

ORDINARY, MS.

Public DEPARTMENT.	
G.O., DATED	5-8-93
No.	605

INDEXED.~~When given for copying.~~

[Despatch Abstract.]

Regarding the
 Revenue dept. comp.
 for of India's resolu-
 tion on Dr. Frelchier's
 report on the improve-
 ment of Indian agri-
 culture, I despatch
 the Director of Agric.
 & Mr. F. A. Ashokan
 I.C.S. to attend the
 conference to be held
 at Simla on the
 2 Oct next—

NOTE FOR THE SECRETARY

First ass. Sec. Dept.

Are you not going to edit
publish an edition in the Gazette?

C.S.
4/8

Wd. Clerk.
Please reply.
R.V.L.
4/8

Yes.
C.S.
4 Aug 98

It will appear
in the next
Gazette.

C.S.
4r

R.V.L. 4/12

Govt. of {1893} Madras.
REVENUE.

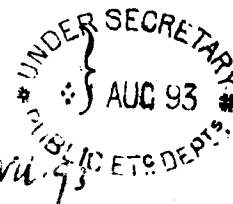
To

The Public Dept.

Dated

Recd.

Regd 2 VII. 93



Encl. 1

Mis. G.O., 28 July 1893, No. 2795.

SUBJECT.

Comm^{rs} to the Board
of Revenue. Govt. of India's
Resolution on Dr. Voelken's
report on the improvement
of Indian agriculture +
resolving to depute the Director
of Agriculture + Mr. F. A.
Nicholson I.C.S. to attend
the conference to be held at
Surat on the 2nd Oct. next.

CS
this

Order. of 5th August 1893, No. 106

Recorded

578/93

Note Arrangements have already
been decided on as regards settling
Mr. Nicholson. It is understood that
Mr. Clogston's place need not be filled
while he is away at Surat.

It is 20th contemplated

CS
4/6

and on this subject the officers above
mentioned will have for their guidance
the views of the Government as set out
in the G. O. of 27th April 1892 no 410 on the
proposed experimental farms and schools

The other subjects which will be discussed
by the members of the Conference are
enumerated in para 13 of the Government
of India Resolution.

3. The following letter will be
despatched to the Government of India
(True Extract)

Chitra
Secretary to Government

To

The Commissioners of Revenue Settlement &
with copy of Report
" Educational Department (copy of
" Public Department. Report already sent)
" Accountant General

H. A. Nicholson Esq re J. C. S. Collector
of Anantapur

PROCEEDINGS OF THE MADRAS GOVERNMENT.

by attached
 Read * Resolution of the Govern

- ment of India, Revenue and Agricultural
 Department, dated Simla the 22nd June 1893
 no $\frac{24}{21}$.

Order thereon: 28th July 1893 no 2795

Communicated to the
 Commissioner of Revenue Settlement and
 Director of the Department of Land Records
 and Agriculture.

2. With reference to paras of
 the Resolution read above, His Excellency
 the Governor in Council has decided to
 depute the Director of Agriculture and
 Mr. F. A. Nicholson I. C. S. to attend the
 Conference to be held at Simla on the
 X 2nd October next. The question of Agriculture
 Education, which is one of the subjects
 proposed for discussion at the Conference
 is of special interest in the Presidency.

main duty of the Agricultural Chemist should be to take his place in the scheme of enquiry rather than to institute what may prove to be premature efforts in the direction of agricultural improvement.

7. It will in the first place be necessary for the Provincial Departments of Agriculture to carry out more effectively than has hitherto been done, the instructions for establishing the system which in the Resolution of 1881 was briefly designated as "district analysis." This subject was discussed at the Agricultural Conference held in 1890 at Simla, but has not as yet been fully understood. The

See also Circular No. 55-R., of the 8th May 1885. object of the scheme was to define with some precision, through the aid of the statistics collected by the land-records agency, the tracts in each district which are subject to failure, or, to use the words of the Resolution, in which the "agricultural operations of the country are liable for any reason to fall below the standard of full efficiency." When some progress has been made in a careful analysis of agricultural tracts, the expert will be usefully associated with the Agricultural Departments in investigating the causes of failure and in suggesting the remedies to be applied. As soon as this stage has been reached, the greater number of those recommendations of the Famine Commission and Dr. Voelcker which deal with positive measures of remedy and improvement, will have to be taken under serious consideration: and, although it may be the case that in some directions enquiry has proceeded sufficiently far to justify immediate action, especially in tracts where agricultural depression is extreme, yet there is no doubt that in the main a considerable period must still be occupied in the preliminary work of investigation.

8. Another branch of enquiry is concerned with the existing methods and practices of agriculture throughout India. This will be entrusted primarily to the Agricultural Chemist. It will involve the collection and collation of facts and statistics contained in gazetteers, settlement reports, and other such sources of information, and will require both personal investigation in the field and continual communication with the officers of the Agricultural Departments.

9. The necessity of ascertaining by continuous and scientifically-directed trial on experimental farms what are the possibilities of improving existing methods was indicated in the Resolution of 1881, and measures have been taken in almost every province to establish farms for this purpose. The inspection of farms; the general direction of the system on which experiments are to be conducted; and the preservation of continuity in experiment will be further and important duties of the new officer.

10. The scheme of agricultural enquiry will also entail a systematic analysis of soils, water, manure, etc., in the laboratory, and these will be conducted by the Agricultural Chemist and the Assistant.

11. It will at the same time be essential that with the co-operation of the Educational Departments measures should be taken which will render the agricultural population capable of assimilating new ideas and of understanding any suggestions made to them, as time goes on, for the improvement of their agricultural methods; and which will qualify them to take that active part in the scheme of agricultural reform without which no effective results can be expected. The necessity of adapting the educational system to the requirements

of the agricultural population was not dealt with in the Resolution of 1881. The Government of India, however, in the 25th paragraph of the Resolution on Education, issued by the Home Department in June 1888, recommended that this subject, among others, should in each province be brought under the consideration of a Committee. The question of agricultural education was also discussed in a valuable note submitted by Mr. F. A. Nicholson to the officers who reported in May 1889 on the Agricultural Department of the Madras Presidency. In that note Mr. Nicholson urged that in developing the efficiency of an Agricultural Department it would be necessary to consider "what means will render its operations more efficient by promoting the intelligence and receptivity of the ryot, by developing the agents rather than the mere methods of production, and by provoking them to take the initiative instead of waiting for an impulse *ad extra*."

12. The Government of India, while placing their views before Local Governments and Administrations, do not desire to communicate in any more precise form their instructions regarding Dr. Voelcker's report until they have had the opportunity of referring the questions raised to an Agricultural Conference, at which Local Governments and Administrations should be fitly represented. They have accordingly determined that a Conference shall be held at Simla on the 2nd of October next, for the purpose of considering the definite measures which should be suggested for adoption and of determining the part to be taken in them by the Agricultural Chemist. It is anticipated that the proceedings of the Conference will be brought to a conclusion within a week from the date on which they commence.

13. The special subjects to be brought under consideration at the Conference will be those mentioned in paragraphs 4 to 11 above, namely:—

- (i) the completion of the scheme of investigation by scientific experts (paragraph 4),
- (ii) the further development of "district analysis" (paragraph 7),
- (iii) the compilation of a gazetteer of existing agricultural methods (paragraph 8),
- (iv) the conduct of experimental farms (paragraph 9),
- (v) the system to be adopted in arranging for the analysis of soils, water, manure, etc., (paragraph 10),
- (vi) agricultural education (paragraph 11).

The opportunity will also be taken to consider, in consultation with the officers of the Civil Veterinary Department at head-quarters, the subjects of the prevention and cure of cattle-disease, and the further promotion of horse-breeding.

14. If any Local Government desires that other subjects dealt with in Dr. Voelcker's report should be specially discussed by the Agricultural Conference, the Government of India will be glad to make arrangements accordingly; but they are of opinion that the particular consideration of subjects other than those mentioned in the last paragraph may, generally speaking, be usefully deferred until further advance has been made in the direction of agricultural enquiry.

These instructions are not in any way intended to preclude the consideration by Agricultural Departments of matters connected with the improvement of agriculture in cases where urgent or early measures are called for, or to deprecate any action by Local Governments and Administrations which it may be deemed by them inexpedient to postpone. As at present advised, the Government of India are disposed to believe that in cases of this kind the recommendations included in Dr. Voelcker's report will be found to be in general accord with the approved policy of the Provincial and Imperial Governments, and may properly be quoted in support of such measures as it may be thought necessary to adopt in the interests of agriculture without further delay. But they do not propose that the Conference now summoned should itself attempt to deal with those portions of Dr. Voelcker's report which are concerned with the final rather than the initial stages of the scheme.

15. Local Governments are invited to depute to the Conference, the Directors of the Agricultural Departments and any other officers whom it may be thought advisable to send, and to provide them with any instructions which it may be considered necessary to give in connection with their own views on the subjects to be discussed. In conclusion the Government of India desire that they may be provided, before the 1st of September next, with the names of the officers delegated, as well as with a statement of subjects other than those named in paragraph 13 which it may be desired to have brought under discussion.

ORDER.—Ordered, that the above Resolution be forwarded to the Local Governments and Administrations and

The Government of Madras.	The Government of the Punjab.	Administrations and officers noted in the margin, for information and guidance, and to the Chief Commissioners of Ajmere and Coorg for information.
Bombay.	The Chief Commissioner, Central Provinces.	
Bengal.	Burma.	
North-Western Provinces and Oudh.	Assam.	

The Secretary for Berar to the Resident, Hyderabad.
The Inspector-General, Civil Veterinary Department.
The Agricultural Chemist to the Government of India.

Commissioners of Ajmere and Coorg for information.

[True Extract.]

E. C. BUCK,

Secretary to the Government of India.

2

was drawn up. The Resolution commenced by explaining that before any attempt could be made to improve the agriculture of the country, it was necessary to enquire into, and collect information regarding, the agricultural conditions in each Province.

3. The first step to be taken in this direction was to organize the land-record establishments, and during the twelve years which have since elapsed, these establishments have in most provinces been brought into fair working order, so that they can now be utilized for the collection of facts and statistics.

4. Another measure was to constitute a system of scientific enquiry by means of experts in those branches of investigation which were beyond the scope of the ordinary establishments. With this object there have been successively established the office of Reporter on Economic Products and the Civil Veterinary and Bacteriological Departments. The Departments of Meteorology and Geology already existed, but the attention of both has been called more distinctly than before to the work of practical investigation. At the same time the Trustees of the Indian Museum have consented to carry out through their staff enquiries connected with Economic Entomology and Zoology; while the Botanical Survey, previously restricted to three Provinces, has been extended over the whole of India.

5. None of these Departments or institutions, however, were connected with agriculture proper, and from 1882 to 1888 representations were made to the Secretary of State that the scheme of enquiry could not be completed without an agricultural expert, who should organize and develop a system of agricultural investigation in those directions in which scientific control was wanted. In 1889 Dr. Voelcker was sent out to India by the Secretary of State—"to advise on the best course to be adopted in order to apply the teachings of Agricultural chemistry and in order to effect improvements in Indian agriculture." Dr. Voelcker's preliminary recommendations led to the appointment, in October last, of an Agricultural Chemist, who with the aid of a laboratory Assistant, appointed at the same time to teach in the Forest School at Dehra, will take the position of the expert asked for by the Government of India.

His duties will be necessarily concerned with a larger field than that implied by the term "Agricultural Chemistry," and it is one of the objects of the present Resolution to indicate to some extent what the duties and functions of the Agricultural Chemist will be.

6. In the detailed report now submitted Dr. Voelcker makes numerous recommendations in the direction of agricultural improvement and reform, many of which cover the same ground as those of the Famine Commission. His suggestions come indeed mainly within the scope of the programme set out in the Resolution of 1881, to the principles of which the Government of India still adhere as forming the basis of the scheme of agricultural enquiry and improvement: and, although his suggestions point, as did the Resolution of 1881, to the ultimate establishment of positive measures for improvement, they do so with the same proviso that "before any real improvements can be effected in agriculture the institution of organized enquiry into existing methods is absolutely necessary." The Government of India desire, therefore, that for the present the

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department, No. 24, dated the 22nd June 1893.

Read again—

Resolution of the Government of India, No. 6-340-350-G., dated the 8th December 1881.

Resolution of the Government of India, Nos. 345-355-R., dated the 25th March 1890, regarding the purposes and duties of the Agricultural Department in India.

Read also : the following correspondence on the subjects of—

- (i) The appointment of an Agricultural Chemist to the Government of India, and
- (ii) The deputation of Dr. A. Voelcker to India.

Despatch to Her Majesty's Secretary of State for India, No. 197, dated the 21st July 1888.

Despatch from Her Majesty's Secretary of State for India, No. 104, dated the 13th December 1888, and enclosures.

Despatch to Her Majesty's Secretary of State for India, No. 6, dated the 1st June 1889.

Despatch from Her Majesty's Secretary of State for India, No. 108, dated the 7th November 1889, and enclosures.

Despatch to Her Majesty's Secretary of State for India, No. 21, dated the 18th February 1891.

Despatch from Her Majesty's Secretary of State for India, No. 75, dated the 25th August 1892, and enclosures.

Read again—

Dr. Voelcker's preliminary report on the improvement of Indian Agriculture.

Proceedings of the Agricultural Conference held at Simla in October 1890.

Circular to Local Governments and Administrations, No. 2, dated the 30th January 1890, relative to the above.

RESOLUTION.

The Government of India have now received copies of the report prepared by Dr. Voelcker, who was deputed in 1889-90 to investigate the conditions of agriculture in India : and the opportunity is taken in circulating them to Local Governments and Administrations to explain the position which the report occupies in the development of the scheme undertaken in 1880-81 for agricultural enquiry and improvement.

2. One of the chief recommendations made in the report of the Famine Commission in 1880 was the formation of Agricultural Departments, of which the ultimate aim was to be the improvement of Indian agriculture. In 1881, the Imperial Department of Revenue and Agriculture was created for the purpose of directing the policy to be followed in carrying out the Famine Commission's recommendations; and in December of that year a Resolution was issued in which a comprehensive scheme, based on the suggestions of the Famine Commission,

No. 6-340-350-G., dated the 8th December 1881.

1893.

GOVERNMENT OF INDIA.
REVENUE AND AGRICULTURAL DEPARTMENT.

AGRICULTURE

File No. 21.

Serial No. 8.

RESOLUTION.

No. $\frac{24}{21}$.

Dated Simla, the 22nd June 1893.

SUBJECT.

Communicates remarks on Dr. Voelcker's report on the improvement of Agriculture in India, and states that it is proposed to discuss the questions raised in it at a Conference to be held at Simla on the 2nd October next.

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was drawn up. The Resolution commenced by explaining that before any attempt could be made to improve the agriculture of the country, it was necessary to enquire into, and collect information regarding, the agricultural conditions in each Province.

3. The first step to be taken in this direction was to organize the land-record establishments, and during the twelve years which have since elapsed, these establishments have in most provinces been brought into fair working order, so that they can now be utilized for the collection of facts and statistics.

4. Another measure was to constitute a system of scientific enquiry by means of experts in those branches of investigation which were beyond the scope of the ordinary establishments. With this object there have been successively established the office of Reporter on Economic Products and the Civil Veterinary and Bacteriological Departments. The Departments of Meteorology and Geology already existed, but the attention of both has been called more distinctly than before to the work of practical investigation. At the same time the Trustees of the Indian Museum have consented to carry out through their staff enquiries connected with Economic Entomology and Zoology; while the Botanical Survey, previously restricted to three Provinces, has been extended over the whole of India.

5. None of these Departments or institutions, however, were connected with agriculture proper, and from 1882 to 1888 representations were made to the Secretary of State that the scheme of enquiry could not be completed without an agricultural expert, who should organize and develop a system of agricultural investigation in those directions in which scientific control was wanted. In 1889 Dr. Voelcker was sent out to India by the Secretary of State—"to advise on the best course to be adopted in order to apply the teachings of Agricultural chemistry and in order to effect improvements in Indian agriculture." Dr. Voelcker's preliminary recommendations led to the appointment, in October last, of an Agricultural Chemist, who with the aid of a laboratory Assistant, appointed at the same time to teach in the Forest School at Dehra, will take the position of the expert asked for by the Government of India.

His duties will be necessarily concerned with a larger field than that implied by the term "Agricultural Chemistry," and it is one of the objects of the present Resolution to indicate to some extent what the duties and functions of the Agricultural Chemist will be.

6. In the detailed report now submitted Dr. Voelcker makes numerous recommendations in the direction of agricultural improvement and reform, many of which cover the same ground as those of the Famine Commission. His suggestions come indeed mainly within the scope of the programme set out in the Resolution of 1881, to the principles of which the Government of India still adhere as forming the basis of the scheme of agricultural enquiry and improvement: and, although his suggestions point, as did the Resolution of 1881, to the ultimate establishment of positive measures for improvement, they do so with the same proviso that "before any real improvements can be effected in agriculture the institution of organized enquiry into existing methods is absolutely necessary." The Government of India desire, therefore, that for the present the

main duty of the Agricultural Chemist should be to take his place in the scheme of enquiry rather than to institute what may prove to be premature efforts in the direction of agricultural improvement.

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9. The necessity of ascertaining by continuous and scientifically-directed trial on experimental farms what are the possibilities of improving existing methods was indicated in the Resolution of 1881, and measures have been taken in almost every province to establish farms for this purpose. The inspection of farms; the general direction of the system on which experiments are to be conducted; and the preservation of continuity in experiment will be further and important duties of the new officer.

10. The scheme of agricultural enquiry will also entail a systematic analysis of soils, water, manure, etc., in the laboratory, and these will be conducted by the Agricultural Chemist and the Assistant.

11. It will at the same time be essential that with the co-operation of the Educational Departments measures should be taken which will render the agricultural population capable of assimilating new ideas and of understanding any suggestions made to them, as time goes on, for the improvement of their agricultural methods; and which will qualify them to take that active part in the scheme of agricultural reform without which no effective results can be expected. The necessity of adapting the educational system to the requirements

of the agricultural population was not dealt with in the Resolution of 1881. The Government of India, however, in the 25th paragraph of the Resolution on Education, issued by the Home Department in June 1888, recommended that this subject, among others, should in each province be brought under the consideration of a Committee. The question of agricultural education was also discussed in a valuable note submitted by Mr. F. A. Nicholson to the officers who reported in May 1889 on the Agricultural Department of the Madras Presidency. In that note Mr. Nicholson urged that in developing the efficiency of an Agricultural Department it would be necessary to consider "what means will render its operations more efficient by promoting the intelligence and receptivity of the ryot, by developing the agents rather than the mere methods of production, and by provoking them to take the initiative instead of waiting for an impulse *ab extra*."

12. The Government of India, while placing their views before Local Governments and Administrations, do not desire to communicate in any more precise form their instructions regarding Dr. Voelcker's report until they have had the opportunity of referring the questions raised to an Agricultural Conference, at which Local Governments and Administrations should be fitly represented. They have accordingly determined that a Conference shall be held at Simla on the 2nd of October next, for the purpose of considering the definite measures which should be suggested for adoption and of determining the part to be taken in them by the Agricultural Chemist. It is anticipated that the proceedings of the Conference will be brought to a conclusion within a week from the date on which they commence.

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- (i) the completion of the scheme of investigation by scientific experts (paragraph 4),
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The opportunity will also be taken to consider, in consultation with the officers of the Civil Veterinary Department at head-quarters, the subjects of the prevention and cure of cattle-disease, and the further promotion of horse-breeding.

14. If any Local Government desires that other subjects dealt with in Dr. Voelcker's report should be specially discussed by the Agricultural Conference, the Government of India will be glad to make arrangements accordingly; but they are of opinion that the particular consideration of subjects other than those mentioned in the last paragraph may, generally speaking, be usefully deferred until further advance has been made in the direction of agricultural enquiry.

These instructions are not in any way intended to preclude the consideration by Agricultural Departments of matters connected with the improvement of agriculture in cases where urgent or early measures are called for, or to deprecate any action by Local Governments and Administrations which it may be deemed by them inexpedient to postpone. As at present advised, the Government of India are disposed to believe that in cases of this kind the recommendations included in Dr. Voelcker's report will be found to be in general accord with the approved policy of the Provincial and Imperial Governments, and may properly be quoted in support of such measures as it may be thought necessary to adopt in the interests of agriculture without further delay. But they do not propose that the Conference now summoned should itself attempt to deal with those portions of Dr. Voelcker's report which are concerned with the final rather than the initial stages of the scheme.

15. Local Governments are invited to depute to the Conference the Directors of the Agricultural Departments and any other officers whom it may be thought advisable to send, and to provide them with any instructions which it may be considered necessary to give in connection with their own views on the subjects to be discussed. In conclusion the Government of India desire that they may be provided, before the 1st of September next, with the names of the officers delegated, as well as with a statement of subjects other than those named in paragraph 13 which it may be desired to have brought under discussion.

ORDER.—Ordered, that the above Resolution be forwarded to the Local

The Government of Madras.	The Government of the Punjab.	Governments and Administrations and officers noted in the margin, for information and guidance, and to the Chief
" " Bombay.	The Chief Commissioner, Central Pro-	
" " Bengal.	vinces.	
" " North-Western	Burma.	
Provinces and Oudh.	Assam.	

The Secretary for Berar to the Resident, Hyderabad.
The Inspector-General, Civil Veterinary Department.
The Agricultural Chemist to the Government of India.

Commissioners of Ajmere and Coorg for information.

[True Extract.]

E. C. BUCK,

Secretary to the Government of India.

1893.
GOVERNMENT OF INDIA.
REVENUE AND AGRICULTURAL DEPARTMENT.

File No. 21.
Serial No. 3.

AGRICULTURE

RESOLUTION.

No. $\frac{24}{21}$.

Dated Simla, the 22nd June 1893.

SUBJECT.

Communicates remarks on Dr. Voelcker's report on the improvement of Agriculture in India, and states that it is proposed to discuss the questions raised in it at a Conference to be held at Simla on the 2nd October next.

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department, No. 21, dated the 22nd June 1893.

Read again—

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The Government of India have now received copies of the report prepared by Dr. Voelcker, who was deputed in 1889-90 to investigate the conditions of agriculture in India: and the opportunity is taken in circulating them to Local Governments and Administrations to explain the position which the report occupies in the development of the scheme undertaken in 1880-81 for agricultural enquiry and improvement.

2. One of the chief recommendations made in the report of the Famine Commission in 1880 was the formation of Agricultural Departments, of which the ultimate aim was to be the improvement of Indian agriculture. In 1881, the Imperial Department of Revenue and Agriculture was created for the purpose of directing the policy to be followed in carrying out the Famine Commission's recommendations; and in December of that

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was drawn up. The Resolution commenced by explaining that before any attempt could be made to improve the agriculture of the country, it was necessary to enquire into, and collect information regarding, the agricultural conditions in each Province.

3. The first step to be taken in this direction was to organize the land-record establishments, and during the twelve years which have since elapsed, these establishments have in most provinces been brought into fair working order, so that they can now be utilized for the collection of facts and statistics.

4. Another measure was to constitute a system of scientific enquiry by means of experts in those branches of investigation which were beyond the scope of the ordinary establishments. With this object there have been successively established the office of Reporter on Economic Products and the Civil Veterinary and Bacteriological Departments. The Departments of Meteorology and Geology already existed, but the attention of both has been called more distinctly than before to the work of practical investigation. At the same time the Trustees of the Indian Museum have consented to carry out through their staff enquiries connected with Economic Entomology and Zoology; while the Botanical Survey, previously restricted to three Provinces, has been extended over the whole of India.

5. None of these Departments or institutions, however, were connected with agriculture proper, and from 1882 to 1888 representations were made to the Secretary of State that the scheme of enquiry could not be completed without an agricultural expert, who should organize and develop a system of agricultural investigation in those directions in which scientific control was wanted. In 1889 Dr. Voelcker was sent out to India by the Secretary of State—"to advise on the best course to be adopted in order to apply the teachings of Agricultural chemistry and in order to effect improvements in Indian agriculture." Dr. Voelcker's preliminary recommendations led to the appointment, in October last, of an Agricultural Chemist, who with the aid of a laboratory Assistant, appointed at the same time to teach in the Forest School at Dehra, will take the position of the expert asked for by the Government of India.

His duties will be necessarily concerned with a larger field than that implied by the term "Agricultural Chemistry," and it is one of the objects of the present Resolution to indicate to some extent what the duties and functions of the Agricultural Chemist will be.

6. In the detailed report now submitted Dr. Voelcker makes numerous recommendations in the direction of agricultural improvement and reform, many of which cover the same ground as those of the Famine Commission. His suggestions come indeed mainly within the scope of the programme set out in the Resolution of 1881, to the principles of which the Government of India still adhere as forming the basis of the scheme of agricultural enquiry and improvement: and, although his suggestions point, as did the Resolution of 1881, to the ultimate establishment of positive measures for improvement, they do so with the same proviso that "before any real improvements can be effected in agriculture the institution of organized enquiry into existing methods is absolutely necessary." The Government of India desire, therefore, that for the present the

main duty of the Agricultural Chemist should be to take his place in the scheme of enquiry rather than to institute what may prove to be premature efforts in the direction of agricultural improvement.

7. It will in the first place be necessary for the Provincial Departments of Agriculture to carry out more effectively than has hitherto been done, the instructions for establishing the system which in the Resolution of 1881 was briefly designated as "district analysis." This subject was discussed at the Agricultural Conference held in 1890 at Simla, but has not as yet been fully understood. The

See also Circular No. 55-R., of the 8th May 1885. object of the scheme was to define with some precision, through the aid of the statistics collected by the land-records agency, the tracts in each district which are subject to failure, or, to use the words of the Resolution, in which the "agricultural operations of the country are liable for any reason to fall below the standard of full efficiency." When some progress has been made in a careful analysis of agricultural tracts, the expert will be usefully associated with the Agricultural Departments in investigating the causes of failure and in suggesting the remedies to be applied. As soon as this stage has been reached, the greater number of those recommendations of the Famine Commission and Dr. Voelcker which deal with positive measures of remedy and improvement, will have to be taken under serious consideration: and, although it may be the case that in some directions enquiry has proceeded sufficiently far to justify immediate action, especially in tracts where agricultural depression is extreme, yet there is no doubt that in the main a considerable period must still be occupied in the preliminary work of investigation.

8. Another branch of enquiry is concerned with the existing methods and practices of agriculture throughout India. This will be entrusted primarily to the Agricultural Chemist. It will involve the collection and collation of facts and statistics contained in gazetteers, settlement reports, and other such sources of information, and will require both personal investigation in the field and continual communication with the officers of the Agricultural Departments.

9. The necessity of ascertaining by continuous and scientifically-directed trial on experimental farms what are the possibilities of improving existing methods was indicated in the Resolution of 1881, and measures have been taken in almost every province to establish farms for this purpose. The inspection of farms; the general direction of the system on which experiments are to be conducted; and the preservation of continuity in experiment will be further and important duties of the new officer.

10. The scheme of agricultural enquiry will also entail a systematic analysis of soils, water, manure, etc., in the laboratory, and these will be conducted by the Agricultural Chemist and the Assistant.

11. It will at the same time be essential that with the co-operation of the Educational Departments measures should be taken which will render the agricultural population capable of assimilating new ideas and of understanding any suggestions made to them, as time goes on, for the improvement of their agricultural methods; and which will qualify them to take that active part in the scheme of agricultural reform without which no effective results can be expected. The necessity of adapting the educational system to the requirements

of the agricultural population was not dealt with in the Resolution of 1881. The Government of India, however, in the 25th paragraph of the Resolution on Education, issued by the Home Department in June 1888, recommended that this subject, among others, should in each province be brought under the consideration of a Committee. The question of agricultural education was also discussed in a valuable note submitted by Mr. F. A. Nicholson to the officers who reported in May 1889 on the Agricultural Department of the Madras Presidency. In that note Mr. Nicholson urged that in developing the efficiency of an Agricultural Department it would be necessary to consider "what means will render its operations more efficient by promoting the intelligence and receptivity of the ryot, by developing the agents rather than the mere methods of production, and by provoking them to take the initiative instead of waiting for an impulse *ad extra*."

12. The Government of India, while placing their views before Local Governments and Administrations, do not desire to communicate in any more precise form their instructions regarding Dr. Voelcker's report until they have had the opportunity of referring the questions raised to an Agricultural Conference, at which Local Governments and Administrations should be fitly represented. They have accordingly determined that a Conference shall be held at Simla on the 2nd of October next, for the purpose of considering the definite measures which should be suggested for adoption and of determining the part to be taken in them by the Agricultural Chemist. It is anticipated that the proceedings of the Conference will be brought to a conclusion within a week from the date on which they commence.

13. The special subjects to be brought under consideration at the Conference will be those mentioned in paragraphs 4 to 11 above, namely:—

- (i) the completion of the scheme of investigation by scientific experts (paragraph 4),
- (ii) the further development of "district analysis" (paragraph 7),
- (iii) the compilation of a gazetteer of existing agricultural methods (paragraph 8),
- (iv) the conduct of experimental farms (paragraph 9),
- (v) the system to be adopted in arranging for the analysis of soils, water, manure, etc., (paragraph 10),
- (vi) agricultural education (paragraph 11).

The opportunity will also be taken to consider, in consultation with the officers of the Civil Veterinary Department at head-quarters, the subjects of the prevention and cure of cattle-disease, and the further promotion of horse-breeding.

14. If any Local Government desires that other subjects dealt with in Dr. Voelcker's report should be specially discussed by the Agricultural Conference, the Government of India will be glad to make arrangements accordingly; but they are of opinion that the particular consideration of subjects other than those mentioned in the last paragraph may, generally speaking, be usefully deferred until further advance has been made in the direction of agricultural enquiry.

These instructions are not in any way intended to preclude the consideration by Agricultural Departments of matters connected with the improvement of agriculture in cases where urgent or early measures are called for, or to deprecate any action by Local Governments and Administrations which it may be deemed by them inexpedient to postpone. As at present advised, the Government of India are disposed to believe that in cases of this kind the recommendations included in Dr. Voelcker's report will be found to be in general accord with the approved policy of the Provincial and Imperial Governments, and may properly be quoted in support of such measures as it may be thought necessary to adopt in the interests of agriculture without further delay. But they do not propose that the Conference now summoned should itself attempt to deal with those portions of Dr. Voelcker's report which are concerned with the final rather than the initial stages of the scheme.

15. Local Governments are invited to depute to the Conference the Directors of the Agricultural Departments and any other officers whom it may be thought advisable to send, and to provide them with any instructions which it may be considered necessary to give in connection with their own views on the subjects to be discussed. In conclusion the Government of India desire that they may be provided, before the 1st of September next, with the names of the officers delegated, as well as with a statement of subjects other than those named in paragraph 13 which it may be desired to have brought under discussion.

ORDER.—Ordered, that the above Resolution be forwarded to the Local Governments and

The Government of Madras.
" " Bombay.
" " Bengal.
Provinces and Oudh. North-Western

The Government of the Punjab.
The Chief Commissioner, Central Provinces.
" " " Burma.
" " " Assam.

Administrations and officers noted in the margin, for information and guidance, and to the Chief

The Secretary for Berar to the Resident, Hyderabad.
The Inspector-General, Civil Veterinary Department.
The Agricultural Chemist to the Government of India.

Commissioners of Ajmere and Coorg for information.

[True Extract.]

E. C. BUCK,

Secretary to the Government of India.

1893.

File No. 21.

Serial No. 8.

GOVERNMENT OF INDIA.
REVENUE AND AGRICULTURAL DEPARTMENT.

AGRICULTURE

RESOLUTION.

No. $\frac{24}{21}$.

Dated Simla, the 22nd June 1893.

SUBJECT.

Communicates remarks on Dr. Voelcker's report on the improvement of Agriculture in India, and states that it is proposed to discuss the questions raised in it at a Conference to be held at Simla on the 2nd October next.

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department, No. 2, dated the 22nd June 1893.

Read again—

Resolution of the Government of India, No. 6-340-350-G., dated the 8th December 1881.

Resolution of the Government of India, Nos. 345-355-R., dated the 25th March 1890, regarding the purposes and duties of the Agricultural Department in India.

Read also : the following correspondence on the subjects of—

- (i) The appointment of an Agricultural Chemist to the Government of India, and
- (ii) The deputation of Dr. A. Voelcker to India.

Despatch to Her Majesty's Secretary of State for India, No. 197, dated the 21st July 1888.

Despatch from Her Majesty's Secretary of State for India, No. 104, dated the 13th December 1888, and enclosures.

Despatch to Her Majesty's Secretary of State for India, No. 6, dated the 1st June 1889.

Despatch from Her Majesty's Secretary of State for India, No. 108, dated the 7th November 1889, and enclosures.

Despatch to Her Majesty's Secretary of State for India, No. 21, dated the 18th February 1891.

Despatch from Her Majesty's Secretary of State for India, No. 75, dated the 25th August 1892, and enclosures.

Read again—

Dr. Voelcker's preliminary report on the improvement of Indian Agriculture.

Proceedings of the Agricultural Conference held at Simla in October 1890.

Circular to Local Governments and Administrations, No. 2, dated the 30th January 1890, relative to the above.

RESOLUTION.

The Government of India have now received copies of the report prepared by Dr. Voelcker, who was deputed in 1889-90 to investigate the conditions of agriculture in India : and the opportunity is taken in circulating them to Local Governments and Administrations to explain the position which the report occupies in the development of the scheme undertaken in 1880-81 for agricultural enquiry and improvement.

2. One of the chief recommendations made in the report of the Famine Commission in 1880 was the formation of Agricultural Departments, of which the ultimate aim was to be the improvement of Indian agriculture. In 1881, the Imperial Department of Revenue and Agriculture was created for the purpose of directing the policy to be followed in carrying out the Famine Commission's re-

No. 6-340-350-G., dated the 8th December 1881.

commendations ; and in December of that year a Resolution was issued in which a comprehensive scheme, based on the suggestions of the Famine Commission,

was drawn up. The Resolution commenced by explaining that before any attempt could be made to improve the agriculture of the country, it was necessary to enquire into, and collect information regarding, the agricultural conditions in each Province.

3. The first step to be taken in this direction was to organize the land-record establishments, and during the twelve years which have since elapsed, these establishments have in most provinces been brought into fair working order, so that they can now be utilized for the collection of facts and statistics.

4. Another measure was to constitute a system of scientific enquiry by means of experts in those branches of investigation which were beyond the scope of the ordinary establishments. With this object there have been successively established the office of Reporter on Economic Products and the Civil Veterinary and Bacteriological Departments. The Departments of Meteorology and Geology already existed, but the attention of both has been called more distinctly than before to the work of practical investigation. At the same time the Trustees of the Indian Museum have consented to carry out through their staff enquiries connected with Economic Entomology and Zoology; while the Botanical Survey, previously restricted to three Provinces, has been extended over the whole of India.

5. None of these Departments or institutions, however, were connected with agriculture proper, and from 1882 to 1888 representations were made to the Secretary of State that the scheme of enquiry could not be completed without an agricultural expert, who should organize and develop a system of agricultural investigation in those directions in which scientific control was wanted. In 1889 Dr. Voelcker was sent out to India by the Secretary of State—"to advise on the best course to be adopted in order to apply the teachings of Agricultural chemistry and in order to effect improvements in Indian agriculture." Dr. Voelcker's preliminary recommendations led to the appointment, in October last, of an Agricultural Chemist, who with the aid of a laboratory Assistant, appointed at the same time to teach in the Forest School at Dehra, will take the position of the expert asked for by the Government of India.

His duties will be necessarily concerned with a larger field than that implied by the term "Agricultural Chemistry," and it is one of the objects of the present Resolution to indicate to some extent what the duties and functions of the Agricultural Chemist will be.

6. In the detailed report now submitted Dr. Voelcker makes numerous recommendations in the direction of agricultural improvement and reform, many of which cover the same ground as those of the Famine Commission. His suggestions come indeed mainly within the scope of the programme set out in the Resolution of 1881, to the principles of which the Government of India still adhere as forming the basis of the scheme of agricultural enquiry and improvement: and, although his suggestions point, as did the Resolution of 1881, to the ultimate establishment of positive measures for improvement, they do so with the same proviso that "before any real improvements can be effected in agriculture the institution of organized enquiry into existing methods is absolutely necessary." The Government of India desire, therefore, that for the present the

main duty of the Agricultural Chemist should be to take his place in the scheme of enquiry rather than to institute what may prove to be premature efforts in the direction of agricultural improvement.

7. It will in the first place be necessary for the Provincial Departments of Agriculture to carry out more effectively than has hitherto been done, the instructions for establishing the system which in the Resolution of 1881 was briefly designated as "district analysis." This subject was discussed at the Agricultural Conference held in 1890 at Simla, but has not as yet been fully understood. The

See also Circular No. 55-R., of the 8th May 1885. object of the scheme was to define with some precision, through the aid of the statistics collected by the land-records agency, the tracts in each district which are subject to failure, or, to use the words of the Resolution, in which the "agricultural operations of the country are liable for any reason to fall below the standard of full efficiency." When some progress has been made in a careful analysis of agricultural tracts, the expert will be usefully associated with the Agricultural Departments in investigating the causes of failure and in suggesting the remedies to be applied. As soon as this stage has been reached, the greater number of those recommendations of the Famine Commission and Dr. Voelcker which deal with positive measures of remedy and improvement, will have to be taken under serious consideration: and, although it may be the case that in some directions enquiry has proceeded sufficiently far to justify immediate action, especially in tracts where agricultural depression is extreme, yet there is no doubt that in the main a considerable period must still be occupied in the preliminary work of investigation.

8. Another branch of enquiry is concerned with the existing methods and practices of agriculture throughout India. This will be entrusted primarily to the Agricultural Chemist. It will involve the collection and collation of facts and statistics contained in gazetteers, settlement reports, and other such sources of information, and will require both personal investigation in the field and continual communication with the officers of the Agricultural Departments.

9. The necessity of ascertaining by continuous and scientifically-directed trial on experimental farms what are the possibilities of improving existing methods was indicated in the Resolution of 1881, and measures have been taken in almost every province to establish farms for this purpose. The inspection of farms; the general direction of the system on which experiments are to be conducted; and the preservation of continuity in experiment will be further and important duties of the new officer.

10. The scheme of agricultural enquiry will also entail a systematic analysis of soils, water, manure, etc., in the laboratory, and these will be conducted by the Agricultural Chemist and the Assistant.

11. It will at the same time be essential that with the co-operation of the Educational Departments measures should be taken which will render the agricultural population capable of assimilating new ideas and of understanding any suggestions made to them, as time goes on, for the improvement of their agricultural methods; and which will qualify them to take that active part in the scheme of agricultural reform without which no effective results can be expected. The necessity of adapting the educational system to the requirements

12. The Government of India, while placing their views before Local Governments and Administrations, do not desire to communicate in any more precise form their instructions regarding Dr. Voelcker's report until they have had the opportunity of referring the questions raised to an Agricultural Conference, at which Local Governments and Administrations should be fitly represented. They have accordingly determined that a Conference shall be held at Simla on the 2nd of October next, for the purpose of considering the definite measures which should be suggested for adoption and of determining the part to be taken in them by the Agricultural Chemist. It is anticipated that the proceedings of the Conference will be brought to a conclusion within a week from the date on which they commence.

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- (v) the system to be adopted in arranging for the analysis of soils, water, manure, etc., (paragraph 10),
- (vi) agricultural education (paragraph 11).

The opportunity will also be taken to consider, in consultation with the officers of the Civil Veterinary Department at head-quarters, the subjects of the prevention and cure of cattle-disease, and the further promotion of horse-breeding.

14. If any Local Government desires that other subjects dealt with in Dr. Voelcker's report should be specially discussed by the Agricultural Conference, the Government of India will be glad to make arrangements accordingly; but they are of opinion that the particular consideration of subjects other than those mentioned in the last paragraph may, generally speaking, be usefully deferred until further advance has been made in the direction of agricultural enquiry.

15. Local Governments are invited to depute to the Conference the Directors of the Agricultural Departments and any other officers whom it may be thought advisable to send, and to provide them with any instructions which it may be considered necessary to give in connection with their own views on the subjects to be discussed. In conclusion the Government of India desire that they may be provided, before the 1st of September next, with the names of the officers delegated, as well as with a statement of subjects other than those named in paragraph 13 which it may be desired to have brought under discussion.

those named in paragraph 2 of the discussion.

ORDER.—Ordered, that the above Resolution be forwarded to the Local Governments and Administrations and officers noted in the margin, for information and guidance, and to the Chief Commissioners of Ajmere and Coorg for information.

The Government of Madras.	The Government of the Punjab.
" " Bombay.	The Chief Commissioner, Central Provinces.
" " Bengal.	" " " Burma.
" " North-Western	" " " Assam.
Provinces and Oudh.	

The Secretary for Berar to the Resident, Hyderabad.
The Inspector-General, Civil Veterinary Department.
The Agricultural Chemist to the Government of India.

[True Extract.]

[True Extract.]

E. C. BUCK,

Secretary to the Government of India.