

Revenue (1899) Department.

MISCELLANEOUS SERIES.

G.O., No. 965

DATED 8th March 99

[Despatch Abstract.]

Stating that the organisation of the
Agricultural branch of the Dept of the Land Records
being of great importance, the Govt would be
glad of the views of the Full Board on the
subject.

BACK PAPERS.

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

FURTHER PAPERS.

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

CN^o 2231/99

REVENUE DEPARTMENT.

1899.

CN^o 1305.

Board of Revenue

(Revenue Settlement, Land Records and Agriculture),

MADRAS.

Recd. 21 - 2

Enclosures

Regd. 21 - 2

1899.

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Printed February th.

Proceedings, No. 49, 9th February 1899.

FEBRUARY.

The revenue for 2/3/99
The organization of the Agr
cultural branch of the De
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views of the Full Board
on the subject. These
in the full report of the
Board will be published

Agriculture — Submitting a report upon the form of the future constitution and work of the Agricultural branch of the Department of Land Records and —.

8/3/99

PROCEEDINGS OF THE BOARD OF REVENUE

(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

Read—the following G.O., Mis. No. 3362, Revenue, dated 13th August 1898:—

Read—the following extract from the address presented by the inhabitants of the City and District of Madura to His Excellency the Governor on his fourth tour:—

"The Government has recognized the importance of agricultural model farms. This district has already taken the lead in starting a model farm, though on a small scale, with the help of private endowment now under the management of the District Board. We request the Government to take up the management of this institution and widen the scope of its usefulness by allotting more lands to it for purposes of experiment and demonstration."

Order—Mis. No. 3362, Revenue, dated 13th August 1898.

The Board of Revenue is requested to deal with this request when the establishment of Government farms in suitable localities comes up for consideration in connection with the Resolutions of the Government of India, communicated in G.O., No. 413, dated 27th July 1898.

(True Extract.)

(Signed)

F. J. WILSON,
for Secretary to Government.

To the Board of Revenue, Revenue Settlement.

Read—again Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), No. 362, dated 28th September 1898.

ABSTRACT.—Communicating the orders of Government regarding the Agricultural policy to be adopted with reference to the instructions issued by the Government of India on the Proceedings of the Agricultural conferences of 1893 and 1895-96.

Read—also the following Memorandum, dated 6th January 1899, by the Deputy Director of Land Records and Agriculture:—

The work of agricultural research, sketched by the Government of India in their fifth resolution, dated 20th March 1897, communicated with G.O., No. 413, Revenue, dated 27th July 1898, may be divided into two sections, namely, a general and superficial investigation of agricultural defects, and a definite and systematic programme of experiment. The former the Government of India desire should be concentrated from time to time upon some single prominent agricultural defect—paragraph 12—and they suggest that the defect to be first taken up for investigation of this sort should be the waste of liquid manure.

In regard to this subject, I doubt, unless the "Imperial officer" alluded to can afford any new light, whether there is anything to be done usefully in this Presidency in regard to the first four points mentioned in paragraph 15 of the resolution. Who the Imperial officer alluded to may be I do not know.

Stages 5 and 6 of paragraph 15 in this case must remain for the future until the second branch of research has been thoroughly organized,

2. At paragraph 18 of the said resolution, however, the Government of India state definitely that they have not intended in their preceding remarks to refer to the working plan of an experimental farm. That is to include the simultaneous trial of as many experiments as may be required for the "broader investigation" of any subject. All that has to be borne in mind is that the experiments should be designed for the purpose "of proving a single fact"—presumably what is meant is that each experiment should be designed to solve a single problem.

3. We have therefore to keep two definite branches of research before us, and in this respect, I venture to submit that some portion of paragraph 6 of the Government Order needs reconsideration. I take it, moreover, reading paragraphs 8 and 19 of the resolution together with the record of the proceedings in conference with Sir Edward Buck on 11th December 1895, and with paragraphs 2 and 4 of Mr. Ibbetson's letter, No. 728, dated 18th May 1897, that the Government of India recognize the fact that, in a great measure, the general and cursory preliminary enquiries which they desire to be made have been already performed in this Presidency. I say this, for all that is said in paragraphs 12 and 15 is, to all intents and purposes, a repetition of what Sir Edward Buck said at the conference mentioned. I am not, however, at present specially concerned with this branch of the work for the conduct of which the Government consider that a considerable staff of inspectors will be necessary, but would throw out the suggestion that the new Land Record staff should, with the Revenue Inspectors, be largely made use of for such cursory investigations.

4. The chief matter which demands attention at present in this Presidency is the organization of the broader investigation alluded to by the Government of India. It was with full cognizance of the fact that we know, in this Presidency, the more important respects in which agricultural practice falls short of the highest attainable standard and the methods in which it can be improved, that my general programme of 1893 was drawn up. But knowing so much, owing to the facts stated in paragraph 2 of Mr. Ibbetson's letter already quoted, we also know that experiment is needed to determine the precise modes in which such improvements should be carried out and for their establishment under the varying conditions of the country. It is for this purpose that the establishment of experimental farms is a necessity and for their management and supervision the employment of a trained staff is required. It is, however, not quite clear what the Government of India desire in this matter, so far as Madras is concerned. At paragraph 9 of their fifth resolution, the establishment of a central farm is suggested but from paragraph 8 of the same resolution, dated 20th March, and paragraph 4 of Mr. Ibbetson's letter, dated 18th May, 1897, I infer that it is recognized that, though in other provinces the starting of a central farm at which to commence investigation may be the present necessity, so far as this Presidency is concerned, no objection is raised to the policy of starting a number of experimental farms which has been consistently advocated for the last ten years and been in general terms approved by Government at several times. What was done at Saidapet in the old days may be regarded as the work which the Government of India now desire to see undertaken on a central farm in every province in India. In Madras, we have reached a further stage, and in my opinion, to make the investigation and experiment, we ought to conduct, effective, it will be necessary to organize such a number of experimental farms as will embrace the varying conditions of the country.

5. As a comprehensive scheme is required, up to which we may in course of time work, I should say that so far as the black-cotton soils of the country are concerned, probably farms in (1) Coimbatore or Tinnevely, (2) Bellary or Kurnool, and (3) Kistna may suffice. Other farms would be required to deal with the questions at issue on the group of soils usually called the red soils, and possibly farms in (4) Madura or Trichinopoly, (5) Coimbatore or Salem, (6) Anantapur or Cuddapah, (7) South Arcot, Chingleput or Nellore, and (8) Gódvári, Vizagapatam or Ganjam. Of course, as a matter of practical working, such a number could only be very gradually arrived at; whilst, for taking up special questions, e.g., irrigation, other farms may be ultimately needed. As pointed out in my letter, dated 15th February 1896, No. 10-A, there would be manifest advantages in taking up the first three suggested together.

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6. Whatever number of farms it be decided to take in hand, the same principles should govern their organization and working. The first and in some respects, the most important point to be considered is the selection of a site. To a settlement of this question considerable difficulty is added by the proposal made in paragraph 7 (5) of G.O., No. 413, dated 27th July 1898. The requirements of an educational farm are so very different from those of an experimental station that it may in many cases be best, if the latter is to be really efficiently conducted, to make an entirely separate institution of it.

7. Assuming that my suggestion to start the black-cotton soil farms is accepted, and that two are first taken up (I could not recommend a larger preliminary undertaking) it must be decided where these are to be placed. Bellary and Coimbatore have been talked of, more or less, for nearly ten years, but the original selection of these places was, as will be seen by reference to G.O., No. 410, Revenue, dated 27th April 1892, to a great extent based on the facilities existing at these places for educational work.

As regards the selection of Bellary, I would remark that better sites could be obtained near Adóni and Nandyal or even a few miles distant from Bellary than near the town. I do not, however, think that the cost of acquiring sites at either place would differ very much. Of the three places mentioned, Adóni is probably the most convenient for inspection from Madras. Assuming, however, that the near neighbourhood of Bellary is decided upon, land may, I think, be acquired in a fairly accessible position at a reasonable cost.

Regarding Coimbatore, the selection has no great advantages to commend it, except accessibility. The acquisition of land near the town would undoubtedly be costly. My opinion is that it would be better to go into Tinnevely, and to seek a site near Sātūr or Koilpatti.

However, I know sites that will do near both Coimbatore and Bellary, and pending any further orders, shall proceed to describe what should be done at each place.

8. *Size of farms.*—It has been my view for some years past that the experimental areas need not be more than 10 acres each. The tillage of such an area, in ordinary practice, would not require a single pair of bullocks; but tillage with one yoke of oxen can never be efficient and is constantly liable to be interrupted. The unit I have usually suggested has been an area that can be tilled by two yoke of cattle, but now bearing the fact in mind that the proposed institutions are to be primarily experimental, I believe that it will be better to provide for three yoke, and I would provide shedding for so many at once, and take up 40 to 50 acres of land at each place that may be selected. Of this area, it will be necessary to fence securely the portion devoted purely to comparative experiments. The latter area may have to be enlarged from time to time, but, as a first start, I think, it will suffice to fence in 10 acres. Besides shedding for the working bullocks, a store-room and shelter-shed for crops and implements will be necessary. If the farm be started close to a town where milk can be sold, it may be advisable to start a dairy and anywhere a good breeding bull should be kept for the benefit of those who choose to utilise his services. Provision for the latter may however be deferred for a year or so.

9. In the management of any experiment station there are some first principles which it may not be out of place to state; they will be found more or less fully described in Dr. Voelcker's book on Indian Agriculture. The portion specially assigned for continuous experiment must be laid out into conveniently shaped and useful sized plots and be durably demarcated. For manuring experiments and the like, probably 0.10 acre plots are the most convenient. Between each, a strip of land must be kept undisturbed. As many plots as are likely to be required at an early date should be so laid out, provision being made for the duplication of every experiment, and for standard plots for comparison. Besides this, as it is almost certain that any series of experiments, once begun, will develop as time goes on, space for expansion should be provided. For tillage experiments, it will, I consider, be necessary to deal with larger areas, say 0.25 acre for each plot, as we may then possibly obtain some data on the time factor in such experiments.

The land required for experiment having been laid out into suitable plots, the next thing is to grow one or two crops over the whole area, treating the land in the same way throughout, and the crops also, and then recording carefully the yields of each plot or block. This process is that known as "equalization" for future experiment. When the second year's record is complete, definite experiments may be fully started.

10. The next question is to what problems should attention be primarily directed. The greatest and most intractable agricultural defect of the country is drought. The evidence available as to the evil effects of shallow tillage in enhancing the effects of drought, and of the good effects of thorough and deep tillage is incontrovertible. Practice in different parts varies greatly, e.g., compare the practice of the cotton-growing ryot in Tinnevely, with that of the Bellary man, and I feel convinced that there is some way in which the ryot of the Deccan Districts can by tillage fight drought. He does something in the way of deep tillage already, and the problem is which is the best way of carrying it out. We must try the Bellary plan, only we must plough more frequently. We must try the Tinnevely plan, and, we can, with European or other ploughs, see if we cannot at less cost obtain a deeper and as good a tilth as the latter plan secures.

This then forms the main item of the programme I put forward. The carrying of it out cannot be effected without touching the question of feeding our tilling cattle; and therefore we must more or less touch the fodder question. Keeping a stock of at least three pairs of cattle, which we can work equally, and feed similarly, we may collect their manure in three different ways, and use it for manuring experiments. The three systems which I should design to follow are the box system, the byre system, and the ordinary system of the locality so far as we can follow it. In the case of the last-mentioned question, the experiments may at any time be largely developed if Government are able to spare funds for providing extra shedding and extra stock.

The questions of seed selection, and the exhibition of new implements, are so simple that I need say nothing as to their inclusion in the programme.

The programme as it stands is, I submit, simple, and embraces the most important problems we have before us, except the economical utilization of irrigation water. It is economical and yet capable of development whenever distrust as to the value of such experimental work dies down. The work proposed as a beginning will give the men in charge experience, which is a thing that every one in the department now needs, for owing to facts that are too well known to need repetition, we are none of us now agricultural experts in the true sense, for to be expert connotes practice.

11. For the management of such farms as may be started, we shall need men of the inspector class. No new staff need be applied for at present, although it may be advisable to reconsider the scale and pay thereof. Of the inspectors we now have, I believe, two (out of four) might be placed in charge, and if need be, the Sub-Assistant Director until he had trained a junior to carry on the work. To each farm, as started, I would attach two passed students from the Agricultural College to gain experience. It must always be remembered that no college training will fit a student for practical work without further experience, and we must provide this, getting what work we can out of them the while; thus it might be very useful to detail such men, before they are placed in charge of a farm, for employment as Revenue Inspectors for a year in the locality where they would afterwards be employed, as in this way they could, while definitely employed, acquire much knowledge of the habits, ideas, and difficulties of the ryots—vide paragraph 14 of the second resolution of the Government of India.

12. The present staff provides for one Sub-Assistant on Rs. 200—250, and for seven agricultural inspectors who are to draw the following rates:—

	rs.	50 per mensem.
First two years	...	75
3 to 10	...	100
11 to 20	...	125
21 to 30	...	150
31 to 35	...	...

Resolution
Statutes with G.O.
1/11/1899

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13. With a view to the future, I would recommend that two posts of Sub-Assistant Director be sanctioned, with the pay and prospects of a Land Record Deputy Collector. These officers should be natives of India who have completed a full college course in agriculture and should be selected for their aptitude and trustworthiness as general enquirers and deputed specially to carry on the general enquiries desired by the Government of India.

To each of these officers I would attach, for the purpose of assisting them to cover a large area in the course of their work, two inspectors only, who might be graded much as the present staff is, or, as the subordinates of the veterinary branch of the department may hereafter be graded, it being remembered that they should be of equal educational attainments. For the proposed eight farms, we shall ultimately require eight more men on the same scale of pay and to each institution I would attach always a junior, or a probationer, to whom might be promised a salary of Rs. 30 for two years, and a prospect, if vacancies occurred, of appointment as an Inspector on Rs. 50, when placed either on enquiry duty, or in charge of a farm. I should look to a considerable number of these probationers going off to other departments, so that a constant stream from which we could select suitable men would be kept up.

Subject to the proviso mentioned above, the scale of pay I would propose is as follows:—

Probationers (8), pay	...	...	...	...	...	Rs. 30	per mensem.
Inspectors (12)—							
Pay 1st to 5th year	...	...	...	...	...	50—5—70	"
6th to 10th "	...	...	...	...	...	75	"
11th to 15th "	...	...	...	...	...	90	"
16th to 20th "	...	...	...	...	...	120	"
21st to 30th "	...	...	...	...	...	150	"

No step or increment to be given, however, unless the officer's conduct and abilities be favourably reported on. It would with so small a staff be practically impossible, in fairness to the staff, to limit the number in each grade. Something in that direction might, however, be possible if the veterinary and purely agricultural branches were placed on one list.

14. I have stated above the requirements and programme that I would suggest for the experimental farms and now proceed to frame an estimate of the cost of starting them. In Bellary, three places suggest themselves to me: (1) near the town, (2) at Paramadévanhalli, about 9 miles from Bellary, and (3) near Adóni.

The cost of the necessary land at these three places would be approximately—

	Rs.
(1) Near Bellary	2,000.
(2) Near Paramadévanhalli	1,500
(3) Near Adóni	2,000

I think that for experimental purposes the second site would be best; but it is an open question whether, if we went to Nandyal we could not find a site where we could in time organize a series of irrigation experiments.

At either place selected, I estimate that the necessary shedding could be erected for about Rs. 700 and in addition it would probably be necessary to spend Rs. 1,000 in providing quarters for the officer in residential charge.

At Coimbatore, the cost of providing the necessary area would be much larger and would probably amount to Rs. 5,000. The cost of shedding would not fall far short of Rs. 1,000 and of quarters about the same. At Sátúr, the land would cost about Rs. 3,000, but I have not gone into the question of shedding there, pending further instructions, I believe, however, that Tinnevely would be a more satisfactory locality to take up than Coimbatore.

The cost of fencing out the experimental areas and fencing them securely may in each case be put at about Rs. 1,000, but it is difficult to say with any exactness how much would be required until each case is taken up.

The live-stock required for each farm would cost from Rs. 600—700, and the implements another Rs. 300. For seed, cattle food, and sundry expenses of the first year, another Rs. 500 would be required, whilst for the general labour about Rs. 600 should suffice. The cost of starting the farms irrespective of the site and buildings would therefore amount to about Rs. 2,000 each for the first year, and rather less in the second year, but what the future charges might be would depend upon what work was taken up.

15. From what has been said above, it will be seen that I estimate the cost of site and necessary shedding, together with quarters for the Inspector in charge at Rs. 8,000 at Coimbatore to about Rs. 5,000 or less at Bellary. The original proposal of Government—G.O., No. 490, Revenue, dated 24th September 1896—was that the first farm started should be placed under the continuous supervision of an expert, and that to provide this supervision I should be detached from the duties I then performed—chiefly Land Records and Secretariat. If this is still to be carried out, a further expenditure for quarters will be needed of about Rs. 12,000, or more. I am not certain, however, what is intended in this respect, but, as no reference is to be found in later papers to the protest of the Board in this matter—B.P., No. 229, dated 13th March 1897—presumably this item must also be added.

16. To start one farm at or near Bellary, during the next official year, would therefore require an allotment of nearly Rs. 20,000. There is no budget provision at all. If two farms be started, and the residence alluded to be omitted, the same sum will suffice. If work is to be begun at Coimbatore, the land should be acquired before April, and at Bellary, before June, or the cost will probably be greater.

(Signed) C. BENSON, M.R.A.C.,
Deputy Director of L.Rds. and Agriculture.

6th January 1899.

RESOLUTION—No. 49, dated 9th February 1899.

With reference to paragraph 11 of the second paper read above, the Board begs to submit the following report upon the form which, it considers, the constitution of the Agricultural branch of the Department of Land Records and Agriculture should in the future assume and the duties which should be performed by it.

2. In paragraph 6 of G.O., No. 413, Revenue, dated 27th July 1898, the duties of the Agricultural branch of the department were stated to be somewhat as follows:—

- (1) The collection and arrangement of facts and statistics bearing on all branches of economics and agriculture;
- (2) the investigation of agricultural defects brought to light by an examination of the land records and the devising of remedies therefor; and
- (3) the investigation of local agricultural practices and the conduct of experiments on problems suggested thereby.

3. The greater part of the work included in the first head is done at present in the Board's office, and the supervision of most of it, especially matters relating to the state of the country—rainfall, prices, cultivation and traffic by land—has been in an informal way assigned to the Deputy Director, who also in times of scarcity or distress has performed the duties of Famine Secretary to the Board. In regard to rainfall statistics, although one tabulation is made in the Board's office, the detailed tables are compiled and issued by the Meteorological Reporter. This work is done in Bombay by the Agricultural Department, and the Board considers that, when the present incumbent of the post of Meteorological Reporter is relieved of her duties, the work should in this Presidency also be taken over by the Agricultural Department, the clerk provided for the purpose being at the same time transferred to the Board's office. This measure will slightly lessen the work of Collectors' offices, as it will then no longer be necessary for them to submit two separate reports of the monthly rainfall.

For the proper carrying on of the statistical work above referred to, and for bringing to notice and investigating facts which may be gleaned from a study of the statistics, the Board considers that the services of one officer might with advantage be employed, and that it is advisable that this officer should be the Deputy Director of Agriculture, this post being, as proposed in a recommendation which will be submitted to Government in connection with the Board's report on the establishment required for the maintenance of land records, separated from that of Deputy Director of Land Records and the latter post not being revived. It would then be the duty of the Deputy Director of Agriculture, subject to the control of the Board, to collect, arrange and publish all statistics bearing on Agriculture, including rainfall, cultivation, and special crops, Prices and wages, Irrigation, and Trade by land, as well as to prepare therefrom, and from the statistics of the sea-borne trade compiled and issued by the Department of Separate Revenue, reviews and reports in elucidation of economic facts bearing on the condition of the country. The adoption of this measure would be advantageous, since it would to this extent define the position and responsibilities of the Deputy Director in relation to the Board, making him in fact Statistical Reporter for the Presidency. It would also be in accord with the policy enunciated in paragraph 13 of the first resolution of the Government of India, dated 20th March 1897.

4. The second item of the duties of the Agricultural Department covers much the same ground as that dealt with in paragraph 9 of B.P., No. 362, dated 28th September 1898. The investigation must, the Board submits, be chiefly carried out by the Land Revenue staff, and by the Land Record staff when appointed, though it would be part of the duty of the Deputy Director of Agriculture to ledger observations in regard to and, if possible, to suggest a remedy for, any serious agricultural deterioration which may be reported by the District officers.

5. In regard to the third item of the programme, the Board solicits the attention of Government to the memorandum printed at the head of these Proceedings which has been prepared by Mr. Benson. The matters on which the Board has been called upon to report are—

- (i) the scope and course of enquiry which should be followed;
- (ii) the number of experimental farms which will be needed now and in the future, and the programme to be adopted thereat;
- (iii) the character of the staff to which these inquiries and farms should be entrusted;
- (iv) the establishments (including European and Native assistants and inspectors) to be worked up to and the cost of such establishments in the near and distant future.

6. Regarding the first point, viz., the scope of the inquiry and the method on which investigations should be carried out, the Board ventures to suggest that the instructions given at paragraph 6 of G.O., No. 413, Revenue, dated 27th July 1898, need reconsideration with reference to the scheme sketched out by the Government of India. In this respect the Board considers that Mr. Benson rightly distinguishes between a general investigation of prominent agricultural defects which may and should be made throughout the country, and the more minute investigations which are the function of an experimental farm. In the former case attention should from time to time be concentrated on one prominent defect; in the latter, as the Government of India (paragraph 18 of the fifth resolution) expressly state "the working plan may legitimately include the simultaneous trial of as many experiments as the Director guided by his advisers and by the imperial expert, may determine to be eventually required;" experiments being set on foot on the experimental farms for some years before the general investigation may be taken up. It may also be pointed out that, the appointment of Agricultural Chemist to the Government of India having been abolished, the Director must depend for his programme on the advice of his expert assistants.

7. If this view is accepted by Government, the Board recommends that Mr. Benson's proposals may in general be accepted. It would suggest that, as a scheme to be ultimately worked up to, eight experimental farms should be established,

four in the northern and four in the southern half of the Presidency, each farm to be about 50 acres in area. The general programme of operations on the farms should be that suggested by the Deputy Director. In connection with each farm, a school or class should be established by the Educational Department, as has been proposed in a separate Proceedings. The agricultural staff required at each farm will be a resident inspector who might be designated farm superintendent, and one or more probationers attached to do duty as bailiffs and record-keepers in connection with the experimental work. These latter after they have gained some experience should do duty as inspectors as defined below or as farm superintendents at other farms.

For making general inquiries into special agricultural defects, the department should in a great measure rely on the staff of Land Record Deputy Collectors and the Revenue Inspectors. This will be possible to a greater extent in the future, if these officers, have, as is proposed elsewhere, been through a course of instruction in agriculture. To meet the requirements of the Government of India, it will, however, the Board considers, be necessary, to make some special provision for more fully trained enquirers, and this may be accomplished by the appointment of two Sub-Assistant Directors of Agriculture, on the scale of pay of Deputy Collectors, and by placing under them four inspectors on a pay rising from Rs. 50 to Rs. 150 per mensem.

8. The total native staff which would ultimately be required would thus be two Sub-Assistant Directors of Agriculture with about 12 inspectors or farm superintendents and 8 or more probationers. All these men should have undergone a full course of training at Saidapet and obtained the agricultural diploma under the Government Technical Examination scheme. The number of men required is so small that the Board has not considered it necessary to consult the Director of Public Instruction specially regarding a supply. It regards it as certain that the requisite number will be forthcoming as fast as it is possible to develop the agricultural side of the department.

9. The Government in its order already quoted has recognised the justice of the Board's contention that it is advisable to secure the services of a second European agricultural expert for the department, and bearing in mind the nature of the duties which it is proposed to entrust to the Deputy Director of Agriculture, and the fact that Mr. Benson has already completed 25 years service, it recommends that steps should be taken to obtain such an officer before 1st April 1900. The pay and position of this officer should, if his services be permanently retained, be similar to those of other technically trained officers; the Board would, however, suggest that the engagement should at first be only temporary, for 3 years, during which period a salary of Rs. 350 until the officer has passed the compulsory vernacular test for forest officers, and Rs. 400 thereafter, may be offered. If the officer's services be retained after this period of probation the salary offered may rise by increments of Rs. 50 in every second year to Rs. 600.

This officer, whom the Board would designate as Assistant Director of Agriculture, should have his head-quarters fixed at Bellary or Coimbatore, as may hereafter be found advisable, and be entrusted with the supervision of such experimental farms as may be started in the section of the Presidency to which he is posted and with the supervision of any work of general inquiry that may be required therein. He would be subject to the general supervision of the Deputy Director of Agriculture and have the prospect of eventually succeeding to that post.

10. The general duties of the Deputy Director have already been indicated. He represent at all events become Statistical Reporter for the Presidency, and would for the supervision of all work of agricultural enquiry and experiment have the immediate supervision of all agricultural work in the Presidency. He would also act as technical adviser to the Board on all matters connected with agriculture and economics. He would thus become practically throughout Agriculture to the Board of Revenue. The salary at present is Rs. 750-50-1,000, but the Board considers that to any future Joint Secretaries' appointments may be given once in two years only. attached to incumben'

Assuming that an officer appointed as Assistant Director would become permanent Deputy Director on Rs. 750 after twelve years service, it would take him ten years more to rise to Rs. 1,000. He would then have served 22 years. The Board submits for the consideration of Government that it would be desirable to stimulate an officer to further effort in the last eight years of his service, when his accumulated experience will have made him of very real value to Government, by holding out a prospect of still further emoluments in those years, such as are obtainable, for instance, in the cognate department of Forests; and it accordingly recommends that, on attaining 24 years service, the Deputy Director, of Agriculture should be paid Rs. 1,100 per mensem and on attaining 26 years Rs. 1,200 a month. Even this pay is considerably less than that of the first and second grade Conservators of Forests (Rs. 1,600 and 1,350), but is somewhat in advance of the pay of the third grade Conservator (Rs. 1,100). The Board takes this opportunity of suggesting to Government that, now that the question of the scale of pay of the Assistant Director and Deputy Director has to be raised, there should be no further reason for declining to grant to Mr. C. Benson, the present Deputy Director, the value of whose services are acknowledged on all hands, the increase of emolument that may be obtainable under the proposed revised scale.

11. To frame an accurate estimate for carrying out the above proposals is not possible: some of the charges would be recurring, others only connected with the starting of the farms; and the charges for working the farms would vary greatly according to the amount and nature of the experimental work attempted. So far as establishments are concerned, the following may be taken as an approximate ultimate estimate:—

	RS.
One Deputy Director Rs. 750—50—1,000—1,100—1,200	11,700
One Assistant Director Rs. 350—50—600	6,200
Two Sub-Assistants Rs. 375	9,000
Twelve Inspectors or Farm Superintendents Rs. 50—150	14,400
Eight Probationers on Rs. 30	2,880
Clerical staff—	
For Deputy Director—	
Three clerks on Rs. 50, 30 and 20	1,800
For Assistant Director—	
Two clerks on Rs. 30 and 20	
Inferior servants—	
For Deputy Director—	
One Muchi on Rs. 12, one peon on Rs. 8, three on Rs. 7	1,920
For Assistant Director—	
Three peons on Rs. 7	
For two Sub-Assistant Directors, 4 Inspectors and 8 farms one peon each (14 on Rs. 7)	
Travelling allowances—	
Deputy Director	2,000
Assistant Director	1,500
Two Sub-Assistants	1,600
Four Inspectors	1,700
Clerical and inferior staff	500
Office contingencies	7,300
	2,800
Total	58,000

or about Rs. 60,000 per annum. The cost of starting eight farms cannot be less than half a lakh, i.e., Rs. 6,000 or more for each farm, and the annual upkeep at about Rs. 16,000.

The statistical branch of the Board's office costs annually Rs. 21,900. The preparation of the irrigation accounts a further provision of Rs. 7,100 is required. Rs. 29,000. A large proportion of the work done in these branches is connected with revenue and administration, and though the superior charge of

statistical work may be transferred to the Deputy Director permanently this would be merely a departmental arrangement, the only change being the transfer of the rainfall clerk of the Meteorological Reporter to the Board's office. His pay is Rs. 30 per mensem which is now debited to 26L. Scientific, etc., Departments—Provincial Statistics.

12. As regards a programme for immediate operations, the Board considers that very early steps should, if funds can be provided, be taken to establish two experimental farms, one in the northern and the other in the southern half of the Presidency. It does not consider that it is necessary or advisable to establish these farms in immediate proximity to any large town. Mr. Benson reports that he is already acquainted with a suitable site about nine miles from Bellary, and if the Government approve of this proposal, a definite selection will be made of another site in the south. In this connection the Board has considered the request referred to it in G.O., No. 3362, Revenue, dated 13th August 1898, and begs to report that it believes that the Madura farm is not specially suited for experimental work and is inconveniently situated as regards the existing technical school. It, however, proposes to depute Mr. Benson to Madura to make further enquiries as to the selection of a suitable site for a farm in that district.

13. To each of the proposed farms an agricultural class or school should be attached, as proposed in B.P., No. 47, dated 9th February 1899, and for the use and accommodation of the students it will be necessary to provide a class-room and hostel or three parts for Brahmins and other caste. If the suggestion is approved the estimates for these buildings may be called for from the Public Works Department.

14. As regards the cost of starting and stocking these farms, the Board considers that the estimates furnished by the Deputy Director may be accepted. They have been worked out on definite plans and are based upon the result of local enquiries into the value of land, and cost of materials, etc. It will not, however, be necessary to provide at either of the farms quarters for the Deputy Director, for the Board considers that officer may be much more usefully employed as already suggested in these proceedings than if he were deputed to the sole charge of one such farm. Eliminating this charge a grant of Rs. 12,000 will probably suffice to enable the department to commence work during the coming official year.

15. For the immediate residential charge of these proposed two farms, the Board proposes to depute two of the existing staff of four inspectors and request permission to appoint a probationer to each farm when it is started. The only other establishment that will be required will be a peon at each farm. For the purpose of continuing general inquiries on special subjects, the existing Sub-Assistant Director and the remaining two inspectors should be retained. There is thus, except in connection with the starting of the two farms proposed no new expenditure immediately suggested, and the Board would urge most strongly that, if possible, the necessary funds for this purpose be at once allotted, so that the Deputy Director may devote his attention thereto from the commencement of the next official year.

16. As already suggested, the Board recommends that another European Agricultural expert should be engaged before the end of the coming official year. The question whether any provision need be made to meet his salary would depend upon the date at which he may arrive. This, however, as well as any small charges in the way of revised establishments may be left for future consideration should the Government approve of the proposals made above.

(True Copy and Extract.)

Secretary.

To the Secretary to Government, Revenue Department.

Exd. M. L. Pahlwan.

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