

7/11
Educational (1896) Department.

ORDINARY MS.

G.O., No. 693

Dated 7-11-96

INDEXED.

[Despatch Abstract.]

Communicating to the S. & J. with remarks, proceedings
of the Revenue Dept. pressing orders on the recommenda-
tions of the Committee appointed under G.O. No 699 Res
of 23 Oct 1895 to report on certain proposals
concerning Agricultural Education and experiment.

BACK PAPERS.

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

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
7523	7/97						

Government (1896) of Madras. REVENUE.

Order

*Comm. to the S.P.S. for information
& guidance.*

CHIEF SECRETARY
20 OCT. 1896
GOVERNMENT OF MADRAS

*Wa
2/10*

Recd.

Regd.

To the S.P.S. in

1896.

Enclosures

Spare copies

850/195
517/188
727/194

G.O., No. 490, 24th September 1896.

SEPTEMBER.

Agricultural Education and Experiment.

Passing orders on Board's Proceedings submitting a memorandum of the discussions and recommendations of the Committee appointed under G.O., No. 699, Revenue, dated 23rd October 1895, in regard to —

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—again G.O., No. 699, Revenue, dated 23rd October 1895.

ABSTRACT.—Communicating to the Educational Department and to the Board of Revenue, with remarks, resolution of the Government of India communicating remarks on the recommendations of the Agricultural Conference of October 1893 on the subject of agricultural education in India.

READ—the following memorandum of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), No. 12, dated 21st January 1896.

The Board begs to submit herewith, for the consideration of Government, a memorandum of the discussions and recommendations of the Committee appointed under G.O., No. 699, Revenue, dated 23rd October 1895.

2. On the question of how best to adapt the system of education in Primary schools to the requirements of the Agricultural classes, the Government will observe that the Committee recommend—

(1) that Agriculture should not appear as a separate subject in the curriculum of rural Primary schools, but that the effort should be to impart an elementary knowledge of it in the group "Object Lessons and Elementary Science," which group should be made a compulsory subject;

(2) that Agriculture should be recognised as a separate optional subject for boys after they have passed the Fourth Standard, and that, until properly qualified teachers become available, the study of a text-book on Agriculture in Lower Secondary schools will be better than nothing;

(3) that the first necessary step is to provide for the training of the teachers of Lower Secondary and Primary rural schools, and that to this end, every training institution, where such teachers are trained, should—

- (a) have on its staff a master qualified to teach Agriculture, and
- (b) have attached to it a school garden;

(4) that to secure an adequate supply of trained teachers for the rural Primary and Lower Secondary schools, an Agricultural class should be developed in selected educational institutions, where the general education will be carried on up to the Upper Secondary Examination and special education in Agriculture up to the Intermediate Standard. Such classes will need a small demonstrational farm for teaching purposes, and a portion of a Government experimental farm may be utilized for the purpose if there be one in the vicinity;

(5) that it is not otherwise expedient to combine a Farm-school for the above purpose, with an experimental farm, as proposed in the scheme of the Madras Government;

(6) that the early establishment of experimental farms, as separate organisations, and designed for carrying on agricultural investigation, is advisable.

3. The last two recommendations are dealt with in paragraphs 9 and 10 of the memorandum which indicate how, in the opinion of the Committee, the orders of Government previously issued may be advantageously modified; that is, that Agricultural education and Agricultural Experiment should be dealt with separately. If the recommendations of the Committee on these points be accepted, there need be no further delay in starting at least two of the experimental farms, which have already been sanctioned by the Government of India—vide G.O., No. 435, Revenue, dated 21st June 1894.

4. The discussion recorded in paragraph 11 of the memorandum arose from inquiries on the subject by Sir Edward Buck made, as he explained, for the information of the Government of India. In view of the conclusion arrived at, the question of appointing an Agricultural Expert as Vice-Principal of the College may again be considered. It was ordered in G.O., No. 130, Educational, dated 17th February 1893, to be deferred until Dr. Voelcker's report was disposed of.

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.

Copy to each of the Members of the Committee—
(Sir. E. C. Buck, Kt., c.s.i.,
The Hon'ble Mr. D. Duncan, M.A., D.Sc.,
Mr. H. M. Winterbotham, I.C.S.,
Mr. F. A. Nicholson, I.C.S.,
Mr. C. Benson, M.R.A.C.,
Mr. W. Keess, M.A., M.R.A.C.,

with copy of the memorandum.

MEMORANDUM OF A DISCUSSION ON AGRICULTURAL EDUCATION AND EXPERIMENT HELD UNDER GOVERNMENT ORDER,

No. 699, REVENUE, DATED 23RD OCTOBER 1895.

PRESENT:

Sir EDWARD BUCK, Kt., c.s.i., Secretary to the Government of India, Revenue and Agricultural Department.

The Hon'ble Mr. D. DUNCAN, M.A., D.Sc., Director of Public Instruction.

Mr. H. M. WINTERBOTHAM, I.C.S., Acting Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture.

Mr. F. A. NICHOLSON, I.C.S., Collector of Anantapur.

" C. BENSON, M.R.A.C., Deputy Director of Land Records and Agriculture.

" W. KEESS, M.A., M.R.A.C., Acting Principal, College of Agriculture.

Read—

G.O., No. 515, Revenue, dated 4th July 1890.

" " 410, " " 27th April 1892.

" " 435, " " 21st June 1894.

Resolutions of the fifth meeting of Simla Conference of 1893.

Government of India Circular No. 19, dated 20th September 1895.

The question as to how an agricultural colouring may be best imparted to the education given in our rural primary schools was generally discussed.

2. Dr. Duncan explained the present position of instruction in Agriculture in the Madras Presidency as follows:—

"Agriculture is an optional subject of instruction for boys in the Fourth, Fifth, Sixth and Seventh standards constituting the Upper Primary and Lower Secondary departments of schools for general education. In the Infant, First, Second and Third standards, instruction in this subject is not imparted directly, but a good deal of information bearing on Agriculture and allied subjects, directly or indirectly, is conveyed to pupils in connection with the teaching of "Object Lessons or Elementary Science," which is an optional subject of study in all the Primary and Lower Secondary standards. The following are the standards prescribed in object lessons and elementary science and their distinct agricultural colouring will be noted:—

Subjects.	Lower Primary Schools.				Upper Primary Schools.		Lower Secondary or Middle Schools.		
	Infant Standard or Class.	First Standard or Class.	Second Standard or Class.	Third Standard or Class.	Fourth Standard or Class.	Fifth Standard or First form.	Sixth Standard or Second form.	Seventh Standard or Third form.	
Object lessons or Science.*	(a) To point out in a picture or from a collection, and to name (1) common objects of every-day life, such as articles of household or school furniture, and implements and utensils used in the ordinary occupations carried on in the locality; (2) familiar animals or plants; (3) familiar products; and (4) familiar minerals or vegetable products. Nine lessons to be prepared, three from each sub-division. (b) To answer very simple questions on the lessons prepared, with reference to (1) the food, habits and uses of the animals, and (2) the cultivation of the plants; and with reference to actual observations of the animals and plants during the year.	(a) To point out in a picture or from a collection, and to name (1) common objects of every-day life, such as articles of household or school furniture, and implements and utensils used in the ordinary occupations carried on in the locality; (2) familiar animals or plants; (3) familiar products; and (4) familiar minerals or vegetable products. Twelve lessons to be prepared, three from each sub-division. (b) To answer simple questions on the lessons prepared, with reference to (1) the food, habits and uses of the animals, and (2) the cultivation of the plants; and with reference to actual observations of the animals and plants during the year.	(a) To point out in a picture or from a collection, and to name (1) common objects of every-day life, such as articles of household or school furniture, and implements and utensils used in the ordinary occupations carried on in the locality; (2) familiar animals or plants; (3) familiar products; and (4) familiar minerals or vegetable products. Sixteen lessons to be prepared, four from each sub-division. (b) To answer questions on the lessons prepared with reference to (1) the manufacture of every-day life; (2) the food, habits and uses of the animals, the most striking characteristics of their structure, and the adaptation of their structure to their food and habits; (3) the origin or preparation of the mineral substances, and their chief properties and uses. The examination shall also have reference to actual observations made by the pupils during the year.	(a) To show some acquaintance, derived in part, at least from actual observation, with (1) familiar animals or plants; (2) familiar products; (3) familiar minerals; and (4) familiar facts regarding the weather. Twenty lessons to be prepared, five from each sub-division. (b) To answer questions on the lessons prepared with reference to (1) the food, habits and uses of the animals; their classification and structure of their food and habits; (2) the cultivation or mode of growth of the plants, their general structure and uses; and (3) the origin or preparation of the mineral substances, and their chief properties and uses. (c) To answer simple questions on the chief characteristics of the classes to which the animals, plants and minerals belong, and on the chief points of resemblance between those of the same class and of difference from those of other classes. The animals, plants, and minerals under (a), (b), (c) shall be selected from those in the neighbourhood and with which the pupils may be expected to be familiar, and the examination shall have reference, in part at least, to actual observations made by the pupils during the year.	(a) To show a fuller acquaintance than in the third standard with (1) familiar animals or animal products; (2) familiar plants; (3) familiar minerals or mineral products; and (4) familiar facts regarding the weather. Twenty-four lessons to be prepared, six from each sub-division. (b) To answer questions more difficult than in the third standard on the lessons prepared with reference to (1) the food, habits and uses of the animals, their classification and structure and the adaptation of their structure to their food and habits; (2) the cultivation or mode of growth of the plants, their general structure and uses; and (3) the origin or preparation of the mineral substances, and their chief properties and uses. (c) Common substances employed in the arts and manufactures and carried on in the district or locality.	(a) The common animals, minerals of Southern India, with the elementary principles of their classification. (b) Familiar facts regarding the weather with their more striking causes and effects.	The simpler kinds of physical and mechanical appliances, e.g., the thermometer, the barometer, the lever, the pulley, the wheel and axle, the spirit level.	A fuller knowledge of the appliances in the Sixth Standard or Second form, and also of the air pump, the iron pump, the mah's press, the fire engine, the siphon.	

* Object Lessons.—The pictures, objects and apparatus used to illustrate the lessons should be in readiness in the school on the day of examination.

"For the Fourth and Fifth standards the *First Book of Agriculture* prepared by Mr. Benson and M.R.Ry. C. K. Subba Rau, and for the Sixth standard, Mr. Robertson's *Agricultural Class Book* have been approved as text-books. The former has been translated into Tamil, Telugu, Malayalam, Canarese, Uriya and Hindustani, the chief vernaculars of the Presidency. No books have yet been prescribed for "Object Lessons"; the standard English works on the subjects are generally followed.

"The Vernacular Readers prepared at the instance of the department some years back contained hardly any reference to Agriculture; but these Readers have for several reasons been condemned by the Text-book Committee. Lessons bearing on Agriculture can be inserted in new Readers to be recommended for use in the Lower Primary standards. Of the 522,944 boys in public Primary schools on the 31st March 1895, only 38,376 were in the Upper Primary (Fourth) standard. Something more should be done to convey an elementary knowledge of Agriculture to a large number of boys in rural parts whose education stops at the Lower Primary stage of instruction.

"At the last Primary examination, 1,265 male candidates, pupil and others, out of 29,000 brought up Agriculture as an optional subject, of whom 783 were successful; during the past year only * 984 pupils were presented in Agriculture under the Fourth, Fifth and Sixth standards direct from public schools. Object Lessons were brought up by 6,125 pupils as an optional subject in the Primary Results standards (Infant to Fourth).

Fourth standard	..	..	..	..	876
Fifth do.	..	..	..	..	104
Sixth do.	..	..	..	..	4

"The number of boys studying Agriculture would be much larger than at present, if it were not for (i) the want of trained and efficient teachers to impart instruction in the subject; (ii) the absence of any encouragement by way of employment for young men going through a course of instruction in Agriculture and passing the public prescribed tests; (iii) the prevailing opinion among the ryots that a knowledge of the science and art of Agriculture is not calculated to develop the agricultural resources of the country; (iv) the fact that the University has not instituted a degree in Agriculture and does not recognize Agriculture in any of its examinations.

"As regards the first drawback, it must be observed that the Junior department once attached to the College of Agriculture has been abolished; but the Farm schools, intended to take its place, have not been started as yet. If these schools were established, some of the students educated in them might be induced to undergo training and join the teaching profession; a few teachers in training schools might also be induced to join the Farm schools and fit themselves to teach Agriculture.

"As regards the second drawback, I am strongly of opinion that the Revenue and kindred departments should employ more largely than hitherto young men trained in Agriculture, other things being equal; or should require candidates selected by them for employment as Revenue Inspectors to undergo a course of instruction in the College of Agriculture or in the proposed Farm schools. As the officers of these departments come in constant contact with the ryots and are in a position to advise them in several ways, the possession of a knowledge of Agriculture by these officers might be expected to produce beneficial results. There seems no reason why one should be sceptical about the ultimate results of such a measure.

"As regards (iii), the Hindus are proverbially conservative, and it is only through the wide diffusion of a knowledge of improved methods of Agriculture and the example of the successful working amidst them of experimental and demonstration farms in connection with Farm schools that they will be convinced of the benefits to be derived from a scientific knowledge of this important subject.

"The University is not in favour of the institution of a degree in Agriculture. But the recent action of Government in opening the Revenue and Criminal Tests, Higher Grade, which were previously open to graduates or to graduates and under-graduates of the F.A. Standard alone, to students of the College of Agriculture who have obtained the diploma in Agriculture at the Government Technical Examinations, though these may have passed only the Matriculation Examination, has given a public recognition to the diploma in Agriculture, and will not fail to be an incentive for the study of Agriculture. If the revised Upper Secondary examination notification now before Government is sanctioned, I trust a much larger number of pupils than at present will pass the compulsory subjects, and that a few of these may come up for the Intermediate Technical examination in Agriculture to qualify for Government service."

3. Sir Edward Buck informed the Meeting that at the Burma Conference it had been decided to recommend that Agriculture should be omitted as a separate subject from the curriculum in rural primary schools, but that Elementary Agriculture should be brought into the group "Object Lessons and Elementary Sciences," which group should be made a compulsory subject.

This principle was unanimously approved by the Meeting so far as regards primary education.

4. Dr. Duncan, however, expressed the opinion that it was expedient to recognize Agriculture as a separate *optional* subject of study for boys after they have passed the Fourth standard—1st, because Agriculture is as good a subject as any other for training and developing the mind; and 2nd, because Agriculture has the advantage of being the subject with which the pupils will be most intimately concerned throughout their lives.

This view was accepted with approval by the Meeting.

5. Mr. Nicholson advised that Agriculture should remain an optional subject for the Lower Secondary course of three years, even though there be at present no fully qualified teachers. A mere teaching of the Agricultural text-books would, he thought, be better than nothing.

This view also was generally accepted by the Meeting.

6. Mr. Nicholson remarked that, since the teaching of Agriculture had been made compulsory in all primary schools in France, 20,000 school-gardens had been opened. Whether or not special Farm-schools were approved and established for Madras, he thought that school-gardens should certainly be encouraged, as far as possible, for illustrating the teaching of elementary science and object lessons for the first four standards.

Mr. Winterbotham doubted whether considering the means and position of the ordinary primary schoolmaster in Madras, and the cost of land, fencing and watering, it would ever be possible for such gardens to become numerous. Mr. Benson suggested that in most cases sufficient means of illustration and object lessons in Agriculture would be found in the fields and gardens of every village, especially as the leading landholders of the villages are in many cases supporters of the primary schools.

7. The Meeting passed on to the consideration of the subject of providing a teaching staff. It was agreed that the first necessary step is to provide for the training of teachers who shall be qualified to impart instruction, by object lessons, in elementary science. Sir Edward Buck drew attention to the fact, recorded in Major Craigie's report on French schools, that "nine years were allowed by the law of 1879 for the perfecting of the machinery provided for the agricultural instruction of ordinary elementary teachers." The process in Madras would no doubt be equally gradual.

8. In the opinion of the Meeting it was desirable that in every training school intended for training teachers for rural primary and secondary schools, there should be a master who has qualified himself to teach Agriculture, and that the salary should be so fixed as to be a sufficient inducement to students, who have obtained the Agriculture Advanced Certificate at the Saidapet College to qualify for the post by going through a course at a training institution. Mr. Keess thought that a salary of Rs. 40 rising to Rs. 60 would suffice to give the Educational Department the pick of the students at the Saidapet Agricultural College, to fill the post of agricultural teachers at wanted. Dr. Duncan stated that about thirty such teachers would be required. With reference to the subject of school-gardens already referred to, the Meeting considered that it would at any rate be feasible and advisable to attach a school-garden to every training institution in which the training of pupils for the post of rural schoolmaster is undertaken.

9. The Meeting considered that the provision of secondary education in Agriculture was desirable, to supply qualified teachers in sufficient numbers for the rural Primary and Lower Secondary schools. This want might best be supplied by training institutions. In the opinion of the Meeting it is not expedient to combine an experimental farm with a Farm-school as proposed in the scheme of the Madras Government. The management of the school should rest entirely with the Educational Department, while the farm should be entirely under the Department of Agriculture. The general standard of admission to such a school should be the Lower Secondary examination, and the general education of the pupils should be carried on up to the Upper Secondary examination.

10. The Meeting desired strongly to express its sense of the importance of no longer delaying to open a suitable number of experimental farms, which are essential to the investigation of Agricultural defects, and for progress towards Agricultural improvement.

It was suggested that, if experimental farms were opened in the vicinity of training institutions, they would also serve for demonstrational purposes. It would be possible to allot a portion of the area for the use of the class studying Agriculture, and the experiments going on would usefully direct the attention and intelligence of the pupils to Agricultural enquiry.

Mr. Benson feared whether land suitable for Agricultural experiment could be got in sufficient proximity to the training institutions which are usually in large towns, where the soil has been more or less subjected to special treatment. What was wanted was an area, the soil of which should be typical of the ordinary rural tracts, but he thought that the difficulty of finding a site to suit both requirements might be got over by having the demonstrational and experimental areas in two detached blocks, by which means the requirements for experimental purposes could be satisfied, and the expense of supervising two entirely separate farms partially avoided. The students could then occasionally visit the experimental farm in addition to more frequent visits to the demonstrational portion.

Mr. Winterbotham remarked that a similar difficulty would be met in working the scheme of the Madras Government, which was to start separate Farm-schools combined with an experimental farm. It would be difficult to get suitable land near enough to towns to admit of the pupils walking to and fro between the farm and their homes, and to arrange for their being boarded would involve a considerable outlay and be attended with many difficulties. It was agreed that the question whether residence for pupils could be provided on the farm in some cases deserved future consideration.

11. Sir Edward Buck enquired whether so high an education in Agriculture as is given to candidates for the diploma at the Saidapet College is required for Revenue officials, and whether the maintenance of an institution to qualify candidates for a diploma could be justified.

Mr. Nicholson first drew attention to the following remarks made by the Committee of 1889 regarding the essential character of the college to progress in Agriculture:—
"We consider that the work, which the majority of the students will, for some years at least, be called on to perform, will not be that of actual farmers, but of superintendents of experimental and demonstration farms, of revenue servants, foresters, veterinarians, superintendents of estates, teachers of Agriculture and employes in miscellaneous callings connected more or less directly with Agriculture."
"We look forward, should our proposals in regard to agricultural schools and experimental farms be approved, to the proportion of those engaged in the teaching and practice of agriculture being very largely increased. We do not look forward to all the students of the College engaging in the direct exercise of agriculture; nor do we think it desirable that such a state of things should exist, as we are firmly convinced that the end in view;—the dissemination of higher scientific knowledge of Agriculture and of the sciences allied to it,—will be greatly furthered by leavening the Revenue, the Forest, the Veterinary, the Educational, and other departments, and callings, by men who have received a thorough course of instruction in this institution. We cannot too strongly press upon the Government that a College of Agriculture is absolutely essential for the progress of Agriculture, for the training of agricultural experts and teachers, and for the education of Veterinarians; and that this institution is at present,—the Medical College and, in some measure, the Engineering College excepted,—the only important institution in the Presidency in which several sciences are taught in their direct application to the necessities of life. Nor would we have it forgotten that as yet hardly three years have elapsed since it has been working on the new lines, and that it has been so working at manifest disadvantage, as it has had but one instead of two scientific agriculturists trained in Europe on its staff"—vide paragraph 69 of the report.

It was further explained that the spirit of Resolution VI of the fifth meeting of the Simla Conference of 1893 had been fully accepted in this Presidency and that persons

obtaining the diploma in Agriculture had been recently pronounced eligible to appear for the Higher Revenue and Criminal Special Tests, and had thus been placed on an equality with graduates of the University.

It was necessary that a student who had taken up Agriculture as a special study should be able to compete for Government employment on equal terms with the numerous graduates who are now seeking admission to the public service.

Unless the Agricultural student was placed on an equality with the graduate by being enabled to pass an examination evidencing equal educational attainments, he would stand a poor chance of being selected for employment, and, if selected, would be placed at a disadvantage as compared with graduates, in his subsequent career. Now that the diploma in Agriculture has been made of the same value as the B.A. Degree, for the purposes of qualifying for Government employment, it may be confidently expected that a large proportion of the students who obtain the diploma will readily find admission to the public service in the Revenue Department (especially if, as is hoped will be the case, their entertainment is encouraged by the Government), and that, in view of their success, the number of students who elect to qualify themselves in the Agricultural line will rapidly increase. The college will also impart higher education in Agriculture to the men required to teach that subject in training institutions, to the necessary staff for carrying on practical Agricultural enquiry and experiment, and to students from the land-owning classes, amongst which a real demand for Agricultural education is beginning to arise. Mr. Keess informed the Meeting that quite ten per cent. of the college students during recent years belonged to the large land-owning class, and that the majority of these men have returned, or will return, at the end of their College course to the cultivation of their estates.

It was also pointed out that there is already some demand for trained students from Mysore, and that, as the college has been in existence for twenty years, it should be considered whether it should not also be regarded as the training ground for Agricultural experts for other Provinces which at present only need a few of such officers.

It was agreed that on these grounds a sufficiently strong case for maintaining and strengthening the Saidapet College was made out.

Messrs. Keess and Benson represented that both the college staff and the Board of Examiners should be strengthened to place the diploma on the Cirencester standard.

(Signed)	E. C. BUCK.
(")	D. DUNCAN.
(")	H. M. WINTERBOTHAM.
(")	F. A. NICHOLSON.
(")	C. BENSON.
(")	W. KEESS.

ORDER—No. 490, Revenue, dated 24th September 1896.

Miscellaneous.

With the Proceedings read above, the Board of Revenue submits for the consideration of the Government a memorandum of the discussions and recommendations of the Committee appointed under G.O., No. 699, Revenue, dated 23rd October 1895, for the purpose of reporting on (a) the best method of carrying out the suggestions of the Government of India contained in the Home Department Resolution, No. 199, dated 18th June 1888, on the Review of Education in India in 1886, and (b) the proposals of the Agricultural Conference held at Simla in October 1893, so far as they relate to agricultural education and experiment.

2. The Committee submits six recommendations, as shown below :—

“(1) That Agriculture should not appear as a separate subject in the curriculum of rural Primary schools, but that the effort should be to impart an elementary knowledge of it in the group “Object Lessons and Elementary Science,” which group should be made a compulsory subject;

“(2) that Agriculture should be recognized as a separate optional subject for boys after they have passed the Fourth Standard, and that, until properly-qualified teachers become available, the study of a text-book on Agriculture in Lower Secondary schools will be better than nothing;

“(3) that the first necessary step is to provide for the training of the teachers of Lower Secondary and Primary rural schools, and that to this end, every training institution, where such teachers are trained, should—

- (a) have on its staff a master qualified to teach Agriculture, and
- (b) have attached to it a school garden;

“(4) that to secure an adequate supply of trained teachers for the rural Primary and Lower Secondary schools, an Agricultural class should be developed in selected educational institutions, where the general education will be carried on up to the Upper Secondary Examination and special education in Agriculture up to the Intermediate Standard. Such classes will need a small demonstrational farm for teaching purposes, and a portion of a Government experimental farm may be utilized for the purpose if there be one in the vicinity;

“(5) that it is not otherwise expedient to combine a Farm-school for the above purpose, with an experimental farm, as proposed in the scheme of the Madras Government;

“(6) that the early establishment of experimental farms, as separate organisations, and designed for carrying on agricultural investigation, is advisable.”

The Government accepts the first two of these recommendations and welcomes the proposal which they embody to make primary and lower secondary education more practical and more designed to develop the habit and power of observation in the school-going classes, but at the same time fears that tangible results from the adoption of these recommendations can hardly be expected until after the expiry of a considerable period of time.

3. The third and fourth recommendations made by the Committee cover very much the same ground, offering as they do two different methods of securing the same object, namely the provision of a supply of teachers with sufficient knowledge of agriculture and capacity of teaching to develop the faculty of practical observation, with special reference to agricultural subjects, among the pupils entrusted to their care. The end in view is theoretically eminently desirable, but the Government fears that the practical difficulties which stand in the way of giving effect to these recommendations are so grave as to preclude the possibility of success for many years to come. The principal obstacle is the difficulty of providing and utilizing the school gardens and demonstrational farms contemplated by the Committee. It is possible that in a generation or two a sufficient supply of individuals competent to manage such institutions properly and to utilize them as an efficient means of affording instruction may be forthcoming; but even if this obvious want be supplied in the course of time, a permanent difficulty will always remain in the scarcity of suitable land for use in the manner contemplated. The number of primary, lower secondary and normal schools is very large and their situation is such that in the great majority of cases it would be impossible to secure the necessary annexe of land of the requisite description and situated within a convenient distance from the school buildings. While therefore the Government considers the principle of these two recommendations to be excellent, it is of opinion that the object in view is practically unattainable.

4. The fifth and sixth recommendations deal with the question of the establishment of experimental farms and farm schools. It will be convenient first to deal with experimental farms. The Committee strongly recommends the immediate opening of a suitable number of these institutions on the ground that they are essential for the investigation of agricultural defects and for progress towards agricultural improvement. It is observed however that in the first place there is no provision in the budget for the current year for the establishment of such farms, and that secondly there is before Government no detailed scheme showing the manner in which effect should be given to the Committee's recommendations. It is clear therefore that for the present no

immediate practical steps can be taken and the question which calls for decision is whether the Government should now authorize the Board of Revenue to make the necessary enquiries and estimates which must precede the actual establishment of farms.

The Government fully admits the advisability in the abstract of establishing such institutions as an aid to agricultural education and as object lessons for the cultivator, but the practical consideration of the method to be pursued in order to start experimental farms presents great difficulties. Thus it is first necessary to ascertain where each farm should be located, and to what extent it should be limited, and roughly to estimate the cost of procuring the necessary site, buildings, live-stock and agricultural implements. Until this information has been collected it is not practicable to determine the number of farms which can be started with reference to financial limitations. Again, the selection of a suitable site must necessarily be a matter of great difficulty. It is essential that each farm should be near a considerable town, as otherwise few pupils will resort to it, stores will be difficult to procure and sales to effect, while the institution will not be available for the observation and instruction of any considerable number of the agricultural community. Again, the site should comprise both wet and dry land and be large enough to admit of the profitable growing and use of fodder crops, while at the same time it must be compact and consist of good soil, or profitable working will be out of the question; and if experimental farms are to be of use as an object lesson, it is essential that they should produce crops at a cheaper rate than the adjacent ryots can grow them. These considerations show that the purchase of suitable sites will be no inconsiderable item in the cost of starting farms. To rent land would be undesirable, *firstly* because the land-holder would no doubt demand an extreme rack-rent, and *secondly* because it would be objectionable to expend Government money in bringing rented land into a high state of perfection.

It was originally proposed to establish three experimental farms and for this purpose an allotment of Rs. 10,000 was provided, but from what has just been stated, it is apparent that so small a sum would be altogether inadequate. If, however, funds could be made available for the acquisition of suitable sites, the erection of buildings and the purchase of the necessary stock and implements, there would still remain the difficult question of the manner in which the farms should be managed and supervised. The proposal to place them under the management of the Stock Inspectors now employed in the Civil Veterinary Department or in the Board's office is wholly impracticable even with the aid of supervision by the Deputy Director of Agriculture. Such knowledge of farming as they may possess is necessarily for the most part theoretical; and even supposing they were sufficiently well-informed and energetic to be capable of managing experimental farms, it would be highly inexpedient to entrust officers on such low pay with the supervision of operations necessitating the expenditure of large sums of Government money, subject only to the occasional supervision of an officer stationed at Madras. Under such conditions it would be futile to expect experimental farms to prove a success.

5. These considerations lead to the conclusion that the immediate establishment of a number of farms is both undesirable and impracticable and that the enterprise is one in which it is necessary to proceed with great deliberation and care. While therefore Government is disposed to believe that experimental farms properly worked institution should be established in the beginning and that it should be placed under the continuous supervision of an expert. Should the management of such a farm prove to be successful, the Government would then be prepared to sanction the establishment of similar institutions in different parts of the Presidency.

6. As regards the location of the first farm, the Government is disposed to select a spot in the vicinity either of Bellary or of Coimbatore. The late Messrs. Clogstoun and Grigg were of opinion that the former town was the most appropriate locality in which to commence operations. The situation is good in itself and a High school is lately decided upon by the Government of India resulted in the establishment of farm schools on a larger scale than that contemplated by the Committee. The town of

Coimbatore presents advantages similar to those obtainable at Bellary and it will be for the Board of Revenue to consider the comparative merits of sites which may be available in either locality. The expert supervision required can be provided by detaching Mr. Benson, the Deputy Director of Land Records, from his present duties, in the performance of which his special qualifications as a trained agriculturist who has been in contact with Indian methods of agriculture for many years are altogether wasted. It will be necessary also to secure the services of a good native assistant who has been thoroughly trained at the College of Agriculture and to whom the management of the farm first started might ultimately be transferred in order to enable Mr. Benson to arrange for the establishment of a second farm under like conditions in some other locality. The Board of Revenue will now be requested to furnish, as early as may be practicable, detailed estimates and proposals for the purpose of giving effect to the scheme now propounded by Government. The question of arranging for the performance of the duties now discharged by Mr. Benson will be further dealt with in connection with the proposals regarding the management of the Land Records Department and the desirability of introducing a second agricultural expert, embodied in Board's Proceedings, No. 22, dated 4th February 1896.

7. To sum up, the Government is not prepared to accept the sixth recommendation made by the Committee until the experience gained by the management of a single experimental farm has proved the probability of success in establishing similar institutions with success. As to the fifth recommendation, the Government is in agreement with the Committee as to the inexpediency of combining a farm school with an experimental farm for teaching purposes except in so far as it may be found possible to utilize a portion of such a farm for the demonstrations of agricultural methods and practices required for the practical instruction of the agricultural classes which may ultimately be started in connection with normal schools.

8. It is observed that the Committee has not specially noticed one point which was referred to it for discussion, namely the action already taken and required in the future with reference to the suggestion made in the 25th paragraph of the Government of India Resolution, No. 199, dated 18th June 1888, that conferences should be held from time to time with which the Agricultural Department should be associated for the purpose of discussing the educational system in its dealings with agriculture. One such conference has already been held in this Presidency, namely that appointed in G.O., No. 686, Revenue, dated 25th September 1888, and the results of its deliberations are embodied in G.O., No. 515, dated 4th July 1890, a copy of which was communicated to the Government of India with Mr. Galton's letter No. 516 of the same date. The subject has again been carefully considered at the conference with Sir E. Buck, the recommendations of which have just been discussed and in the opinion of Government no further deliberations are required until after the Government of India has definitely decided what form the general policy in regard to agricultural education and experiment shall take and some experience has been gained by carrying it into execution.

9. A copy of these Proceedings will be transmitted to the Government of India.

(True Extract.)

Ag. Secretary to Government.

To the Board of Revenue (Revenue Settlement, Land Records and Agriculture).
the Educational Department.

Exd. C. M. Brisson.

60 Copies.

Then give for copy
Then copied [G. 25]
Then exam 500-3-10-96.
Then sign

Union of all
the Primary Education Schemes

Ed. DEPARTMENT.

C. No. 1248. Ed.

READ

DUREE

NO

DE

(for orders)

FOR ORDERS.

Please see go. 53. Ed. 28. 1906. Orders
are solicited whether the directions in
the Res. go. forming the current
should take effect at once or whether
the orders of the Govt. of India
comprehending the replies & decisions
of all Govts. and administrations
on the subjects discussed with
Sir E. Buck should be awaited.

The Madras Committee which
discussed things with Sir E. Buck
has suggested that "Object Lessons
& Elementary Science", which is at
present an optional subject (Art.
p. 30. of the Madras Educl. Rules
should be made compulsory &
Res. go. accept the proposal.

Submitted that there is no
very strong reason for waiting
further, as India is unlikely
interfere in such a matter, &

no change may be introduced at
once. If this is approved, the
draft order on the current may
come

1/30/96

I think it will be better to wait
for India's Resoln. It is pretty
certain to contain something
wh. will involve an addition to
if not a modification of
any order now passed.

Moreover in G.O. 53 of 28-7-96
it was decided to wait.

MA 2 11-96

Order No 693 of 7-11-96
Communicated to the D.P.S.

2. No steps need be taken towards
making "Object Lessons & Elementary
Science" a compulsory Subject until
the orders of the Govt of I on the subjects
discussed with Sir Ed. Buck are received
(from orders)

1/11/96

When given for copying 12/11
When copied 11/11
When examined 11/11
When signed 11/11 } 1896

BRAD AGAIN G.O., No.
189 ,

DATED

CURRENT No.

ENCLOSURES TO C. No

ORDER OF GOVERNMENT

A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

NOT FILED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL.

N.B.—

A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.

282 RA
84