[Edl. 6.]
500—24-8-97.

Educational (1898) Department.

ORDINARY MS.

G.O., No. 57

DATED 28. 1. 98

INDEXED. 16-16

28-1-98

[Despatch Abstract.]

Recording Pros: Board of Rev:
on Pros: of the dep^{tt}: reviewing
the report on the working of
the College of Agriculture,
Saidapet, during 1896-97

I
28.1.98

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Educational 27/1

~~Revenue~~ (1897) Department.

Ordy Mi. No. 57 dt 28.1.98 JG 27/1/98

Recorded 28-1-98

CURRENT No. 168

636/97 Opf

Bd of Rev (Sett) .. Rto. Dft. 9 - Rto. + E. only. Secy/Ord 3/2/98 6/Rto. 1/2/98

Secy

Order Endt. R. 88 dt 15 Jany 98

From the Board of Revenue Revenue Settlement Land Records and Agriculture Madras

No. 10224 Mis

Dated 31st December 1897

Received 7.1.98

Registered 8.1.98

Enclosures 1

Spare copies

Transferred to the Educational Department.

W.M. Marjoribanks 11.1.98

Act under Secy to Govt

Fort St. George

Jany 1898

Rec'd 8/1/98

To

The Educational Dept.

Note

The Bd under the reference direct to the Board and the letter requires reply to the Bd

Dftd 10.1.98

Rud. 15.1.98

SUBJECT.

Recording, with remarks, Government Order (Revenue Department) Communicating Government Order (Educational) on the report of the working of the College of Agriculture, Saidapet, during 1896-97.

Mis. 28/1 10.1.98

BACK PAPERS.

G.O.	No.	Department.	Date.
Ev.	6421	d 14-12-97	

FURTHER PAPERS.

G.O.	No.	Department.	Date.

1897.

Board of Revenue

(Revenue Settlement, Land Records and Agriculture),

MADRAS.

Recd. } 1897. *Enclosures*

Regd. } 1897. *Spare copies*

Printed November 4th.

Proceedings, No. 673, 16th October 1897.

OCTOBER.

College of Agriculture.—Communicating to all Collectors, with remarks, review of the Director of Public Instruction on report on the working of the — during 1896–97.

1898
REVENUE DEPARTMENT
Enclosures No. 1
Current No. 660

PROCEEDINGS OF THE BOARD OF REVENUE
(Revenue Settlement, Land Records and Agriculture).

Read—again the following Proceedings of the Board of Revenue (R.S., L.R. and Agri.), Mis. No. 7037, dated 30th August 1897 :—

Read—the following letter from J. B. BILDERBECK, Esq., M.A., Acting Director of Public Instruction, to the Secretary to the Board of Revenue (R.S., L.R. and Agri.), No. 8472, dated Madras, 7th August 1897 :—

In continuation of this office endorsement, No. 5284, dated 14th May 1897, I have the honour to forward, for the information of the Board, copies of letters from the Principal, College of Agriculture, Nos. 651 and 656, dated 3rd and 4th August 1897, respectively, which furnish the results obtained by the college at the Government Technical Examinations held in April last.

Enclosure No. 1.

From W. KEESS, Esq., Principal, College of Agriculture, Saidapet, to the Director of Public Instruction, No. 651, dated 3rd August 1897.

With reference to your Proceedings, No. 7373, dated 23rd July 1897, and in continuation of my letter, No. 617, dated 26th July 1897, I have the honour to submit a statement showing the results of the Government Technical Examinations held in April last for which this college presented candidates.

2. The percentages obtained last April were very satisfactory more so than they have ever been since the college began sending up candidates for the examinations held under the Government technical scheme. Personally I attach very little importance to percentages, but, on the present occasion, I would remark that the lowest percentages were obtained in the only two subjects (Physiography Intermediate and Inorganic Chemistry Intermediate) in which special examinations for the college candidates were not held. As you are doubtless aware, the examinations in all subjects, except those just mentioned, are held by specially appointed boards (Agriculture and Veterinary), while in the examinations in Physiography and Inorganic Chemistry the papers are set for the whole Presidency without any reference to the requirements o f agricultural students.

Enclosure No. 2.

From W. KEESS, Esq., Principal, College of Agriculture, Saidapet, to the Director of Public Instruction, No. 656, dated 4th August 1897.

In continuation of my letter, No. 651, of yesterday's date, I have the honour to report that fourteen students of the college have obtained the diploma in Agriculture on the results of the Government Technical Examinations held in April last.

The figure "14" compares very favourably with the corresponding figure for last year, viz., 4.

Enclosure No. 3.

Su ect.	Number of candidates.	Number passed. First class.	Second class.	Total.	Percentage.	Remarks.
1. Agriculture, Advanced	15	1	12	13	86·7	
2. Botany, Special	17	..	..	11	64·7	Not divided into classes.
3. Physiography, Intermediate	18	3	5	8	44·4	
4. Veterinary Science (Intermediate), Stage I	9	5	3	8	88·9	
5. Do. (do.), do. II	17	3	12	15	88·2	
6. Inorganic Chemistry, Intermediate	14	2	5	7	50·0	
7. Organic Chemistry, Special	10	3	7	10	100·0	
8. Surveying and Levelling, Special	11	4	5	9	81·8	
9. Agricultural Engineering, Intermediate	14	9	5	14	100·0	

Resolution—Mis. No. 7037, dated 30th August 1897.

Recorded, pending receipt of the Director of Public Instruction's review of the report of the College of Agriculture.

(True Copy and Extract.)

(Signed) L. E. BUCKLEY,
Famine Secretary.

To the Director of Public Instruction.

Read—also the following Proceedings of the Director of Public Instruction, No. 10531, dated 14th September 1897 :—

Read the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), No. 528, dated 26th July 1897 :—

Read the following letter from W. KEESS, Esq., M.A., M.R.A.C., Principal, Madras College of Agriculture, to the Director of Public Instruction, dated Saidapet, 4th May 1897, No. 407 :—

I have the honour to submit the report on the College of Agriculture for the official year 1896–97. The report has been prepared in accordance with the instructions issued in your Proceedings, No. 4585, dated 17th April 1896.

2. *Staff.*—There were no changes in the *personnel* of the staff. Mr. Collins, Assistant Agricultural Chemist to the Government of India, and Veterinary Lieutenant Clarke, Superintendent, Civil Veterinary Department, did duty at the college as shown below :—

Name.	Period.	Class II.	Class III.
Mr. Collins	16th November 1896 to 19th December 1896.	Nine hours' practical instruction.	Twenty-three hours' lectures.
Veterinary Lieutenant Clarke	2nd February 1897 to 15th March 1897.	Sixteen hours' lectures	Sixteen hours' lectures and twelve and-a-half hours' practical instruction.

A report (copy enclosed) by Mr. Collins was submitted with my letter No. 9, dated 5th January 1897. A report by Veterinary Lieutenant Clarke is now submitted.

3. *Strength.*—There were 47 students on the rolls on the 31st March 1897 against 44 on the corresponding date of the previous year. Class I was very fairly filled and the strength of class III was well maintained. Unfortunately for the college the number of students in class II decreased to eight. In my last report the figures for class I of the session 1895–96 were six Brahmans and seven non-Brahman caste Hindus. Of the former all rejoined the college as students of the present class II, but only two of the latter did so.

Statement showing the distribution of students according to nationality.

	Class I.		Class II.		Class III.		Total.	
	31st March 1896.	31st March 1897.	31st March 1896.	31st March 1897.	31st March 1896.	31st March 1897.	31st March 1896.	31st March 1897.
1. Europeans and Eurasians	..	..	..	..	..	..	..	..
2. Native Christians	..	..	..	..	..	..	..	..
3. Muhammadans	..	2	..	..	1	..	1	2
4. Brahmans	6	10	7	6	11	10	24	26
5. Non-Brahman caste Hindus	7	8	8	2	4	9	19	19
Total	13	20	15	8	16	19*	44	47

* Includes five 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 came. It will be observed that nine students do not belong to the Madras Presidency.

STATEMENT showing the distribution of students according to districts.

Districts.	Class I.	Class II.	Class III.	Total.
Vizagapatam	1	..	.	1
Gódávari	..	..	1	1
Kistna	1	..	..	1
Cuddapah	..	..	1	1
Nellore	..	..	2	2
Madras	4	..	..	4
Chingleput	1	..	1	2
South Arcot	..	..	2	2
Tanjore	1	1	1	3
Trichinopoly	..	..	1	1
Madura	1	1	2	4
Tinnevelly	1	1	2	4
Coimbatore	..	2	1	3
Salem	2	1	..	3
Malabar	1	1	2	4
South Canara	2	..	..	2
Jamnagar	2	..	..	2
Idar (Guzarat)	1	..	..	1
Bangalore	1	..	..	1
Hassan	1	..	..	1
Coorg	..	1	2	3
Kathiwar	..	..	1	1
Total ..	20	8	19	47

5. Of the seven district scholarships six were filled by the nominees of Collectors.

Names of students.	Districts.	Nominated by	Sections of the population.	Educational qualifications.
1. G. V. Subramanayya	Kurnool	Collector	Brahman	Matriculation.
2. H. Rama Rao	South Canara	Do.	Do.	Do.
3. S. Krishnaswami Aiyar	Salem	Do.	Do.	F.A.
4. M. R. Nagoji Rao	Madura	Do.	Do.	Matriculation.
5. P. Gurumurti	Vizagapatam	Do.	Non-Brahman	Do.
6. C. S. Vijiaranga Mudaliar.	Chingleput	Do.	Do.	Do.
7. T. V. Rajagopalachari	Vacancy in Nellore.	Principal	Brahman	F.A.

6. *Examinations.*—The following table gives the results of the Government Technical Examinations held in April 1896. The names of the teachers responsible for the different subjects are shown in the last column. So far as examination results can be used as a test of the work of the college, I think the institution may be said to have done well. In five subjects the percentage of the passes was 75 or over. In the remaining four subjects the percentage of passes was over 40. Four students obtained the diploma in Agriculture :—

RESULTS of the Government Technical Examinations held in April 1896.

Subjects.	Number presented in April 1896.	Number passed in April 1896.	Names of responsible teachers, April 1896.
1. Agriculture, Advanced	13	6	W. Keess, G. Krishna Prabhu and R. Ramaswami Aiyar.
2. Veterinary Science, (Intermediate,) 1st stage.	17	16	A. E. Clarke, S. L. D'Silva and T. V. Narayana Rao.
3. Do. do. 2nd stage.	12	7	A. E. Clarke and S. L. D'Silva.
4. Inorganic Chemistry, Intermediate	22	9	W. Keess.
5. Organic Chemistry Special	15	12	Do.
6. Botany Special	8	4	G. Krishna Prabhu.
7. Physiography Intermediate	15	13	Do.
8. Surveying and Levelling, Intermediate	16	12	R. V. Subramania Aiyar and T. V. Narayana Rao
9. Agricultural Engineering, Intermediate	13	10	R. V. Subramania Aiyar.

7. *Courses of Studies.*—There were no changes made in the course of studies. As regards the special syllabus in "Surveying and Levelling" introduced under G.O., No. 882, Educational, dated 5th June 1895, I consider that it has not answered the

purposes intended. The new syllabus was introduced in order to reduce the number of hours devoted to Surveying and Levelling. All it has done is to reduce the number of hours of work in class and to correspondingly increase the number of hours of work out of class. I still hold to the opinion expressed in my last report that the scales prescribed for the plans which candidates have to submit are too small. The scales are those used for the preparation of Revenue Survey plans, but I do not think this is a sufficient reason for prescribing them for the use of Agricultural students.

The order in which the different subjects were gone through was the same as in the previous year and is given below :—

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 (completed).
Veterinary Science, Intermediate, Stage II (whole).
Agricultural Engineering, Intermediate (concluded).

8. The following statement shows the hours devoted to lectures and practical instruction. The statement is, as in my last report, prepared for the session. Were it prepared for the financial year the hours shown against each subject would include time devoted to that subject by two different sets of students during two different sessions.

The reduction in the time devoted by classes I and II to Surveying and Levelling is more apparent than real, for, as pointed out before, work out of class has been substituted for work in class.

There was a sensible reduction in the hours spent by class III on Agricultural Engineering. This is due to the use, during the whole session, of the new and simpler syllabus. Much of the work, however, is done out of hours. In this subject it is impossible to separate lectures from practical instruction. The whole time spent on Agricultural Engineering is therefore shown under lectures.

The details of the agricultural excursions are omitted from the "remarks" column and given separately in the next paragraph.

Subjects.	Lectures.	Hours of practical instruction.	Remarks.
Class I.			
Agriculture, Advanced, Part I	56	114½	....
Botany, Special	101	78	Class usually taken in two batches for practical instruction.
Inorganic Chemistry, Intermediate	64	30	....
Physiography, Intermediate	132	..	....
Veterinary Science, Intermediate, Stage I	60	1½	Introductory to second year's work.
Surveying and Levelling, Special	4	74½	....
Museum classes	..	30	....

Subjects.	Lectures.	Hours of practical instruction.	Remarks.
Class II.			
Agriculture, Advanced, Part I	53	36	Excludes plot cultivation.
Do. do. Part II	32	..	....
Veterinary Science, Intermediate, Stage I	101	63	Sixteen of the lectures by the Superintendent, Civil Veterinary Department.
Inorganic Chemistry, Intermediate	70	76½	....
Organic Chemistry, Special	88	34	Nine of the hours of practical instruction by Mr. S. H. Collins, Assistant Agricultural Chemist to the Government of India. A large portion of the practical work not shown, as it was done out of hours.
Surveying and Levelling, Special	34	76	....
Agricultural Engineering, Intermediate	58½	..	Some of the lectures were in reality practical classes.
Class III			
Agriculture, Advanced, Part I	117	112½	Excludes the days spent on agricultural excursions in the Cuddapah and Coimbatore districts.
Do. do. Part II	99	19½	Excludes hours in which the classes worked in batches at oil cake and other analyses. 23 hours' lectures by Mr. S. H. Collins.
Agricultural Engineering, Intermediate	141½	..	Division between lectures and practical instruction impossible. Excludes three-half days spent on excursions.
Veterinary Science, Intermediate, Stage II	88	88	Sixteen of the lectures and 12½ of the hours of practical instruction by the Superintendent, Civil Veterinary Department.
Museum classes	..	22	....

9. *Practical work—Agriculture.*—The rainfall of the year was not so favourable to the performance of practical work on the farm as during 1895–96.

Class I was instructed in ploughing and other field operations. The usual field and museum classes were also held.

The practical work of class II consisted chiefly of "plot cultivation." Owing to the abnormal rainfall the cultivation of the plots by the students was carried on under difficulties. In my letter, No. 660, dated 9th October 1896, I advocated the substitution of "field cultivation" for "plot cultivation". The Revenue Board (Revenue Settlement, Land Records and Agriculture) in its Proceedings, Mis. No. 6031, dated 27th November 1896, agreed with me that the change was desirable. I hope the necessary orders from Government will reach me before the opening of the next session. The usual field classes were held.

Class III made two agricultural excursions under the guidance of M.R.Ry. R. Ramaswami Aiyar, fourth Assistant — the first in October to the Cuddapah district and the second in January to the Coimbatore district:—

Cuddapah Excursion.

6*th September* 1896.—Left Saidapet, Madras, for Yerraguntla.

7*th September* 1896.—Left Yerraguntla for Proddatur. Observed the transplanting of ragi, the working of single mhotes and the standing crops of cholam withered. Enquired into the cultivation of ragi.

8*th September* 1896.—Left Proddatur for Maitukúr, visiting Gudlapalli and Seetharamapuram villages and observed cholam, indigo, castor, &c. At Maitukúr enquired into the cultivation of tenai and inspected some indigo vats.

9*th September* 1896.—At Maitukúr observed the preparation of indigo dye. Enquired into the cultivation of turmeric and cummin and the preparation of the produce for the market. Left Maitukúr for Sivapuram.

10*th September* 1896.—At Sivapuram, all the Ceded districts implements, with the exception of Pedda Madaka, were worked for the students. Enquired into the cultivation of cholam, tenai and cotton as a mixed crop. Returned to Maitukúr.

11*th September* 1896.—Inspected a large area under "wastes" near Maitukúr. Explained about the reclamation of waste land. Observed the standing crops of indigo, tenai, paddy and cholam grown in some reclaimed area. Completed paddy.

12*th September* 1896.—Inspected the livestock, manure heaps, &c. Enquired into the management of livestock, castration and its after treatment. Left Maitukúr for Kamalápuram and reached Rajampet.

13*th September* 1896.—At Rajampet enquired into the cultivation of sun-hemp. Observed the extraction process.

14*th September* 1896.—At Rajampet, enquired into working of oil mills, the cultivation of gingelly, cumbu and onions and the preparation of the produce for the market, and the cultivation and curing of tobacco.

15*th September* 1896.—Rajampet to Kodur; observed large area under indigo in sandy loams and noted the difference. Inspected a reserved forest and the varieties of trees grown there.

16*th September* 1896.—Orampad—Inspected betel gardens, cocoanut and arecanut plantation. Studied livestock and its management, garden lands and the crops. Returned to Kodur and reached Madras, Saidapet, on the 17th.

	RS.	A.	P.
Cost—			
Assistant	35	10	0
Students and muchee	125	0	0
Total ...	160	10	0

Coimbatore Excursion.

4*th January* 1897.—Party arrived at Coimbatore; visited Anuparapalayam and enquired into the cultivation of tobacco.

5*th January* 1897.—Visited Telugupalayam village near Coimbatore; enquired into the cultivation of wheat and cotton and inspected the crops standing.

6*th January* 1897.—Visited Ganapathy and Krishnarayapuram villages; completed the enquiry on wheat, curing of tobacco, construction of wells and cattle management.

7*th January* 1897.—Inspected the coffee and manure works of Messrs. Stanes & Co. at Coimbatore. Enquired into the cultivation of Bengal-gram and chillies.

8*th January* 1897.—Visited the Central Jail gardens and saw the different kinds of manufactures carried on there by convict labour.

9*th January* 1897.—Singanallur and Neelikonanpalayam villages; enquired into the cultivation of cholam, chillies and sugarcane. Management of sheep, shearing season and the quantity of wool obtained, &c.

10*th January* 1897.—Perur village. Inspected cocoanut and arecanut plantations, manufacture of cocoanut jaggery and enquired into the cultivation of plantains, &c.

11*th January* 1897.—Visited Pothanur sugar works.

12*th January* 1897.—Holiday for Pongal.

13*th January* 1897.—Leave for Pongal; left Coimbatore for Erode.

14*th January* 1897.—At Erode visited the garden lands and enquired into the cultivation of sweet potato and observed the cultivation of paddy, turmeric and plantain along the Kalingarayan channel.

15*th January* 1897.—Karungalpalayam and Pílamédu villages; enquired into the cultivation of paddy, turmeric and plantains.

16*th January* 1897.—Left Erode for Kodumudi; enquired into the cultivation of yams, different varieties of cholam in garden and dry lands and different varieties of paddy in wet land.

17*th and* 18*th January* 1897.—Left for Madras and Saidapet.

	Rs.	A.	P.
Cost—			
Assistant	57	10	0
Students and muchee	179	9	0
Total ...	237	3	0

Field and museum classes were also held.

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

(1) Standardising an acid.
(2) Do. 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. Both classes derived benefit from the prevalence of anthrax in the neighbourhood of Saidapet during certain months of the year.

Surveying and Levelling.—The new special syllabus was in use during the whole year. I have already pointed out the disadvantage of having the scales, prescribed for the plans, as small as they now are.

Agricultural Engineering.—The practical work is prescribed in the syllabus. Three half-days were spent on excursions.

Organic Chemistry.—The practical work, prescribed in the special syllabus, is of a very useful nature and is adapted to the requirements of agricultural students.

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 increased as shown below :—

	1895-96.	1896-97.
Horses and ponies	135	147
Cattle	145	161
Other animals, chiefly dogs	100	139
Total ...	380	447

It should be explained that the increase in cattle patients was not due to a number of contagious cases being treated at the hospital, for, only three head of cattle suffering from anthrax were entered in the books.

The expenditure and income of the hospital were Rs. 1,246–8–4 and Rs. 523–7–7 against Rs. 1,073–11–1 and Rs. 541–2–1 during 1895–96. There was consequently an increase of Rs. 191 in the net cost of the hospital. The increase of expenditure occurred chiefly under "sundries." It is impossible to distribute such expenditure evenly over a number of years. I may mention that the present scale of charges for horses and dogs appears to be too low. A revised scale will be shortly submitted.

A report by Mr. D'Silva, Second Assistant, who was in charge of the Veterinary Hospital throughout 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. Every endeavour, however, is made to work the farm at as small a cost as is consistent with the purposes for which it exists.

M.R.Ry. R. Ramaswami Aiyar, Fourth Assistant, acted as Manager throughout the year, but there were unavoidable changes in the Bailiff's post, owing to the deputation to Poona of, and to the grant of sick leave to, M.R.Ry. J. Chelvaranga Raju, the Bailiff of the Farm. This officer was on duty at Saidapet during the following periods: 8th April 1896 to 24th July 1896, 23rd November 1896 to 31st March 1897. During the remaining portions of the year the Bailiff's post was filled by M.R.Ry. M. R. Ramaswami Sivan, Diplomaed Agriculturist, S.P.T., second clerk of the College.

Owing to the increased size of the farm and especially to the fact that it is attached to a Government educational establishment, the time has arrived for affording assistance to the bailiff. In my letter No. 348, dated 23rd April 1897, I addressed you on the subject of changing the designation of the second clerk to "second clerk and assistant bailiff" and of compelling him to reside on the farm. The plan, suggested by me, will, if adopted, entail no additional expense on Government beyond the loss of the rent of a cottage on the farm and will allow of the much needed assistance being guaranteed to the bailiff. Such assistance is now given owing to the present second clerk being a diplomaed agriculturist and, of his own accord, residing on the farm, but as matters stand, a clerk, pure and simple, may be appointed to the second clerk's post and such an officer would not be able to assist the bailiff. I hope the matter will be favourably considered.

The officers mentioned above, namely, M.R.Ry. R. Ramaswami Aiyar, J. Chelvaranga Raju and M. R. Ramaswami Sivan, performed their several duties on the farm in an efficient manner. During the year under report they had to contend with many difficulties—drought, flood and an outbreak of anthrax. It gives me much pleasure to bring their services to your notice.

12. The rainfall of the year was most abnormal. About the first week in November it looked as if the farm would have to face a drought. I was on the point of deciding which fields should be abandoned to their fate when over 50 inches of rain fell within five weeks and the farm had therefore to contend against flood. Matters were aggravated by the overflow of the river Adyar consequent on the bursting of several tank-bunds further up the stream and by the breaching of the bund of the Mylapur tank.

Statement showing the monthly rainfall registered at the College Farm, Saidapet, during 1896–97.

Months.	Actual rainfall 1896–97.	Average rainfall collected at Saidapet during the previous 26 years.
	Inches.	Inches.
April 1896	...	0·29
May ,, ...	...	2·17
June ,, ...	1·26	2·47
July ,, ...	2·19	4·11
August ,, ...	9·00	4·97
September ,, ...	7·28	5·32
October ,, ...	3·15	11·19
November ,, ...	35·46	14·24
December ,, ...	20·85	5·24
January 1897	0·57	0·43
February ,, ...	...	0·44
March ,, ...	0·03	0·27
Total ...	79·79	51·14

13. The net cost of the farm was Rs. 319–14–5 against Rs. 391–6–7 in 1895–96 and Rs. 859–12–8 in 1894–95.

There was an increase of over Rs. 400 under "field produce." This can be accounted for by the sale of cholam fodder (for which an unexpected demand arose) and lucerne and by the comparatively high prices realized by the cereal grains. The increase would have been greater had it not been for the damage done by heavy rain and flood to several of the crops and also to the vegetables—the latter having been, in many cases, completely destroyed. There was a decrease of about Rs. 400 under "live-stock." This is explained in subsequent paragraphs. An increase of nearly Rs. 200 occurred under "wood and miscellaneous."

There was a considerable reduction in the amount expended on cattle food. The farm was fortunate in making a favourable contract for the supply of food stuffs. The contractor must have lost money by the arrangement but he fulfilled the terms of his contract. The additional expenditure on manure was due to the manuring with tank silt of certain fields.

Financial statement of the College Farm for 1896–97.

Farm Receipts.

	Rs.	A.	P.	Rs.	A.	P.
Field produce				1,898	0	4
Live-stock—						
Sale of cows, calves, sheep, &c.	83	12	0			
Sale of milk, butter, ghee, &c.	1,220	9	2			
Covering fees	57	8	0			
				1,361	13	2
Wood and miscellaneous				1,066	7	7
Total				4,326	5	1

Farm Charges.

Cattle food—						
Ground-nut cake, &c.	624	14	7			
Dholl husk	318	8	8			
Wheat bran	139	7	3			
Salt	39	13	0			
Paddy straw	85	10	6			
Rice, ragi, &c.	3	2	0			
				1,211	8	0
Manure				204	4	6
Seeds and plants				80	15	7
Cooly labour				2,425	10	10
Machines, implements, &c.				274	0	8
Workshop				59	10	10
Estate improvements				163	14	0
Contingencies				86	6	10
Live-stock				139	12	3
Total				4,646	3	6

14. In accordance with the instructions conveyed in paragraph 8 of your Proceedings, No. 10116, dated 14th September 1896, the detailed cropping statement (which in my last report occupied five pages) is omitted, a summary with a few explanatory notes being substituted.

The paddy is divided into seven classes according to method of cultivation and to the fact whether it was damaged or not by flood. It will be observed that the students must have seen paddy cultivated in a variety of ways. The paddy which was drilled and which escaped damage by flood yielded 3,712 lb. per acre of grain and 3,360 lb. of straw. The yield of grain must be considered *excellent*. The land on which this crop was grown may be said to be the best soil on the farm but it is

far inferior to soils in the Tanjore district from which a yield of 3,000 lb. would be considered very good. The paddy which was transplanted and which also escaped damage by flood may also be said to have yielded excellently (2,203 lb. per acre) when the nature of the soil is considered. The paddy which was transplanted but which was damaged by flood had its yield of grain decreased by about 300 lb. and its yield of straw increased by about 600 lb. The paddy sown broadcast dry on very poor soil yielded well (1,141 lb. per acre). Great damage was done by flood to the paddy growing on 8 acres of land, the crop having been submerged for days under running water. Of course the yield was very considerably decreased.

The ragi transplanted and grown under irrigation yielded very well—grain per acre 960 lb.; straw per acre 4,633 lb. That drilled and grown as a dry crop was very much damaged by heavy rain and yielded badly in consequence. The varagu (sown with dholl) did fairly well.

The pulse crops were seriously damaged by the heavy rains of November and December—the green-gram was practically destroyed.

Among the industrial crops, Sea Island cotton deserves to be specially mentioned. The yield per acre was 1,200 lb. of cotton in seed (360 lb. lint and 840 lb. seed). The average yield in this Presidency on the so-called black cotton soil is 50 lb. to 70 lb. lint and 150 lb. to 200 lb. seed. The Sea Island cotton has a good staple and the lint is easily separated from the seed. There appears to be no difficulty about its cultivation. The only disadvantage it possesses is the height of the plant which necessitates a crooked stick being used in gathering the higher bolls. The farm on sandy soil obtained a yield about six times as large as that raised on black cotton soil. It would be interesting if really efficient experiments were to be conducted with the farm seed in the districts where black cotton soil is found. The sugarcane was submerged for some days and very much damaged in consequence. The ground-nut shown as harvested in this report was put down in August 1895. One-third of the crop was given for harvesting and 640 lb. per acre represents therefore two-thirds of the total produce. The yield must be considered poor.

Among sundry crops, plantains did fairly well in spite of an unfavourable season. The fruit and leaves from half an acre fetched over Rs. 30. The vegetables were much damaged by heavy rain and in some cases completely destroyed. In an ordinary season the cultivation of vegetables is very profitable and were the farm worked for profit it would be desirable to largely increase the area under vegetables. They respond well to careful cultivation and there is no difficulty about their disposal.

Crops.	Area sown.	Outturn.				Remarks.
		Grain or seed.		Straw or fodder.		
		Amount.	Per acre.	Amount.	Per acre.	
Cereals.	Acs.	lb.	lb.	lb.	lb.	
Paddy transplanted (not damaged by flood).	3·50	7,710·5	2,203	8,800	2,514	
Paddy transplanted (damaged by flood).	1·60	3,026	1,891	5,040	3,150	
Paddy sown broadcast, wet system (damaged by heavy rain).	1·00	1,031	1,031	2,400	2,400	Inferior variety sown, soil slightly saltish.
Paddy drilled (not damaged by flood).	3·00	11,136	3,712	10,080	3,360	
Paddy drilled (damaged by flood) ..	5·25	6,233	1,188	15,680	2,987	
Paddy drilled, inferior variety in sandy soil.	3·00	1,513	504	5,040	1,680	
Paddy broadcast, dry, sandy soil ..	3·30	3,766	1,141	7,840	2,376	
Ragi drilled, dry crop	2·50	598	239	3,360	1,344	Crop while young suffered severely from excessive rain.
Ragi transplanted and under irrigation.	4·77	4,580	960	22,101	4,633	
Varagu (sown with dholl)	3·50	2,170	620	5,888	1,682	Dholl standing.

Crops.	Area sown.	Outturn. Grain or seed. Amount.	Grain or seed. Per acre.	Straw or fodder. Amount.	Straw or fodder. Per acre.	Remarks.
Pulses.	ACS.	LB.	LB.	LB.	LB.	
Black gram	2·75	1,190	433	..	..	Crop suffered while in flower owing to continuous heavy rain.
Green gram	1·90	140	74	..	..	Do. do.
Dholl (sown with varagu).	6·20	1,170	189	..	..	Varagu harvested last year and shown in last year's report.
Industrial.						
Sugarcane	1·00	Sold by auction for Rs. 152-8-0.				Crop submerged during the heavy rains of November and December, and much damaged. Over quarter of an acre reserved for seed and still standing.
Groundnut (not yet harvested).	3·30	..	..	5,376 (haulms).	1,629 (haulms).	....
Groundnut (harvested)..	1·00	640	640	..	..	Haulms shown in last year's report.
Sea Island cotton ..	·10	120 lb. cotton in seed.	1,200 lb. cotton in seed.	..	..	....
Sundries.						
Plantains	·50	1,500 (fruit).	3,000 (fruit).	Leaves worth Rs. 8.	Leaves worth Rs. 16.	Crop still standing, green plantain sold at 3 pies a pound.
Chillies	·15	Dry chillies worth Rupees 10.	Dry chillies worth Rupees 66-10-8.	..	..	....
Do.	·25	..	..	..	..	Crop standing.
English and Indian vegetables.	2·00	Vegetables worth Rs. 83-6-0.	Vegetables worth Rupees 41-11-0.	..	..	Vegetables very much damaged by heavy and incessant rain.
Green fodder.						
Cholam	23·45	..	..	1,17,855	5,026	One cutting only, damaged by heavy rain.
Horse gram	11·55	..	..	21,212	1,836·5	Sown late owing to heavy rain, crop standing in ·75 acre.
Guinea grass	2·00	..	..	7,411	3,705·5	....
Lucerne	·10	..	..	275	2,750	From one cutting only crop still standing.
Green manure.						
Sun hemp	1·60	..	..	..	..	Ploughed in.
Horse gram						
Indigo						
Dholl	1·90	..	..	..	..	Ploughed in.

15. Eleven cows yielded milk during the year against twelve during the previous year. Meenachi. I (16 years old) was sold on account of age. The yield of milk increased by 1,929 lb. (517 Madras measures). Tara (No. 2), the second best milker on the farm, slipped her calf, and milked without a calf at foot for 346 days. Her yield in consequence was much reduced.

Although the number of cows was decreased by one and the yield of milk was increased by 1,929 lb., the average yield, as worked out in previous report, decreased to 8·15 lb. This furnishes another proof of the inutility of the averages arrived at by the method adopted above, in disapproval of which I have several times expressed myself. The "average for the herd" is best obtained, I think, by dividing the total yield by 11 (the number of cows) × 365. By this process the average works out as 5·97 lb. I do not think it practicable to give effect to the suggestion made in paragraph 2 of B.P., dated 27th November 1896, No. 6035. In any case, I consider too much has been made of the "average yield." In practice, a herd would be judged on various grounds and the "average yield" during any given year would not be reckoned of much, if any, consequence.

The income from the sale of milk, butter, &c., decreased by Rs. 120. The explanation of this is as follows:—1st, during the year under report the farm did not maintain any buffaloes. Two buffaloes were kept during the previous year. They yielded 465 measures of milk, which realized Rs. 87. These animals were most troublesome, and it was not worth while to employ a separate man to look after them. I consequently decided not to keep any buffaloes during 1896–97. 2nd, in May 1895, the prices of milk, butter and curd were kept at the following rates:—annas 3–6 per measure, annas 12 per pound, annas 1–6 per measure, respectively. In May 1896 it was not practicable to maintain these rates, and they were consequently reduced to annas 2–8 per measure of milk, annas 8 per pound of butter and anna 1 per measure of curd. 3rd, in 1895–96, all sums due for milk, butter, &c., were recovered during the year, but in 1896–97 Rs. 92–2–10 stood over as balance. I may add that the whole of this sum will be recovered before 1st July next, except Rs. 8–11–10, about which I fear there will have to be legal proceedings.

The following statement gives the yield of milk. All the cows are pure bred Nellores, with the exception of Kali II, which is a cross between Nellore and Mysore:—

STATEMENT showing the yield of milk in the College Farm herd during 1896–97.

No.	Name of cow.	Age of cow.	Yield in 1896–97. Madras measures of 100 cubic inches.	Yield in 1896–97. Pounds.	Number of days cow yielded.	Average per day in. Madras measures.	Average per day in. Pounds.
		YEARS.					
1	Kalyani I *	13	1,086·125	4,051·246	326	3·332	12·428
2	Tara *	8	526·375	1,963·379	346	1·521	5·673
3	Kalyani III *	7	464·125	1,731·186	224	2·072	7·729
4	Parvati *	6	400·625	1,494·331	220	1·821	6·792
5	Alamelu *	6	556·250	2,074·813	344	1·617	6·031
6	Narayani *	9	880·375	3,283·799	363	2·425	9·045
7	Seetha *	7	284·500	1,061·185	144	1·975	7·367
8	Meenachi II *	8	562·125	2,096·726	238	2·362	8·810
9	Do. I *	16	Sold.				
10	Sahib's cow *	13	838·625	3,128·071	364	2·304	8·594
11	Kali II †	12	722·125	2,693·526	304	2·375	8·859
12	Govindu *	9	102·375	381·859	66	1·55	5·785
	Total ..		6,423·625	23,960·121	2939	..	..

* Nellore. † Cross bred, Nellore and Mysore.

16. In paragraph 8 of your Proceedings, No. 10116, of 14th September 1896, you desired certain calculations to be made, 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." With this object in view I shall work out the actual expenses of, and the actual income from, the best milker on the farm and also from one of the medium milkers for last financial year. In both cases, the whole milking period fell within the financial year.

Kalyani I.—This animal milked for 326 days and yielded 1,086 Madras measures. While milking her daily feed was as follows:—

4 lb. cake, 4 lb. dholl husk, 2 lb. wheat bran, 2 oz. salt, 20 lb. paddy-straw (or its equivalent). During her milking period of 326 days, she therefore consumed 1,304 lb. cake, 1,304 lb. dholl husk, 652 lb. wheat bran, 40¾ lb. salt, 6,520 lb. straw. When dry she got only 15 lb. straw and in 39 days consumed 585 lb.

Her total cost of feeding was, therefore,—

	Rs.	A.	P.
1,304 lb. cake, at Rs. 12–12–0 per 500 lb.	33	4	0
1,304 lb. dholl husk, at 40 lb. per rupee	32	9	7
652 lb. of wheat bran, at 30 lb per rupee	21	11	9
$40\frac{3}{4}$ lb. salt = $13\frac{7}{12}$ measures, at annas 2 per measure ...	1	11	2
6,520 lb. straw, at Rs. 10–8–0 a ton	30	9	0
585 lb. straw, at Rs. 10–8–0 a ton	2	11	11
Total ...	122	9	5

Attendance may be estimated at Re. 1 a month, that is, Rs. 12 a year. Roughly speaking, the cost of maintaining such a cow may be put down as Rs. 135. Her produce for the year was as follows:—

	Rs.	A.	P.
1,086 measures of milk, at annas 3–6 a measure	237	9	0
Value of 4 tons of manure	12	0	0
Value of calf	15	0	0
Total ...	264	9	0

The profit, excluding depreciation, is, therefore, about Rs. 130.

Kali II.—This animal gave 722 measures of milk in 304 days. During this period she received a daily ration of 5 lb. cake, 3 lb. dholl husk, 2 lb. wheat bran, 2 oz. salt and 20 lb. paddy straw, or its equivalent. During the 61 days she was dry she received 15 lb. straw a day. A similar calculation as that made for Kalyani I gives the total cost of maintaining Kali II as follows:—

	Rs.	A.	P.
912 lb. cake (3 × 304), at Rs. 12–12–0 per 500 lb.	23	4	1
912 lb. dholl husk (3 × 304), at 40 lb. per rupee	22	12	10
608 lb. wheat bran (2 × 304), at 30 lb. per rupee	20	4	3
38 lb. salt = $12\frac{2}{3}$ measures, at annas 2 a measure	1	9	4
6,080 lb. straw (20 × 304), at Rs. 10–8–0 a ton	28	8	0
915 lb. straw (15 × 61), at Rs. 10–8–0 a ton	4	4	8
Total ...	100	11	2
Add attendance ...	12	0	0
Grand Total ...	112	11	2

Her *produce* was as follows:—

	Rs.	A.	P.
722 measures of milk, at annas 3–6 per measure	157	15	0
Value of 4 tons manure	12	0	0
Value of calf	12	0	0
Total ...	181	15	0

The profit, excluding depreciation, is therefore, about Rs. 69.

I have assumed that all the milk was sold for annas 3–6 a measure. No doubt were the farm a private venture and were therefore able to take certain steps to dispose of its produce, *all* the milk could be sold at the price mentioned. The farm during all months of the year, except May and June, sells its milk at annas 3–6 a measure to customers, who are not students of the college, and at annas 3 a measure to students of the college; during May and June the price is usually annas 2–8 a measure. As regards butter, the price varies on the farm from As. 8 to Rs. 1–8–0 a pound.

No doubt a private firm, producing a fairly large quantity of good butter could obtain Re. 1 or annas 14 for a pound all the year through. It requires from five to six measures of farm milk to make a pound of butter.

17. The following statement shows the number and value of the live-stock on the farm at the commencement and at the end of the year. The value of an animal is arrived at by fixing the price it would probably fetch were it sold. The sale of cows, calves, sheep, &c., amounted to Rs. 83–12–0 during the year against Rs. 318–12–0 during the previous year. The value of the live-stock increased by about Rs. 200.

An outbreak of anthrax occurred on the farm in November 1896, and a working bullock of the value of Rs. 50 and heifer calf of the value of Rs. 25 were attacked. The former died and the latter was destroyed. The outbreak occurred during a time of heavy rain and the difficulties in combating it were therefore increased. The efforts of the farm officers, however, succeeded in confining the outbreak to very narrow limits:—

Statement showing the number and value of the stock at the commencement and at the end of the year 1896–97.

No.	Description.	Commencement. Number of animals.	Commencement. Value.	End. Number of animals.	End. Value.
			Rs.		Rs.
	Cows	11	750	11	950
	Heifers	3	75	4	100
	Heifer calves	6	75	5	57
	Bulls	10	680	10	650
	Bullocks	7	375	6	320
	Bull calves	4	55	8	121
	Sheep.				
	Rams	6	30	5	25
	Ewes	18	72	19	76
	Gimmers	10	30	8	24
	Lambs	16	16	20	30
	Total ..	91	2,158	96	2,353

18. The following statements give the information usually supplied regarding the live-stock of the farm. The figures show everything that is required and no remarks are necessary except in the case of "Bull service." The decrease in the number of cows served was due to the exclusion from the farm of all outside cows during the prevalence of anthrax in the neighbourhood of Saidapet and to the uselessness for breeding purposes of some of the farm bulls on account of age and of the effects of hard work:—

(*a*) *Value of labour to be charged against stock*—

	Rs.
One milk man on Rs. 7–4–0 per mensem, 12 × $7\frac{1}{4}$	87
One man attending on cows on Rs. 5 per mensem	60
One boy attending on bulls on Rs. 2–8–0 per mensem	30
One boy attending on sheep on Rs. 2–8–0 per mensem	30
One boy cleaning byres, &c., on Rs. 2–8–0 per mensem	30
Total ...	237

(*b*) *Value of farm-grown fodder consumed by stock*—

	Rs.	A.	P.
Straw—			
Ragi straw, 25,461 lb., at Rs. 7 per ton	79	9	1
Varagu straw, 5,880 lb., at Rs. 3–8–0 per ton	9	3	0
Paddy-straw, 54,880 lb., at Rs. 10–8–0 per ton	257	4	0
Haulms—			
Ground-nut, 5,376 lb., at Rs. 5–8–0 per ton	13	3	2
Green fodder—			
Cholam {20,384 / 57,299} lb., at 150 lb. per rupee	135	14	4
	381	15	11
Guinea grass, 7,144 lb., at 200 lb. per rupee	35	11	6
Horse-gram, 21,212 lb., at Rs. 12 per ton	113	10	2
Total ...	1,026	7	2
Deduct 8 tons of paddy-straw in stock on the 1st April 1897, at Rs. 10–8–0 per ton	84	0	0
Net value of farm-grown fodder consumed by stock in 1896-97...	942	7	2

(*c*) *Value of services rendered by live-stock on the farm*—

Field No.		Rs.	A.	P.
1		42	0	0
2		94	9	0
3		56	6	0
4		13	15	6
5		16	14	0
6		30	3	0
7		71	5	0
8		12	12	0
9		47	5	0
10		39	10	9
11		38	0	0
12		213	10	6
13		9	6	0
14	A Rs. 27 6 0	69	3	6
	B „ 41 13 6			
15		44	14	0
16		32	0	0
17		9	1	0
18		16	10	0
19		21	15	0
20		15	9	0
21		14	13	0
22		33	15	0
25		12	8	0
26		28	14	0
27		13	8	0
Total		998	15	3

(*d*) *Total quantity of manure collected from the live-stock on the farm during* 1896–97.—One hundred and twelve tons of farm yard manure, valued at Rs. 3 per ton, = Rs. 336.

(*e*) *Bull service.*—During the year 8 farm cows and 112 outside cows were served.

(*f*) *Value of services rendered by the live-stock on the farm to the Botanical Gardens and the College compound during* 1896–97.—Total value of services equals Rs. 290.

19. *Botanical Gardens.*—The botanical gardens suffered very severely during the heavy rains of November and December, the lower terraces having been completely submerged for several days. The plots in the upper terrace were as usual utilized for growing specimens of the crops of the Presidency. As requested in your review of my last report, the number of specimen crops is given below :—

	No.
Cereals	12
Pulses	9
Oil-seeds and industrial crops	10
Fibre crops	7
Root crops	6
Grasses	8
Total	52

This part of the gardens is always the favourite one with visitors, and during January and February seemed to be as popular as ever. The cost of the gardens was Rs. 982–11–0 against Rs. 920–12–3 during the previous year.

20. *Hostel.*—On the 31st March 1897, eight students of the College of Agriculture and seven students of the Teachers' College were messing at the Brahman hostel maintained on the farm. It is to be hoped that when the new Teachers' College hostel is built, the Brahman students of this college will be allowed to mess there. The present building on the farm, which is used as a hostel, is not suited for that purpose.

21. *Former students.*—The annexed statement gives the occupation of former students. During the year I circulated among Collectors and District officers a statement showing the names of ex-students who were seeking employment. I am glad to state that the result of my doing so has been satisfactory. The number of students engaged in farming and coffee planting increased by two. Private employers seem to be recognizing the value of the education imparted at the college, for I have just secured a good post for a student at a large manure manufactory. His duties there will give him ample scope for utilizing the knowledge he gained at this institution.

1. Farming and coffee planting	30
2. Superintendents of plantations, farms, estates and gardens	16
3. Agricultural implements and dairy trade	2
4. Teachers of agriculture—	
(*a*) Employed in the College of Agriculture	5
(*b*) Employed elsewhere	12
5. Agricultural department—	
(*a*) Madras	5
(*b*) Bombay	2
(*c*) North-West Provinces	1
(*d*) Native States	21
6. Veterinary department—	
(*a*) Madras Civil Veterinary department	6
(*b*) Native States	2
7. Private veterinary practice	4
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	51
(*d*) Attached to Revenue Settlement parties	4
10. Irrigation department—	
(*a*) Government	6
(*b*) Native States	2
11. Forest department—	
(*a*) Madras—	
(1) Extra Assistant Conservators	2
(2) Rangers	10
(3) Foresters	13
(*b*) Other Provinces and Native States	15
12. Merchants and managers of trading firms	12
13. Local Fund overseers and sub-overseers	5
14. Sanitary inspectors	3
15. Barristers, High Court Vakils and Pleaders	8
16. Medical department	2
17. Commissariat department	7
18. Salt department (Assistant and Sub-Inspectors)	7
19. Miscellaneous—	
(*a*) Government	16
(*b*) Native States	7
(*c*) Private	11
20. Unemployed	13
21. Not known	27
22. Dead	26

22. Classes I and III underwent gymnastic instruction. Class II was exempted from gymnastics in order to leave the mornings free for "plot cultivation." Should "field cultivation" replace "plot cultivation," the students of this class will go through a course of gymnastics.

The athletic club, as usual, concerned itself with cricket, tennis and foot-ball. By a College rule all students are members of the athletic club, those playing tennis paying an extra subscription. Three cricket matches were arranged and two played, one having been abandoned on account of rain. One foot-ball match was played. It is needless to point out that it is very difficult to get together good cricket and foot-ball teams when the selection is limited to 47 students.

At the competition for the Travancore challenge shield in February last, the College team tied with the Christian College team and was only finally beaten on one of the events, in which there had been a dead-heat, being competed for over again.

The athletic sports of the college were held on Saturday, 20th February 1897, in the presence of a fairly large assembly. By permission of Colonel Burn and officers, the band of the 14th Madras Infantry played a selection of music during the sports. A native band was also in attendance. The sports were generally considered to have been successful. I have to thank the Honourable Dr. Duncan, the Elaya Rajah of Travancore and several ex-students for subscribing to the expenses of the sports.

The paragraph devoted to the athletics of the College would not be complete without mention of the services rendered during the last three years to the Athletic Club by student K. Subbiah (Coorg), whose connection with this institution ceases to-day. In recognition of these services the Athletic Club has presented him with a silver cup of the value of Rs. 37½. I may add that this student has been as successful in the examination room as on the athletic ground.

23. The Students' Association held eleven meetings, at which essays were read, followed by discussions. Eight of the essays dealt with agricultural topics (cultivation of betel, cultivation of waternut, cows' milk, bamboo, agricultural tours, &c.) and one was on a veterinary subject.

The anniversary meeting was held on Wednesday 21st April, when the usual programme was gone through (reading of the report, Chairman's speech, refreshments, jugglers and music).

24. The following statement gives the books in the library. Stock was taken at the end of the year and no books were missing. The library catalogue is kept up to date.

Description.	No. of books.
Agriculture	794
Botany	78
Gardening	25
Forestry	40
Economic Entomology	46
Zoology	55
Veterinary	138
General Science	76
Chemistry	54
Physics	16
Geology	62
Physiography	96
Mathematics	71
Surveying	47
Engineering	72
General Literature	125
Miscellaneous reports	151
Total	1,946

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. The foot-note to a great extent explains the decrease in the number of books taken out by students.

Books.	Number taken out by staff.	Number taken out by students.
Agriculture	48	248
Veterinary Science	31	113
Botany, &c.	35	62
Chemistry, Physiography, Geology, Physics	43	118
Surveying and Levelling, Engineering	29	28
Miscellaneous reports	5	8
General Science	13	23
General Literature	29	43
Total	233	643 *

* This excludes Agricultural, Engineering and Surveying books in circulation among students.

25. 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 authorized strength.

(iii) *Accommodation and sanitation.*—The building could with ease accommodate double the number of students now on the rolls. The sanitary arrangements were some time 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.*—One paying-student was removed for absence without leave. With this exception, there was no breach of discipline which required to be dealt with. The College authorities enforce the disciplinary provisions of the Madras Educational Rules as well as the rules applicable only to students of this institution.

(vi) *Registers and Accounts.*—The registers (attendance, gymnastics, &c.) have been properly maintained. The accounts are kept in the College office under my personal supervison. 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 to 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 the cultivation of their plots should there be any necessity for doing so. From 10 A.M. to 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—Eleven holidays approved of, by the Director of Public Instruction.

26. During the year a draft of new rules was submitted. The necessary matter for the calendar has been got together, but the work has been retarded by the second clerk having been on duty at the Veterinary hospital during October and November and by his helping the farm bailiff. I hope to issue the calendar by October next.

27. The service registers have been maintained up to date. The inventory of valuable stock has been checked and the usual return will be submitted in due course. The levelling staff reported as lost in the last report has been recovered. It is doubtful how much of the physical and chemical apparatus should be entered in the return of valuable stock. This matter will receive consideration.

28. *Finance.*—The cost of Mr. Collins' deputation was not this year charged against the College. The expenditure (including scholarships) rose by Rs. 790–14–1 and the income by Rs. 289–6–1 The net cost of the institution, therefore, increased by Rs. 501–8–0. The furlough allowances of the gymnastic instructor and head clerk, and whole cost of the deputation of the bailiff to Poona were debited to the college.

	Budget estimates, 1896–97.	Expenditure. 1895–96.	Expenditure. 1896–97.
	RS.	RS. A. P.	RS. A. P.
Principal	18,454	12,389 3 5	* 12,201 0 0
Masters and Teachers	9,060	8,729 1 8	9,092 2 2
Establishment	2,388	2,361 7 11	2,616 14 11
Ordinary contingencies	810	804 15 10	793 14 2
Service postage	100	48 0 0	54 8 0
Service telegram		2 0 0	3 2 0
Rents, rates and taxes	70	69 12 0	67 4 0
Scholarships †	..	....	....
Travelling allowances	700	556 11 0	820 4 0
Library and prize allowances	350	284 11 0	198 13 7
Laboratory charges	250	244 4 11	194 12 11
Furniture, apparatus and live-stock	700	460 12 0	129 9 7
Farm annexe	4,650	4,508 15 3	4,646 3 6
Botanical garden	1,000	920 12 3	982 11 0
Petty construction and repairs	1,550	1,499 14 7	1,508 13 3
Payment made through the Accountant-General's office for periodicals, stores, &c.	..	474 5 9	878 2 11
Veterinary Hospital Charges.			
Establishment	816	814 13 2	816 0 0
Contingencies	984	258 13 8	430 8 4
Total	41,882	34,428 10 8	35,434 12 4
Receipts.			
College of Agriculture	..	4,781 6 1	‡ 5,088 6 8
Veterinary Hospital	..	541 2 1	523 7 7
Total	..	5,322 8 2	5,611 14 3

* Includes Rs. 1,393-14-6, being exchange compensation allowance.
† Rupees 3,454-15-7 are to be charged against separate provision in the Educational budget.

	RS.	A.	P.
‡ Farm	4,326	5	1
Fees	525	0	0
Rent and Miscellaneous	237	1	7
Total	5,088	6	8

29. In conclusion, I desire to acknowledge the services of the staff and officers of the college.

ENCLOSURE No. 1.

Copy of letter from the Assistant Agricultural Chemist to the Government of India, to the Principal, College of Agriculture, Saidapet, dated 19th December 1896.

With reference to paragraph 2 of Proceedings of the Director of Public Instruction, No. 13823, dated 21st December 1895, I have the honour to report that during the winter term at the College of Agriculture, I took the following classes :—

Class II—commencing on the 1st December and ending on the 16th December for 9 hours work in practical organic chemistry, viz. :—

The properties of, and tests for, the vegetable oils, animal fats, mineral oils, essential oils, resins and hard and soft soaps.

The extraction of the acidity of oils for lubrication.

The students showed themselves intelligent in drawing conclusions from the observations actually made.

Class III—commencing on the 16th November and ending on the 19th December for 23 lectures of 1 hour each on the following subjects. The chemistry of soils with special reference to—

(1) Obtaining a good sample for analysis.
(2) The salts removed by drainage. their detection and estimation.
(3) The salts retained by the soil.
(4) Rough tests (where applicable) and ordinary methods of analysis for the principal elements of plant food in a soil.
(5) Available and total plant food, their mutual relationships and methods of analysis.
(6) The method by which the plant obtains its food from the soil.

The analysis of food stuffs and calculation of albuminoid ratio therefrom. The composition of the ash of plants, the composition of the chief diary products and simple methods of analysis.

The students showed intelligence in class and answered the questions in the examination with clearness.

ENCLOSURE No. 2.

From the Superintendent, Civil Veterinary Department, Madras Presidency, to the Principal College of Agriculture, Saidapet, dated Chepauk, 20th March 1897.

I have the honour to report that I delivered a series of lectures on Physiology to Class II and Veterinary Science to Class III from February 2nd to March 15th 1897; to Class II, I gave 16 lectures of one hour each, and to Class III 16 lectures of one hour each and 10 practical classes at the Saidapet Veterinary Hospital of 1½ hours each. I also held two examinations for Classes II and III. Class II, I consider to be very well up in their work, and almost if not all of the students ought to pass their examination. Class III, I do not think have had sufficient time to make themselves well acquainted with Veterinary Science, although I think they ought to be able, most of them, to pass. I do not know exactly how many lectures Mr. D'Silva has given them, but I have only lectured for about half the time I did last year owing to my time at Saidapet being curtailed by the Board.

In conclusion, I wish to thank Mr. D'Silva for his help and to express my high opinion of him. I think a better man for the work could hardly be found and would suggest that if a chance of his being promoted should occur, that he be given the step.

ENCLOSURE No. 3.

From Mr. S. L. D'SILVA, Provisional Second Assistant in charge, Government Veterinary Hospital, Saidapet, to the Principal, College of Agriculture, Saidapet, dated 30th April 1897.

I beg to submit herewith the annual return of cases treated at the Veterinary Hospital, Saidapet, during 1896–97. The figures, as compared with those of the previous returns, show that the hospital, in spite of its remoteness from most parts of Madras, continues to make steady progress. There was, during the year under report, an increase of patients under each heading, the total number of cases treated being 447 against 380 during 1895–96. The increase in cattle patients was not due to outbreak of any infectious disorder. There were 7 cases of anthrax (3 head of cattle and 4 horses) that came up to the hospital, all of which terminated fatally. The increase in the number of deaths was due to the increase in the total number of patients admitted, and also to a comparatively large number of cases under specific blood disorders.

STATEMENT showing the principal classes of diseases treated at the Government Veterinary Hospital, Saidapet, during 1896–97.

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	30	..	11	1	4	..	12	1	57	2
Specific blood diseases	18	4	5	1	4	2	17	4	44	11
Diseases of the digestive organs	22	..	12	3	6	1	24	..	64	4
,, ,, biliary apparatus	6	..	1	1	..	..	13	5	20	6
,, ,, respiratory organs		..	..	..	3	..	13	1	20	1
,, ,, urinary system	3	..	..	..	..	..	3	1	6	1
,, ,, skin	8	..	4	..	1	..	13	1	26	1
,, ,, foot	15	1	3	1	..	..	..	..	18	2
,, ,, eye	3	..	4	..	..	..	2	..	9	..
,, ,, ear	..	..	..	..	..	..	3	..	3	..
,, ,, lactiferous organs	..	..	..	..	..	..	1	..	1	..
,, ,, generative organs	2	..	..	..	3	..	4	1	9	1
,, ,, nervous system	2	..	1	..	1	..	13	2	17	2
Injuries and diseases of bones	8	..	3	..	2	1	1	..	14	1
Injuries and diseases of ligaments, tendons and muscles	7	..	8	..	1	..	..	..	16	..
Surgical conditions, wounds, tumours, etc.	19	..	73	..	11	..	20	3	123	3
Total	147	5	125	7	36	4	139	19	447	35

Read also letters from the same officer, Nos. 651, 656, 712 and 713, dated 3rd, 4th, 23rd and 23rd August 1897, respectively.

No. 5284.

Forwarded to the Secretary to the Board of Revenue (Revenue Settlement, Land Records and Agriculture), for favour of any remarks, the Board may deem fit to offer.

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

14th May 1897.

Resolution—dated 26th July 1897, No. 528.

The report read above having been again prepared for the official year, the results of the Government Technical examinations undergone by the students of the College shortly after its close are not yet available, but may be forthcoming as in the last year for the review of the Director of Public Instruction.

2. The re-organization of the Educational Department being now an accomplished fact, it is expedient, for the reasons stated by the Director of Public Instruction in his review of the last year's report, that the place of the Vice-Principal be permanently filled at an early date.

3. The number of Sudra students has steadily increased since 1892–93, in spite of the fact that, as noted in the last report of the Principal, four Sudra students left the College "owing either to their inability to live at Saidapet, or to ill-health occasioned by the hardships which residence at Saidapet entailed on them". No reason is assigned for five Sudra students having left the College during the current year. The Board desires to know whether the cause has been ascertained beyond doubt to have been due to the difficulty of finding board and lodging. The project of providing a hostel for Sudra students had to be given up, as the number of such students at the Agricultural and Teachers' Colleges combined, who would have become boarders, was too small to admit of a hostel being established for them. Every effort should be made to induce more non-Brahman students to join the College, and any difficulties standing in the way of such students should be, as far as possible, removed.

4. The period for which the Superintendent, Civil Veterinary Department, was engaged in lecturing at the Agricultural College was reduced from nine weeks to six, but the number of lectures delivered by him and the number of hours spent by him in practical instruction fell only from 36 to 32 and from 19 to 12½ respectively.

5. It is interesting to note that the College has attracted a considerable number of students from outside the Presidency.

6. As regards the new syllabus in Surveying and Levelling, the Principal says "all it has done is to reduce the number of hours in class and to correspondingly increase the hours of work out of class". From paragraph 3 of the enclosure to the Director of Public Instruction's letter to be found in Board's Proceedings, No. 6540, dated 28th November 1895, it appears that this result was contemplated by the committee. The Principal reports that there was, under the new syllabus, some real reduction in the time devoted by class III to Agricultural Engineering, but nothing is said as to the manner in which class II has been affected by the change. The syllabus in "Agriculture—Advanced" has been slightly changed by the substitution of "field cultivation" for "plot cultivation."

7. The Superintendent, Civil Veterinary Department, does not appear to have ever visited the College Veterinary hospital, as directed in Board's Proceedings, No. 2260 of 1885, except during the time he was engaged in lecturing at the college. The number of patients treated at the hospital exceeded that treated in the previous year by the following percentages :—

	Per cent.
Horses and ponies	9
Cattle	9
Other animals, chiefly dogs	39
...	15

8. The Principal's suggestion to make the second clerk of the College office assistant bailiff, and make him reside on the farm, meets with the approval of the Board.

9. The outturn of Sea Island cotton was remarkably good, but the area cultivated with this crop ($\frac{1}{10}$ acre) was small, and it is doubtful whether equally good results are likely to be obtained by cultivation on a large scale. The black cotton soil, to which the Principal alludes in paragraph 14, is said to be not so well suited as red and other light soils to the Sea Island and other American varieties of cotton.

10. With reference to the Board's remarks in paragraph 9 of its review of the last year's report, Mr. Keess has since explained that the outturns of grains, pulse, &c., were converted from terms of capacity to terms of weight, not on any arbitrary assumption, but on data obtained by repeated actual weighments.

11. The Board is prepared to accept the method proposed by Mr. Keess for arriving at the daily average yield of milk per head of the whole herd. It may be instructive to note from time to time the specific gravity of the milk yielded by cows of various ages at different stages of their milking periods. From the statement subjoined to paragraph 15, the weight of a Madras measure of the milk yielded by cows of all ages, appears to be considered uniform. It is doubtful if this assumption is correct. It will be interesting, in order to compare the values of individual cows, to record for each cow the length of the period between one calving and the next, and the total quantity of milk given during that period. The comparative value of each cow may thus be deduced from the formula—

$$\frac{\text{Total quantity of milk from calving to calving}}{\text{Number of days from calving to calving.}}$$

The data mentioned in paragraph 2 of Board's Proceedings, No. 6035 of 1896 should be recorded, as they may be found useful.

12. The entry under the head "haulms" in paragraph 18 (*b*) should be corrected as noted below, the word "haulms" being inapplicable to cholam stalks; the object of the double entry as regards the quantity and price of the cholam fodder is not apparent.

	Rs.	A.	P.
Cholam straw, 77,683 lb. at 150 lb. per rupee	517	14	3
Ground-nut haulms, 5,376 lb. at Rs. 5–8–0 per ton	13	3	2

13. The Board suggests that a statement of the outturn of wool from the Farm flock should be incorporated in future reports.

14. The Board is glad to learn that those who have passed through the College have been more fortunate than in previous years in obtaining posts under Government in the mofussil. Nearly 90 per cent. of the "passed" students of the College, who are still living, are known to be employed, while hardly 4 per cent. of the surviving "passed" students are known to be unemployed.

15. The Board notes with pleasure the remarks of the Principal on the success of K. Subbiah in the examination room as well as in out-door exercises.

16. The Board would be glad to know what progress Mr. Keess has made in revising the Saidapet Farm records.

17. The net cost of the institution compares not unfavourably with the figures of previous years, notwithstanding that the College had to deal with drought, flood and disease.

(True Copy and Extract.)

(Signed) L. E. BUCKLEY,
Famine Secretary.

To the Director of Public Instruction.
" Principal, Agricultural College.
" Superintendent, Civil Veterinary Department.

Proceedings No. 10531 of 1897.

Staff.—Mr. Keess, who had been acting as Principal ever since the retirement of Mr. Robertson, has lately been confirmed in that appointment which has been reserved for the Indian Educational Service. The Vice-Principalship, also included in the same service, has not yet been filled. It is hoped that Government will soon be in a position

to take steps to fill the vacancy, especially as there is no available officer in this Presidency, who can be appointed to act for the Principal in the event of his applying for leave. The Assistant Agricultural Chemist to the Government of India and the Superintendent, Civil Veterinary Department, delivered lectures and gave practical instruction to the senior classes during the year.

2. *Library.*—Good use seems to have been made of the library; the number of books added during the year has not been reported.

3. *Strength and attendance.*—It will be seen from the marginal summary that the number on the rolls was almost stationary during the past quinquennium. The number of students from outside the limits of the Presidency fell from eleven in 1896 to nine in 1897. As in the year previous, sixteen districts were represented in the College, the number of students returned by each ranging from one to four. Ganjám, Bellary, Anantapur and Kurnool contributed no students. From paragraph 5 of the Principal's report, it is observed that the Collector of Kurnool nominated a candidate for the district scholarship, but his nominee seems to have discontinued his studies in the College. The number of Brahmans and Muhammadans increased by two and one, respectively, while that of non-Brahman Hindus remained the same as in 1896. It should be reported whether there were any Government stipendiaries among the non-Brahman caste Hindus who are stated to have left the College. Four of the students belonged to the richer, and 37 to the middle, classes, while the official and landholder classes contributed 10 and 34 students, respectively. All the seven district scholarships were appropriated—six on the nomination of Collectors, and one on the nomination of the Principal. The total number of stipendiaries on the 31st March last was 25, against 26 in the year previous. The average number on the rolls and the average daily attendance were 40 and 37, respectively.

On the 31st March 1893	42
Do. 1894	41
Do. 1895	47
Do. 1896	44
Do. 1897	47

4. *Examinations.*—The results of the Government Technical Examinations in Agriculture and the allied subjects held in April 1896 and 1897 appear in the following table:—

Subject.	1896.		1897.		Percentage of passes.	
	Examined.	Passed.	Examined.	Passed.	1896.	1897.
Agriculture, Advanced	13	6	15	13	46·1	86·7
Botany, Special	8	4	17	11	50·0	64·7
Physiography, Intermediate	15	13	18	8	86·6	44·4
Veterinary Science (Intermediate), Stage I	17	16	9	8	94·1	88·9
Do. (do.), Stage II	12	7	17	15	58·3	88·2
Inorganic Chemistry, Intermediate ..	22	9	14	7	40·9	50·0
Organic Chemistry, Special	15	12	10	10	80·0	100·0
Surveying and Levelling, Special	16	12	11	9	75·0	81·8
Agricultural Engineering, Intermediate ..	13	10	14	14	76·9	100·0

The above results are considered by the Principal to be the best ever obtained since the presentation of students of this College for the Government Technical Examinations. In his letter, No. 651 of the 3rd August, the Principal explains that the comparatively poor outturn in Physiography and Inorganic Chemistry was due to the fact that the papers in these subjects were unlike nearly all the other papers in that, while the latter were set by the Special Boards of Examiners in Agriculture and Veterinary Science, the former were set for the whole Presidency and had no special bearing on the requirements of agricultural students. There does not seem to be much reasonable ground for complaint against the syllabus prescribed for the examination in Physiography; in respect to Inorganic Chemistry, Mr. Keess is requested to indicate the modifications he would propose in the present syllabus. There appears to be no urgent necessity for a further revision of the new syllabus in Surveying and Levelling, which should be allowed a longer trial. The Acting Director is glad to hear that fourteen students, as against four in 1896, have qualified for the diploma in Agriculture.

5. *Practical work.*—In consequence of heavy floods in the Adyar, the farm lands to a great extent were under water during November and December last year, and this naturally interfered with the practical work on the farm. Since the close of the official year, Government has expressed its approval of Mr. Keess's proposal to substitute "field cultivation" for "plot cultivation" in the syllabus on Practical Agriculture—Advanced. Two excursions were made during the year by students of class III under the guidance of one of the Junior Assistants—one to Cuddapah and the other to Coimbatore—and the students seem to have been provided with a wide and varied range of interesting subjects for investigation.

6. *Veterinary instruction and hospital.*—The Superintendent, Civil Veterinary Department, delivered 32 lectures on Physiology and Veterinary Science and gave ten practical lessons in the Veterinary hospital for nearly a month and a half in February and March last. It is hoped that he will, as suggested by the Board of Revenue, arrange to pay as many visits as possible to the Veterinary hospital during his stay in Madras. At the examinations in Veterinary Science, Intermediate, held in April last, 23 students passed, both in the first and second stages, out of 26 presented, eight having been placed in the first class. These results are encouraging. There was an increase in the number of admissions into the hospital from 380 to 447, the increase being contributed by each class of patients. The net cost to Government of the hospital rose from Rs. 533 to Rs. 723.

7. *College Farm.*—The information furnished in paragraph 14 of the Principal's report is interesting, and it might serve a very useful purpose, if brief but complete summaries of the more interesting and useful results obtained in the farm were translated into the vernaculars and published in the various District Gazettes. Sueh a course, if it did not provoke imitation of methods pursued in the farm, would at least disseminate valuable information and would probably stimulate thought and enquiry. The Principal's explanation of the fall in the value realised from the sale of dairy produce is noted, and he is requested to report with reference to the remarks and suggestions contained in paragraphs 11 and 13 of the review of the Board of Revenue. Owing to increased receipts from "field produce" and "wood and miscellaneous," the net cost to Government on the upkeep of the farm annexe fell from Rs. 391 to Rs. 320.

8. *College live-stock.*—There was an increase in the number of live-stock, which has raised the value of the stock from Rs. 2,158 to Rs. 2,353. With reference to the correction noted by the Board of Revenue in paragraph 12 of its review, the Principal has since explained that the heading "Green fodder" was, through an oversight, placed below instead of above "Cholam," which is to be treated as green fodder and not as *haulms*, and that the object of the double entry against cholam is to distinguish the yield of two different fields.

9. *The College Botanical Gardens.*—The total number of specimen crops grown in the botanical gardens was 52. The upkeep of the gardens cost Rs. 983, as against Rs. 921 in the year previous.

10. *The College Hostel.*—The Principal's remarks in paragraph 20 of his report are noted.

11. *Physical Training.*—Considerable interest was evinced in athletic sports and exercises. The Acting Director is pleased to hear of the excellent example set by the Coorg student L. Subbiah, and also to learn that his fellow students appreciated his services. A statement showing the financial condition of the College Athletic Club might be furnished in future reports.

12. *Employment of Students.*—The ratio which the number of students who are unemployed bears to the total number of qualified living students is, as observed by the Board, very satisfactory. It is hoped that the number of those entering the Revenue Department will gradually increase.

13. *Finance.*—The total charges of the College during the year, including scholarships, amounted to Rs. 38,890 and the farm and other receipts to Rs. 5,612. The net cost to Government was thus Rs. 33,278, which gives the cost per head as Rs. 832 approximately, against Rs. 800 in 1895–96.

14. *General.*—The working of the Students' Association appears to have been satisfactory. The rules of the college have been thoroughly recast, and the draft revised rules will be submitted to Government as soon as the press of work in connection with the preparation of the quinquennial report and the departmental budget is over. The designation of the second clerk has, as recommended by Mr. Keess, been changed into that of second clerk and assistant bailiff, and Government has also approved of the officer in charge of the Veterinary hospital being provided with quarters on the premises. As requested by the Principal, the Board of Revenue will be asked to communicate copies of their Proceedings to all Collectors, to whom the thanks of the Department are due for their kind help in the selection of college students for vacancies in the Revenue Department. The efficient condition of the college during the year was creditable to the Principal and the staff.

(A true Extract.)

(Signed) J. B. BILDERBECK,
Ag. Director of Public Instruction.

To the Principal, College of Agriculture, with 20 spare copies.
" Principals of other Professional Colleges.
" " of Government First Grade Colleges.
Copy to the Board of Revenue (Revenue Settlement, Land Records and Agriculture), } for information.
" " Superintendent, Civil Veterinary Department, }
" " Commissioner for Government Examinations, }
" " Government, with covering letter, }

RESOLUTION—No. 673, dated 16th October 1897.

Communicated to all Collectors.

2. With regard to the proposal made in the first sentence of paragraph 7 of the proceedings of the Director of Public Instruction, the Board is not prepared to impose on Collectors the task of translating and publishing in the District Gazette a summary of the results of experiments conducted at the college; but it is open to any Collector to adopt the suggestion, if his staff has the necessary leisure.

(True Copy and Extract.)

(Signed) L. E. BUCKLEY,
Famine Secretary.

(True Copy.)

(Signed) P. GOVINDA MENON,
Ag. First Assistant.

To all Collectors.
" the Director of Public Instruction.
Copy to the Superintendent, Civil Veterinary Department.

Mxd. Md. Pahilvan.

(Sett. 22—2,000—11-3-97.)

REVENUE BOARD OFFICE. MADRAS.

Proceedings of the Board of Revenue

(Revenue Settlement, Land Records and Agriculture),

Dated 31st December 1897.

No. 10224 Miscellaneous

READ Government Order, Revenue department, 6421 Miscellaneous dated 14 December 1897 communicating G.O. Educational, No. 636 dated 12-November/97.

ENCLOSURES TO C. No. Resolution

Recorded

2. With reference to para 5 of Government order (Educational), the Board begs to submit a copy of its Proceedings No. 673 dated October 1897. The Board wo... add that the district Gazettes not generally studied by any ... circle of subscribers, and can... be regarded as a satisfact... for disseminating informati... the agricultural classes

(True Extract)