salt Departmen (Assistant and Sub-Inspectors)		6
19. Miscellaneous—t		
(*a*) Government		16
(*b*) Native States		7
(*c*) Private		10
20. Unemployed		7
21. Not known		25
22. Dead		26

21. Classes I and III underwent gymnastic instruction. Class II, as on previous years, was exempted from gymnastics owing to press of out-door work.

The Athletic Club as usual looked after the requirements of the students on cricket, tennis and foot-ball. Tennis is undoubtedly the favourite recreation of the majority of men here. Cricket and foot-ball are not, however, neglected. Two cricket and two foot-ball matches were played during the year, but of course a small college like the College of Agriculture has much difficulty in putting a good team into the field. The Boat Club is also in a fairly flourishing condition.

In spite of small numbers, this College holds its own in athletics, for its representatives (K. Subbiah and P. Purushotham Naidu) secured the Travancore Challenge Shield at the inter-collegiate competition held in February last.

The athletic sports of the College were held on Saturday, 15th February 1895, in the presence of fairly large assembly. The Right Rev. the Lord Bishop of Madras kindly distributed the prizes. By permission of Lieutenant-Colonel Nutt and officers, the band of the Royal Artillery from Saint Thomas' Mount played a selection of music during the sports. A native band was also in attendance. The Director of Agriculture's prize (a silver watch) for the best athlete was easily won by K. Subbiah (Coorg) of class II.

22. The Students' Association held twenty meetings during the year, of which number sixteen meetings were devoted to essays and discussions. There were thirteen essays read, eleven of which were on agricultural topics, such as cultivation of coffee in Coorg, cultivation of plantains, cultivation of sugar-cane in Salem, &c.

The anniversary meeting was held on 5th April. The annual report was read, and I made a short speech. Then came refreshments, jugglers and high class native music.

23. The following statement gives the books in the library. Five books cannot be accounted for and must, I fear, be put down as irrecoverable :—

Description.	Number of books.
Agriculture	775
Botany	68
Gardening	25
Forestry	38
Economic Entomology	46
Zoology	55
Veterinary Science	132
General Science	76
Chemistry	49
Physics	14
Geology	59
Physiography	83
Mathematics	45
Surveying and Levelling	12
Engineering	61
General Literature	117
Miscellaneous Reports	145
Total	1,800

The annexed statement shows the number of books taken out by the staff and students from the library. The statement includes only those books removed from the library and excludes books consulted in the library. I cannot account for the decrease in the number of books taken out :—

Books.	Number taken out by staff.	Number taken out by students.
Agriculture	68	270
Veterinary Science	20	83
Botany, &c.	9	49
Chemistry, Physiography, Geology, Physics	13	139
Surveying and Levelling, Engineering	13	68
Miscellaneous Reports	...	3
General Science	2	34
General Literature	23	33
Total	148	679

24. Referring to paragraph 4 of your Proceedings, No. 4585, dated 17th April 1896, I beg to state that the provisions of the Madras Educational Rules as far as they are applicable to this College were observed during the year.

(i) *Academic costume of staff.*—Three members of the staff (viz., the First and Third Assistants and myself) are entitled to wear academic costume and it was regularly worn as prescribed.

(ii) *Strength of classes.*—The tabular statement in paragraph 3 shows that the classes were well below the authorised strength.

(iii) *Accommodation and sanitation.*—The building could, with ease, accommodate double the number of students now on the rolls. The sanitary arrangements were sometime back certified to by the District Surgeon of Chingleput.

(iv) *Inter-school rules.*—These have been observed. Students on entry have to produce a "leaving certificate" unless they have previously furnished it to the University and have not since attended any school or college. On leaving, students, who have paid all their dues and have otherwise complied with the College regulations, are granted "leaving certificates."

(v) *Discipline.*—The maintenance of discipline in a small college is an easy matter especially when the students are composed chiefly of high caste Hindus. There was not the slightest difficulty in enforcing the disciplinary provisions of the Madras Educational Rules as well as the rules applicable only to students of this College.

(vi) *Registers and accounts.*—The registers (attendance, gymnastic, &c.,) have been properly maintained. The accounts are kept in the College Office under my personal supervision. They include the Farm and Hospital accounts. The register of receipts (College, Farm and Hospital) is always kept up to date and all the entries on being posted are initialled by me.

(vii) *Hours of Attendance.*—Classes I and III have practical classes in Agriculture, Veterinary or Botany from 6-30—8 A.M. Occasionally the classes last till 9 A.M.; Class II has most of its mornings free so as to allow the men to look to their cultivation of plots should there be any necessity for their doing so. From 10 A.M.—1 P.M., all classes have lectures. In the afternoon, the out-door surveys, dissections, special laboratory classes, &c., are held and when practicable, ploughing classes are arranged for.

(viii) *Holidays and Vacations.*—During the year, the following holidays and vacations were enjoyed :—

Easter vacation	*Nil* (suspended).
Summer vacation	Two months.
Michaelmas vacation	One week.
Christmas vacation	Two weeks.
Holidays	Those sanctioned in Proceedings, No. 8540, dated 10th August 1895.

25. The service registers have been written up to date. The inventory of valuable stock has been checked and the usual statement will be submitted in due course. The inventory has been maintained in the same manner for the last twenty years or so, and I am told by my Head Clerk that it is drawn up according to certain prescribed rules, but these rules are not forthcoming in this office. Everything under the value of Rs. 20 and all articles of furniture are omitted. I am not quite satisfied with the method of keeping this inventory except so far as it relates to the live and dead stock on the farm and to the physical and chemical apparatus belonging to the College. If the inventory annually submitted to you is rightly prepared, it will be necessary to start a supplementary inventory for private use.

Separate books are maintained for stores on the farm, such as oil-cake, grain, bran, &c., and for reagents used in the laboratory. In connection with stores, I regret to state that a levelling staff (price, when new, Rs. 19) was lost during the

year and enquiry has failed to discover how the loss occurred. Under the new rules, every student has to do his levelling separately and no doubt students passed the staff from one to another and some student must have left it lying out in the field when his work was over.

26. *Finances.*—The necessary adjustment to meet the expenses of Mr. Collins' deputation to Saidapet has not yet been received from the Accountant-General. The financial statement is, therefore, submitted without any reference to this adjustment. Excluding the cost of Mr. Collins' deputation, the net cost of the College (including scholarships) amounted to Rs. 38,098–13–10 against Rs. 37,831–14–6 in 1894–95, thus showing an increase of Rs. 266–15–4. The receipts rose from Rs. 4,961–13–11 to Rs. 5,322–8–2 chiefly owing to the increased income of the farm. Neglecting the expenses of Mr. Collins' deputation, there was a decrease of about Rs. 100 in the net cost of the College.

	Budget estimate for 1895–96.	Expenditure. 1894–95.	Expenditure. 1895–96.
	Rs.	Rs. A. P.	Rs. A. P.
Principal	17,495	11,907 14 1	* 12,389 3 5
Masters and teachers	9,398	9,166 6 10	8,729 1 8
Establishment	2,366	2,337 3 2	2,361 7 11
Ordinary contingencies	805	943 13 7	804 15 10
Service postage	100	50 0 0	48 0 0
Service telegram		5 14 0	2 0 0
Rents, rates and taxes	70	69 12 0	69 12 0
Scholarships †	..	..	..
Travelling allowances	600	703 5 0	556 11 0
Library and prize allowances	350	214 4 8	284 11 0
Laboratory charges	250	107 7 3	244 4 11
Furniture, apparatus and livestock	1,200	257 2 6	460 12 6
Farm Annexe	4,500	4,435 13 7	4,508 15 2
Botanical Garden	1,000	909 0 9	920 12 3
Petty construction and repairs	1,500	1,548 5 11	1,499 14 7
Payments made through the Accountant-General's Office for periodicals, stores, &c.	..	592 10 4	474 5 9
Veterinary Hospital charges.			
Establishment	816	815 8 0	814 13 2
Contingencies	1,184	359 11 8	258 13 11
Total	41,634	34,424 5 4	34,428 10 8
Receipts.			
College of Agriculture	..	4,430 6 5	‡ 4,781 6 1
Veterinary Hospital	..	531 7 6	541 2 1
Total	..	4,961 13 11	5,322 8 2

* Includes Rs. 1,882–1–10, being Exchange Compensation Allowance.
† Rs. 3,670–3–2 under this head are to be charged against separate provision in the Educational Budget.

	Rs. A. P.
‡ Farm	4,117 6 8
Fees	387 0 0
Rent and miscellaneous	276 15 5

27. In conclusion I desire to acknowledge the services of the Assistants and other officers of the College.

Enclosure.

From S. L. D'SILVA, Esq., Second Assistant *Sub. pro tem.* in charge, Government Veterinary Hospital, to the Acting Principal, College of Agriculture, dated Saidapet, 25th April 1896.

In submitting the usual statement of the cases treated at the Veterinary Hospital during 1895–96, I beg to state that the figures therein as compared with those of the previous years show that the hospital continues to enjoy the confidence of the public. The small excess in the total number of cases treated last year, especially as regards the cattle patients, was due to the outbreak of foot and mouth disease on the farm noticed in my last year's report. But for this outbreak, the comparison of the figures for the successive years ending with the present would have shown, on the whole, a steady progress in the work done at the hospital.

Statement showing the principal classes of diseases treated at the Government Veterinary Hospital, Saidapet, during 1895–96.

Class of disease.	Horses and ponies.		Bulls and bullocks.		Cows and heifers.		Other animals.		Total.	
	Treated.	Died.	Treated.	Died.	Treated.	Died.	Treated.	Died.	Treated.	Died.
Non-specific blood diseases	21	..	6	1	6	1	13	2	46	4
Specific blood diseases	9	1	3	..	..	..	9	2	21	3
Diseases of the digestive organs	9	..	9	..	6	1	32	1	56	2
Do. of the biliary apparatus	1	..	..	..	..	..	3	2	4	2
Do. of the respiratory organs	19	..	5	..	1	1	7	..	32	1
Do. of the urinary system	2	..	1	..	..	..	1	..	4	..
Do. of the skin	14	..	6	..	2	..	14	..	36	..
Do. of the foot	12	..	2	..	1	..	..	..	15	..
Do. of the eye	3	..	5	..	..	..	5	..	13	..
Do. of the ear	1	..	..	..	..	..	..	..	1	..
Do. of the lactiferous organs	..	..	..	..	2	..	..	..	2	..
Do. of the generative organs	2	1	1	..	1	1	1	..	5	2
Do. of the nervous system	5	2	1	..	..	..	4	3	10	5
Injuries and diseases of bones	8	..	10	..	..	..	2	..	20	..
Injuries and diseases of ligaments, tendons and muscles	6	..	6	..	2	..	..	..	14	..
Surgical conditions, wounds, tumours, &c.	23	1	57	..	12	..	9	..	101	1
Total	135	5	112	1	33	4	100	10	380	20

No. 5190.

Forwarded to the Secretary to the Board of Revenue (Revenue Settlement, Land Records and Agriculture) for favour of remarks of the Board.

(Signed) D. DUNCAN,
Director of Public Instruction.

5th May 1896.

Resolution—dated 4th June 1896, No. 116.

The report read above has, in accordance with orders issued in the Educational Department, been again prepared for the financial year, a course which deprives it of much of its interest and value, for there is much force in Mr. Keess' remarks at paragraph 1 that comments on the results of work done more than a year ago must lose much of their force, and this is especially the case when, by a very brief delay, the report could be brought up to date. The Board would draw the Director's attention to this point, with a view to the results of the April examinations being embodied in the report.

2. The comments made by Mr. Keess in paragraph 6 of his report have already, it is presumed, been dealt with by the Director, as the matters were brought under his notice so long ago as August 1895; but the Board would be glad to know how far he considers them justifiable.

3. The continued failure of the College to attract an increased number of students, notwithstanding the greatly increased inducements offered, as a means to entering Government service, to men who obtain the Agriculture diploma, is to be regretted, but the Board is not disposed to attach much weight to the explanations put forward by Mr. Keess as deterring Sudra students from joining the College. The matter is, however, one of importance, as it is most desirable to attract students of these castes to study at the College. The Collector of Chingleput will be requested to report on the facilities that exist for Sudra students to live at Saidapet.

4. The increase in the number of diplomas obtained during the year is satisfactory, and the matter should be referred to in the body of the report rather than in a foot-note, for the diplomas obtained are the final record of the results of the students' studies.

5. The alterations in the course of studies, alluded to in paragraph 7 of his report, were, for the most part, introduced during the course of the session under reference on the recommendation of a committee of which the Principal was a member. It is to be regretted that he is not satisfied with the results of the efforts made to lessen work on comparatively unimportant subjects, but it appears to the Board to be far too early as yet to form any opinion on the results of the change, especially as the examinations under the new syllabuses were only held in April last and have not been reported on.

6. The report promised by the Principal on the question of the "plot" cultivation at present prescribed will be awaited with interest, but the Board would draw the attention of the Director to the large proportion of seven days spent in "travelling and resting" out of the total of 25 days devoted to excursions. It would also suggest that the conduct of these tours should scarcely be entrusted to officers who are apparently the Junior Assistants in the college, and that possibly they might be superintended with advantage by the Principal himself.

7. The cost of the College proper amounted to Rs. 27,925, or only Rs. 21 more than in the preceding year. This is excluding any provision for the cost of the courses of lectures delivered by the Assistant Agricultural Chemist and by the Superintendent, Civil Veterinary Department. In regard to the latter, the Board scarcely considers that it is worth while to detain an officer at Saidapet for about $2\frac{1}{2}$ months to deliver two courses amounting in all to 36 lectures and 19 hospital classes, and would be glad to learn the wishes of the Director as to the more full utilization of the Superintendent's services during the time for which they are practically made available for the Educational Department.

8. Although there was a falling off in the number of patients treated at the College Veterinary Hospital, this is satisfactorily explained. In future reports, it will be well for the Principal to embody any remarks or suggestions the Superintendent, Civil Veterinary Department, may have to offer regarding the work and management of the hospital, which it is his duty to visit from time to time when at head-quarters—*vide* Board's Proceedings, Mis. No. 2260 of 1895.

9. In regard to the farm maintained in connection with the College, primarily for the education of the students, Mr. Keess protests against full particulars of the working being placed on record. The Board is of opinion that a great deal of useless matter is imported into the report, and that there is, for instance, no necessity for embodying therein the long table given at paragraph 14. The results should, however, be summarised and abstracted and submitted with such brief comments from the Principal as are necessary to elucidate them, for the operations of the farm should be made as far as possible of educational value for a wider circle than that of the students of the College. The Board, in its Proceedings No. 169 of 1895, suggested that the yields of grain and the like should be reported in terms of weight, for it is obvious that, if recorded in any other manner, they can be of but little value. In view of the fact now stated that the yields now reported have been calculated from terms of capacity to terms of weight on some arbitrary assumption, the Board does not consider it of any use to notice them, but it fails altogether to understand the remark made at paragraph 14 that there was no comparison such as the Principal desires observed between the crops grown in the College farm and those grown by the ryots. In so far as such comparison may be possible, the defect should be supplied by observations made by the Principal and recorded in the report.

The remarks made above apply also in some measure to the milk record given in the report, to which the Principal attaches little or no importance. The Principal should, therefore, the Board considers, be asked how it can be made of real value. It should certainly also be maintained, as modern dairy records usually are, in terms of weight, however the commercial transactions of the farm are conducted.

The financial results of the farm must, the Board considers, be regarded as satisfactory, and the Board is glad to notice Mr. Keess' testimony to the work done by his subordinates in carrying on this branch of his work.

(True Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Director of Public Instruction.
" Collector of Chingleput.
Copy to the Superintendent, Civil Veterinary Department.

Read—the following letter from the Acting Principal, Madras College of Agriculture, to the Director of Public Instruction, dated Saidapet, 11th August 1896, No. 504 :—

Referring to your Official Memo. No. 8207, dated 1st August 1896, I have the honour to submit a tabular statement showing the result obtained at the recent examinations for the diploma in Agriculture. It will be recollected that the packet containing the answer papers in Organic Chemistry (Special) was destroyed by fire while on its way to Dehra Dun. The results in that subject are, therefore, not yet published.

No.	Subject.	Number of students appeared.	Number passed.	Percentage.
1	Agriculture (Advanced)	13	6	46·1
2	Inorganic Chemistry (Intermediate) ..	22	9	40·9
3	Organic Chemistry (Special)	15	..	..
4	Veterinary Science (1st stage)	17	16	94·1
5	Do. (2nd stage)	12	7	58·3
6	Surveying and Levelling (Special) ..	16	12	75·0
7	Agricultural Engineering (Intermediate) ..	13	10	76·9
8	Botany (Special)	8	4	50·0
9	Physiography (Intermediate)	15	13	86·6

Introduction.—It is disappointing to find that the special concession sanctioned by Government in favour of holders of the diploma in Agriculture did not prove sufficiently attractive and did not add to the popularity or strength of the institution. The mere privilege to appear for certain special tests is, no doubt, quite different from the appointment of the holders of the diploma to suitable vacancies in the Revenue and kindred Departments. The fact that, notwithstanding the suggestion of the Board of Revenue to all Collectors to give their favourable consideration to applications from holders of the college diploma (Proceedings of the Board of Revenue, No. 307, dated 2nd October 1895), the Principal was not successful in securing employment for such men, shows that there are still difficulties in the way of grafting into the executive ranks of the revenue service young men who, by their special and technical knowledge, should be of help in developing the agricultural resources of the country. The Director is aware that the men who leave the college possessing the diploma in Agriculture have much to learn before they can be useful Revenue officers; but he is also of opinion that, for the improvement of this most important of all industries in India, a more sympathetic attitude towards the men educated at the College of Agriculture is indispensable.

2. *Staff.*—The Vice-Principalship continued vacant. As the appointment has been included in the reorganization scheme of the Educational Department lately sanctioned by the Secretary of State, it is hoped that the place will soon be permanently filled. The practical instruction of the students will be much better attended to when a Vice-Principal has been appointed. M.R.Ry. C. Krishna Menon, Fourth Assistant, did not return from England to resume his duties.

3. *Library.*—The decrease in the number of books taken out is not creditable to the students.

4. *Strength and attendance.*—There was a decline from 47 to 44 in the strength of the college, and a fourth of the students were from territories outside the Presidency. Coimbatore was represented by six students; Tanjore, Madura, and Tinnevelly by four each; and South Arcot, Salem and Malabar by two each, while nine other districts had one each. Six districts, including Kistna, contributed none; of the students, 24 were Brahmans, 19 non-Brahmans and one was a Muhammadan. The further increase in the number of non-Brahman Hindus is satisfactory, though the Principal considers that they labour under certain disadvantages during their residence at Saidapet. Mr. Keess should, in communication with Mr. Hall, devise measures to have a hostel established for them. Eight of the students belonged to the richer and 33 to the middle classes, while seven were contributed by the official and 35 by the landholder class. Four of the seven district scholarships were conferred on Collectors' nominees and one was bestowed on the Principal's nominee. Who made the original nominations for the other two scholarships should have been mentioned in paragraph 5. It is to be regretted that two out of the three Non-Brahman Hindu scholarship holders had to quit the college. The Principal, no doubt, did his best to arrange, with the help of his native Assistants, for their comfortable board and lodging. Only one of the men was a First Arts undergraduate, the rest being Matriculates. The average number on the rolls and the average daily attendance were 41 and 37, respectively. On the whole 26 students were in receipt of stipends.

5. *Examinations.*—The results of the Government Technical examinations in Agriculture and allied subjects held in April 1895 and April 1896 are compared below:—

No.	Subject.	1895.		1896.	
		Examined.	Passed.	Examined.	Passed
1	Agriculture (Advanced)	17	4	13	6
2	Veterinary Science (Intermediate), 1st stage	16	10	17	16
3	Do. (Intermediate), 2nd stage	13	11	12	7
4	Inorganic Chemistry (Intermediate)	15	6	22	9
5	Organic Chemistry (Intermediate)	23	19	15	12
6	Botany (Special)	15	15	8	4
7	Physiography (Intermediate)	21	8	15	13
8	Surveying and Levelling (Intermediate)	13	10	16	12
9	Agricultural Engineering (Intermediate)	12	8	13	10

With regard to the Principal's remarks in the latter portion of paragraph 1 of his report, Government is fully aware that the examination held in April relates to the work of the previous session, but directed the exclusion of the results from the report, because the examination is held after the close of the year to which the report relates. If the examinations in Agriculture were held in March, it would put a stop to the anomaly; but both the Commissioner for Government Examinations and the Principal consider that that month would be unsuitable. In view, however, of the remarks of the Board of Revenue, the results of the examination of April 1896 have also been recorded above for information and for purposes of comparison. On the whole, the results must be considered satisfactory and would certainly have been even better had a Vice-Principal been employed, as this would have enabled the Principal to devote more time to the practical instruction of the students both on the farm and during agricultural excursions. The Director cannot endorse all that Mr. Keess writes in paragraph 6 of his report. A fair margin must be allowed for the inevitable vicissitudes of all examinations, and no examination can be held so as to satisfy the head of every institution sending up candidates for it. Dr. Leather, the Agricultural Chemist, observes in connection with the Principal's comment on the last examination "As to confining questions to a syllabus, I think Mr. Keess wishes to adhere to the letter rather than the spirit of the matter. A syllabus is, I think, principally for the purpose of indicating the range of studies. An examiner must, of course, confine his questions within this range, taking the syllabus in the spirit in which it is intended." The Director fully concurs in the

above remark. The Principal's letter, No. 477, was communicated through the Commissioner to the Board of Examiners for information, and no disposal was called for. The Director shares the view of the Board of Revenue, that it is too early to form any opinion on the results of the changes in the syllabuses in Organic Chemistry, Surveying and Levelling, and Agricultural Engineering.

6. *Practical work.*—Increased attention should be paid to practical work, some of the college students having shown weakness in the oral and practical examination. The third class made two excursions through Cuddapah and Coimbatore under the superintendence of the junior assistants. While the Director agrees with the Board in thinking that the Principal might superintend the tours with much advantage, he apprehends that this would not be possible until a Vice-Principal has been appointed. In the meantime, the Principal should entrust the work to the senior Assistant and a slightly larger number of days than at present should be devoted to excursions proper, the time spent in travelling and resting being reduced to the lowest limit possible. His proposal to substitute "field" for "plot" cultivation is awaited. The success of the sugar-boiling operations is noted with satisfaction.

7. *Veterinary instruction and hospital.*—The Superintendent of the Civil Veterinary Department delivered eighteen lectures to classes II and III and held nineteen hospital classes for class III, and, at the Veterinary Science examination held in April last, 23 students passed in the first and second stages out of 29 entrants as against 21 out of 29 in April 1895. A decrease is noticed in the number of admissions into the Veterinary hospital, and the falling off under equine patients and other animals is attributed to the competition of private practitioners, and that under cattle patients to the absence of any outbreak of cattle diseases in the vicinity of the hospital. In consequence partly of the decrease in the number of patients, the net cost to Government on the upkeep of the hospital fell from Rs. 644 to Rs. 533. Mr. Keess is requested to furnish the Director with his views on the question of the better utilization of the Veterinary Superintendent's services, raised by the Board of Revenue in paragraph 7 of its review.

8. *College farm.*—It is pleasing to note that the farm annexe was worked at a net cost to Government of Rs. 391 only as against Rs. 860 in 1894–95. This was chiefly due to the increased receipts from farm produce and sale of milk, butter and ghee, and the charges also fell by Rs. 73. As remarked by the Board of Revenue, the detailed statements appended to paragraph 14 may be omitted in future reports, a summary only being furnished with brief explanatory notes. Owing to an aggregate increase in the number of days during which the cows yielded milk, the yield of milk was greater, but the average yield per head fell from 9·40 to 8·91 lbs. The Principal should explain why he would attach little or no importance to the average yield and in what way the milk record can be made of real value. The average cost of feeding each cow and the average receipts from sale of milk and ghee yielded by each cow should be worked out in future reports, with the approximate value, so that the public may form some idea as to the amount of net income that can be derived from a well-nourished cow of a good breed. The district or breed to which each cow belongs might also be usefully mentioned.

9. *College live-stock.*—The principle on which the value of live-stock in the statement appended to paragraph 16 has been calculated is not apparent. It should be reported whether the current market value has been taken as the basis of calculation. A decrease of Rs. 461 is noticed in the value of stock at the end of the year, while the sale of cows, &c., during the year yielded Rs. 319 only. Mr. Keess is requested to report whether the expenditure of Rs. 88–1–1 on live-stock shown in paragraph 13 is on account of the purchase of new stock.

10. *The College botanical gardens.*—An outlay of Rs. 921 was incurred on the upkeep of these gardens, and they are reported to have been properly kept and to have attracted a fairly large number of visitors. Information as to the number of specimen crops grown might have been given.

11. *The College hostel.*—Ten students of the college, besides twelve belonging to the Teachers' College, messed in the Brahman hostel. Every effort should be made to accommodate non-Brahman Hindus also. The expediency of providing quarters for, say, ten such students should be considered and reported on.

12. *Physical training.*—This subject, it is satisfactory to note, received due attention, and the success of two of the students at the inter-collegiate competition is noted.

13. *Employment of students.*—From the fuller particulars obtained and recorded in paragraph 20 of the report, the Director notes with satisfaction that as many as 249, or 65 per cent. of the men educated in the college, are employed in the Revenue and kindred Departments in British territory and in Native States. The Principal should continue sending to the heads of such Departments lists of men available, and the Director trusts that work may be found for the men remaining unemployed. The Court of Wards might also be furnished with such a list, as a few might, with advantage, be employed on the estates under the Courts' charge.

14. *Finance.*—The total charges (not the net cost) of the college including scholarships were Rs. 38,099 and the farm and other receipts were Rs. 5,323. The net cost to Government was thus Rs. 32,776, which gives the cost per head as Rs. 800 nearly. It is needless to urge that such a large expenditure by the State in turning out men with a fairly good knowledge of the principles and practice of agriculture and allied subjects can only be justified by the employment of such men on work where such knowledge can be usefully applied.

15. *General.*—The successful working of the Students' Association and the observance of the educational rules are noted. There is no objection to the Principal maintaining a complete inventory of stock for his information and guidance in two parts, the first part relating to the valuable stock for which he is required to submit an annual return and the second relating to all other articles on stock. It is believed that the college calendar is kept up to date. The results of the year's work were on the whole satisfactory and creditable to the Principal and his staff.

(A true Extract.)

(Signed) D. DUNCAN,
Director of Public Instruction.

To the Principal, College of Agriculture, with three spare copies.
„ Principals of other Professional Colleges.
„ Principals of Government First-grade Colleges.
Copy to the Board of Revenue (Revenue Settlement, Land Records and Agriculture), } for information.
„ the Superintendent, Civil Veterinary Department, }
„ the Commissioner for Government Examinations, }
„ Government, with C.L.

From the Honourable Mr. D. DUNCAN, M.A., D.Sc., LL.D., Director of Public Instruction, to the Chief Secretary to Government, dated Madras, 1st October 1896, No. 10759.

In continuation of paragraph 5 of my Proceedings, No. 10116, dated 14th ultimo, reviewing the report on the working of the College of Agriculture during 1895–96, I have the honour to report that twelve candidates passed the Government Technical Examination in Organic Chemistry (Intermediate) held in April last out of the fifteen that appeared—four being placed in the first class and eight in the second class.

Order—No. 646, Educational, dated 16th October 1896.

Recorded.

2. The Government concurs in the remarks of the Board and the Director of Public Instruction in paragraphs 9 and 8, respectively, of their reviews that the results of the farm and dairy at the college should be so reported as to be of educational

value to the largest possible circle, especially as the Principal states in paragraph 14 of his report that he considers that the farm crops are incomparably superior to those raised by the ryots of neighbouring land.

The difficulty complained of by Mr. Keess in paragraph 11 in giving yields in terms of weight would apparently be obviated if the whole of the transactions of the farm were described in the books from the beginning by weights rather than by measures of capacity.

3. The Government entirely agrees with the observations of the Director of Public Instruction in the introduction and paragraphs 13 and 14 of his review on the subject of the employment of passed students of the college, and all Collectors will be requested to see that, in future, the institution is given every support in this important direction. The point should continue to be noticed in the annual reports.

4. Three copies of the college calendar should in future be submitted to Government.

(True Extract.)

A. T. ARUNDEL,
Ag. Chief Secretary.

To the Director of Public Instruction.
„ Revenue Department.
„ Collectors of all Districts.
Editors' Table.

Exd. C. M. Thumbuswamy.

Educational (1896) Department.

CURRENT No. 1124

From The Dir. of Pub. Instruction, Madras.

Order

No. 10134

Dated 15 September 1896.

Received 16 —

Registered —

Enclosures One

Spare copies One

SUBJECT.

Submitting a copy of his Proceedings reviewing the report on the working of the College of Agriculture during the session 1895-96.

BACK PAPERS.

G.O.	No.	Department.	Date.
	~~337 SC~~	Edl a	6-6-96
	83 Inis	— " —	12-2-96
	41 — "	— "	22-1-96
	939 — "	— " —	19-12-95
	898 — "	— " —	22-11-95
	882 — "	— " —	16-11-95
	834 SC	— " —	19-10-95

FURTHER PAPERS.

G.O.	No.	Department.	Date.

691 Inis - Edl a 15-8-95
566 — " — " 9-7-95
464 — " — " 5-6-95
274 — " — " 6-4-95
759 SC — " — " 8-10-94
691 Inis — " — " 21-9-92
R 495 : 15 9 96
892 : 20 11 95
213 : 11 3 95 orgl
605 : 16 8 92

Educational (1896) Department.

CURRENT No. 1186

DESPATCHED 1 OCT. 96

From the Dir of Eds. Instruction Madras

Order

No. 10719

Dated 1st October 1896

Received 2. 10. 96

Registered 2

Enclosures nil

Spare copies nil

SUBJECT.

Reporting the issue of the ~~candidates~~ results appeared for the Technical Examination in Organic Chemistry (Intermediate) held in April last.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Report on College of Agriculture

Hon'ble Mr. Grose C. I. E.

JG
13/10/96

Educational Department.

C.Nos.1124 and 1186

ORDER No. 646.J. 16th Oct 1896
P.D.

Recorded.

2. The Government concurs in the remarks of the Board and the Director of Public Instruction in paragraphs 9 and 8 respectively of their reviews that the results of the farm and dairy at the College should be so reported as to be of educational value to the largest possible circle, especially as the Principal state in para 14 of his report that he considers that the farm crops are incomparably superior to those raised by the ryots of neighbouring land.

The difficulty complained of by Mr. Keess in para 11, in giving yields in terms of weight would apparently be obviated if the whole of the transactions of the farm were noted in the books from the beginning by measures of weight rather than of capacity.

JG

3. The Government also entirely agrees with the observations of the Director of Public Instructions in the introduction and paragraphs 13 and 14 of his review on the subject of the employment of passed students of the College and all Collectors will be requested to see that in future, the institution is given every support in this important direction. The point should continue to be noticed in

in the Annual reports.

4. Three copies of the College Calendar should in future be submitted to Government.

Uff 10-10-96 Ack 2106/96.

To

The D.P.I. 5

Revenue Department. 6 } Despd 11/11

Collectors of all districts Despd 13/11

Editors' Table. Issued 10/11

The Collectors of
The District Magistrates of

Anantapur. 8
North Arcot, Chittoor. 8
South Arcot, Cuddalore. 8
Bellary. 8
South Canara, Mangalore. 8
Chingleput, Saidapet. 8
Coimbatore. 8
Cuddapah. 8
Ganjam, Chatrapur. 8
Godavari, Cocanada. 8
Kistna, Masulipatam. 8
Kurnool. 8
~~Madras (when necessary).~~
Madura. 8
Malabar, Calicut. 12
Nilgiris, Ootacamund. 8
Nellore. 8
Salem. 8
Tanjore. 9
Tinnevelly. 8
Trichinopoly. 8
Vizagapatam. 8

Dispd 13/11/96

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