Proceedings of the Madras Government, Revenue Department,
25th October 1873.

No. 251. Read the following letter from Colonel R. BENSON, F.L.S., Honorary Secretary, Agri-Horticultural Society, Madras, to the Hon. F. HUDLESTON, Chief Secretary to Government, Madras, dated 8th September 1873, No. 410 :—

WITH reference to the Proceedings of the Government of Madras, dated 5th June 1873, No. 576, I have the honour, by desire of the Committee of Management, to submit the following for the information of the Government of India.

2. The objects of the Society are, first, to subject to the test of careful experiment any schemes having for their purpose the improvement of agriculture or horticulture ; secondly, the introduction and propagation of new and useful plants of all kinds, but more especially those which are likely, in the event of successful introduction, to extend and improve the commercial resources of the country ; thirdly, the formation of an orchard of the most valuable fruit-trees of all countries that can be made to thrive in this climate.

3. Members and others throughout Southern India, and not merely in the Presidency town and its neighbourhood, are supplied with seeds and plants ; but, except in cases where it is desired to make experiments in various parts of the country, this part of the Society's operations is thought of importance, chiefly on account of the considerable addition which it produces to the Society's funds.

4. Towards the close of 1869, a sketch of the Society's operations was published for the information of Members, and the Committee now beg to forward three copies of this for submission to the Supreme Government.

5. Since that date, the operations of the Society have been as follows:—

with the Botanical

stralia, and many

ained through these means.

6. A public botanical garden, to illustrate the chief natural families of the Indian flora, has also been laid out and stocked ; and it is believed that this addition will be of great value not only to private students desirous of getting some knowledge of Indian botany, but also to the botanical class in the Medical College. Indeed, we have the authority of the gentleman who was, until recently, Professor of Botany in the College for saying that, without the aid of the Society's gardens, it would be impossible to teach botany in Madras. Considering, therefore, the growing importance which is being attached to botany as a branch of general education in other parts of the world, the Committee believe that in their botanical garden they have made some provisions for the future educational wants of the country.

7. The Committee regret that it has not hitherto been the practice to keep any special records of the plants sent to other botanical gardens, but the issues since 1869 have been very considerable, and the returns equally extensive.

8. *Horticultural and Agricultural.*—Under this head, the Committee have received and published periodical reports from the coffee districts of Southern India ; many of which have contained valuable information regarding coffee-culture, and useful hints regarding the treatment of plants and estates infested with the borer.

9. They have also devoted some attention to the introduction of better forage plants, believing that the first step to, and decided improvement in, Indian agriculture must be in this direction. With this view, they procured and distributed

at considerable expense seeds of French honeysuckle (*Hedysarum coronarium*) and the Carob tree (*Ceratonia Siliqua*). The experiments with these were not encouraging, but failures are not always without useful lessons. The Committee were also the first to direct attention to the desirability of effecting improvements in the culture and curing of tobacco,—a subject which has since engaged the attention of the Board of Revenue and Government.

10. From a commercial point of view, this is a matter of very great importance, and the Committee have spared no pains in procuring seeds of the best varieties of the plant and in distributing them all over British India and Burmah. Consequent on the attention directed to the subject by the Society, the Government have, from time to time, employed the services of their Quinologist in making analyses of experimental crops, and a large amount of useful information on the tobacco culture has thus been accumulated.

11. The Committee have also been directing their attention to fibre-yielding plants and the best means of extracting and cleaning fibre. At their suggestion, the New Zealand flax plant (*Phormium tenax*) was distributed from the Ootacamund gardens to various other hill-ranges, and special inquiries were made by Government regarding Dr. Purchas's cleaning machines, now extensively used in New Zealand. They were also the first to procure and distribute over Madras, Mysore, and Coorg, the Rhea plant, and they have raised and sent out many plants of the Manilla plantain and a large quantity of *Sanseviera* or bow-string hemp to the Bombay Government. At the same time, they have sent successive parcels of tree-seeds to the Acclimatisation Society of New South Wales and to the Mauritius, where attempts are [illegible] that have resulted in [illegible] the true Sumach plant were also procured [illegible], and an attempt was made to introduce the valuable Esparto grass. During the past five years, the Society has also, on various occasions, been consulted by the Board of Revenue and Government on points connected with horticulture, and has afforded information regarding silkworms and silk-culture.

12. The Committee desire to bring prominently to notice that their plans and arrangements have been invariably based upon what appears to them only a fair and reasonable conclusion, namely, the permanent continuance of the grant; and that its discontinuance will so materially interfere with these arrangements, both pecuniary and otherwise, as to entail serious inconvenience.

13. With reference to 2nd paragraph of the letter under reply, the Committee beg to observe that not only in some cases are the European residents of the particular station, which is the head-quarters of the Society, benefited by the improved and increased supplies of flowers, fruits, and vegetables, but that the chief benefits in these particulars flow towards the natives, and that the natives are particularly interested in the well being of this institution; and the Committee are of opinion that there are few institutions to which the intelligent natives would more readily, as the chief tax-payers, contribute. Moreover, it is the medium of drawing natives and Europeans together on common ground in a kindred pursuit, and, therefore, in a political aspect, is well worth the continued and increased support of the Government.

14. In conclusion, the Committee cannot do better than adopt the last paragraph of Dr. Bidie's able sketch of the origin, history, and present status of the Society, which was printed, for circulation among the Members, in 1859.

15. It is the only body at the Presidency which the Government can consult and seek assistance from in introducing new plants or improving those indigenous to the country; such advice and aid are often asked and always cordially given. It is the only botanical garden on the plains of Southern India, and is, therefore, the sole source from which other tropical countries can get useful plants belonging to the Peninsula, and botanists procure specimens for information regarding the indigenous flora. From its infancy, it has constantly been engaged in experiments having for their purpose the improvement of agriculture and horticulture. It has introduced and distributed great numbers of new and useful plants likely to extend and improve the commercial resources of the country. It has added and improved the food-supplies of the people in various ways, and, for some years, it has been trying to get for the ryot by the forage plants than our pastures produce, to enable him to improve the breed of cattle and feed them in dry seasons when ordinary supplies fail; such have been, and such are still, the objects of the Society, and it may be said briefly that its capabilities for doing good in the field it has so long occupied are only limited by the amount of its income.

No. 252. ORDER THEREON, 25th October 1873, No. 1,175.

RESOLVED that the foregoing letter [illegible] Miscellaneous [illegible] India, with the strong recommendation of this Government that the allowance to the Society be continued, as there is no reason to doubt that, for the last thirty-nine years, the Agri-Horticultural Society of Madras have made persistent efforts towards the development of the agricultural and commercial resources of this Presidency.

(True Extract.)

(Signed) R. A. DALYELL,
Acting Secretary to Government.

To the Honorary Secretary, Agri-Horticultural Society, Madras.
,, the Board of Revenue.

Exd. F. R. Bantleman.

REVENUE DEPARTMENT,
OOTACAMUND,
25th October 1873.

No. 1,176.

No. 253.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
DEPARTMENT OF AGRICULTURE,
REVENUE, AND COMMERCE.

Miscellaneous.

SIR,—In reply to your letter, dated 15th May 1873, No. 157, I am directed by His Excellency the Governor in Council to submit, for the consideration of His Excellency the Viceroy and Governor-General in Council, the accompanying Proceedings of this Government, embodying a report from the Honorary Secretary to the Madras Agri-Horticultural Society containing the information called for by the Government of India.

2. As regards the benefits which the efforts of the Society have conferred upon the public at large, I am also to request a reference to the printed sketch which accompanies the Honorary Secretary's report. It will be perceived that they have included the experimental introduction of plants yielding products useful in the Arts and Commerce, the general improvement of the Agriculture of the Presidency by endeavours to naturalize new forage plants and to give assistance towards the improved cultivation of cotton, indigo, Carolina rice, tobacco, etc., etc., as well as numerous services to botanical science.

3. I am to request attention to the fact that the general grant for "Donations to Scientific Societies" to this Presidency, which includes this grant-in-aid to the Agri-Horticultural Society, is considerably lower in amount than the similar grants to the Presidencies of Bengal* and Bombay, and to add the strong recommendation of this Government that the present State assistance which is essential to the well-being of the Society be continued.

	RS.
* Bengal	20,778
Bombay	22,700
Madras	3,900

4. The Governor in Council considers this long enjoyed allowance of £300 per annum a very moderate subsidy for the objects which the Society subserves, and would view with regret its extinction which is inevitable if the grant be discontinued. Considering the revenue and population of the Presidency, the Governor in Council trusts this small contribution in aid of Botanical and Horticultural Science will not be withdrawn.

I have the honour to be,
Sir,
Your most obedient servant,

(Signed) R. A. DALYELL,
Acting Secretary to Government.

Exd. W. H. French.

13.6.08
12.1.14
21-2-17

(*For Private Circulation only.*)

SKETCH

OF THE

ORIGIN, HISTORY, AND PRESENT STATUS

OF THE

Agri-Horticultural Society of Madras,

AND OF

THE VARIOUS BENEFITS WHICH IT HAS CONFERRED ON HORTICULTURE, AGRICULTURE, COMMERCE & SCIENCE, SINCE ITS FOUNDATION IN 1835;

BY

G. BIDIE, M.B., F.R.G.S.

CORRESPONDING MEMBER AUSTRIAN APOTHECARIES' SOCIETY, VIENNA, AND HONORARY *SECRETARY AGRI-HORTICULTURAL* SOCIETY OF MADRAS.

MADRAS:
CALEB FOSTER,
FOSTER PRESS, 23, RUNDALL'S ROAD, VEPERY.
1869.

PREFACE.

This brief sketch was prepared in reply to some inquiries regarding the Society, and has been published by order of the Committee, in hopes that it may prove interesting to Members. Unfortunately the records of operations during a good many years have been partially destroyed or lost, but still sufficient remains to show, that the Society has done much good work in Southern India; and had not brevity been indispensable, this sketch might have been expanded into a goodly sized volume. To the writer the task has been a pleasant one, and he only regrets, that it has not been in his power to set before the public a more extensive review of these chronicles of the past, and one more worthy of the Society and those who have laboured to extend its usefulness.

Madras, 11*th October* 1869.

SKETCH

OF THE

ORIGIN, HISTORY, PRESENT STATUS, &c., OF THE AGRI-HORTICULTURAL SOCIETY OF MADRAS.

I. Origin.—The Agri-Horticultural Society of Madras was instituted by a Public Meeting of English and Native Gentlemen, held on the 15th July 1835. The Minutes of the Meeting state, that the promotion of horticulture is to be considered the primary object of the Society, but that its endeavours are to extend, as far as its means will allow, to the encouragement of improvements in Agriculture generally. The Society as then constituted consisted of *Members* paying an entrance donation of 10 Rs. and a quarterly subscription of 7 Rs., a *General Committee* elected annually by the Members, and an *Honorary Secretary* and *Garden Committee* elected annually from their own number by the General Committee. Dr. Wight, the eminent botanist, was the first Secretary, and the Society appears to have been instituted and fostered into active and useful existence chiefly through his exertions.

Objects of the Society.

Early Constitution of the Society.

Origin of Garden.—2. The Government, recognising the importance of the infant Society, was pleased to grant it 7 acres of land for a garden. Unfortunately the spot given, the only one available at the time, was very ill suited for horticultural experiments, and the Society was long embarrassed by expenses connected with its improvement.

II. Efforts for the improvement of Culinary Vegetables and Fruits.—3. Prior to the origin of the Society, the only vegetables and fruits procurable in the bazaars were the common native kinds, and these of very inferior quality. Its earlier

operations therefore were chiefly directed to the encouragement of the culture of European vegetables, the improvement of the cultivation of indigenous fruit trees, and the introduction of new species of the latter from other parts of India and distant tropical countries. The means adopted to attain these objects were the establishment of a nursery for the propagation of new and superior kinds of fruit trees, the gratuitous distribution and sale of seeds and plants, and the institution of an annual show at which prizes were given to private cultivators, and native market gardeners for the best specimens of garden produce. In a few years, these efforts produced most satisfactory results, European vegetables and indigenous and naturalised fruits of superior quality, becoming common articles of sale in the Madras Market. The influence of the Society in this direction also gradually extended to the Mofussil, and its earlier records show, that demands were being made upon it for seeds and plants from all quarters of the Presidency.

Means adopted to secure improvements.

Results of these earlier efforts.

4. Throughout the whole of its subsequent career, the Society has continued to give earnest attention to this most important branch of horticulture. From time to time it has, at great expense, introduced exotic fruit trees, many of which are now common throughout the country, and it imports annually from England and France large quantities of vegetable and flower seeds of the best quality procurable. These are distributed amongst the members, and sold to the public. It has also for years supplied seeds to, and given prizes for the products of Soldiers' gardens. The annual show of vegetables, fruits, &c. is still continued, and has given a great stimulus to kitchen gardening. Year by year, a gradual improvement has been taking place in the quality and variety of the articles exhibited, and the European vegetables presented at the last show were quite equal to those usually seen at provincial shows in England. The Prize List of this year will show what vegetables are now cultivated in Madras, and the following is a list of some of the exotic fruit trees which have been introduced, or propagated and distributed through the agency of the Society.

Subsequent and present operations.

Encouragement of Soldiers' Gardens.

General results of operations in this Department.

Exotic Fruit trees introduced or propagated and distributed.

Phœnix dactylifera, *Date Palm.*
Varieties of Ananassa sativa, *Pine Apple.*
Musa, *Plantain (Several species).*
Morus multicaulis, *Mulberry.*
Cucumis melo (*varieties*), *Sweet Melon.*
Cucurbita citrullus (*varieties*), *Water Melon.*
Carica papaya, *Papaw.*
Passiflora quadrangularis, *Granadilla.*
Adansonia digitata, *Monkey-bread.*
Hibiscus sabdariffa, *Roselle.*
Blighia sapida, *Akee.*
Nephelium lichi, *Lichee.*
Malpighia punicifolia, *Barbadoes Cherry.*
Anona muricata, *Sour-sop.*
Cookia punctata, *Wampee.*
Citrus aurantium, *Maltese, Seville, &c. Oranges.*
Citrus decumana, *Pumplemose* (*varieties*).
Citrus limonum, *Lemon*, (*varieties*).
Averrhoa carambola, *Carambola.*
Do. bilimbi, *Bilimbi.*
Pyrus malus, *Apple.*
Do. communis, *Pear.*
Eriobotrya japonica, *Loquat.*
Fragaria vesca, *Strawberry.*
Chrysophyllum cainito, *Star-Apple.*
Achras sapota, *Sapodilla.*
Diospyros Kaki, *Date-plum.*
Arduina bispinosa, *Natal-plum.*
Olea Europea, *Olive.*
Physalis peruviana, *Peruvian Cherry.*
Jambosa malaccensis, *Malay Apple.*
Pimenta vulgaris, *All-Spice.*
Psidium cattleyanum, *Chinese Guava.*
Castanospermum australe, *Moreton-bay Chesnut.*
Persea gratissima, *Avocado Pear* or *Subaltern's Butter.*

III. Introduction of and experiments with plants yielding products useful in the Arts, &c.—5. From a very early stage of its existence too, the Society has experimented in the cultivation of indigenous and exotic plants yielding products

useful in the arts, or forming articles of commerce. In 1839, it aided the Government in the introduction of the Mauritius Sugar Cane, and in the course of two or three years had the satisfaction of knowing, that it was fully established in all the sugar growing districts of the presidency. About the same time, it established a nursery for raising and distributing species of timber trees, foreign or peculiar to other parts of India, to which we owe the Dalbergia sissoo, Thespesia populnea, Poinciana regia, Casuarina (2 species), Dillenia speciosa, Barringtonia speciosa, Kleinhovia hospita, Swietenia mahagoni, Hura crepitans, Tanaecium pinnatum, Parkia biglandulosa, Cordia sebestena, Inga dulcis, Colvillea racemosa, Millingtonia hortensis, and many others. This nursery is still maintained, and distributes annually numbers of plants and large quantities of seeds to public departments and private individuals. About 1840 the Society undertook the cultivation of Coffee at Madras, on a scale of sufficient magnitude to ascertain, whether the plant could be profitably grown in the Carnatic. The experiment was not very successful, but led to trials being made in more suitable localities, for which the Society furnished seed and young plants.* Throughout 1840 and 1841, it made strenuous efforts to improve the cultivation of Cotton in Southern India. With the assistance of Government, it got returns from the Collectors of Cotton growing Districts, showing the systems of culture pursued by the natives, and samples of the seeds of all the varieties of the cotton plant then existing in the Presidency. With the seed thus procured, and that of imported exotic species, it formed a nursery, from which for years it continued to distribute seeds of superior kinds to members, Collectors and others interested in this important branch of agriculture. About the same time it took up the cultivation of the Philippine Mulberry, and appears to have distributed it widely, with the effect of greatly promoting the success of silk-culture. It also about 1840 experimented in the culture of Nutmeg, Cinnamon, Clove and Allspice. These experiments, owing

Introduction of Mauritius Sugar Cane in 1839.

Introduction of Timber trees.

Nursery of useful plants.

Experiments in introduction of Coffee in 1840.

Operations for improvement of culture and quality of Cotton in 1840-41.

Distribution of Philippine Mulberry for rearing Silk worms.

Spice Plantation, 1840.

* The exports of coffee from Southern India now amount to about 300,000 cwts. in a year.

to the dryness of the climate, ended in failure, and now only one All-spice remains as a memorial of the spice plantation. About 1841, it made several expensive efforts to introduce the cultivation of the Tea-plant, on our hill ranges. These do not seem to have produced any result then, beyond the cultivation of a few plants as curiosities in private gardens at some hill stations. It is very likely, however, that the presence of these specimens in after-years suggested more extensive trials of the plant. At present it is endeavouring to establish the culture of the Hop-plant, in the hill ranges of Mysore and Coorg.

Attempt to introduce Tea culture, 1841.

Attempt to introduce Hop-plant.

6. The Society has also from time to time given attention to the utilization of Forest Products, such as Gums, Resins, Tanning materials and Dye Stuffs. Many years ago, it introduced the Divi-divi (Caesalpinia Coriaria), and has sent an application to Kew for seeds or plants of the *Sumach*, with the view of its cultivation being tried in Southern India. Quite recently it re-established a trade in Kamala (a drug and dye stuff), which had ceased for years, owing to the adulterations to which it was subject at the hands of native dealers.

Utilization of Forest Products.

About to try culture of Sumach.

Revival of trade in Kamala.

7. Plants yielding oils and fatty substances have also been experimented with, and distributed extensively. Some years ago it introduced the Chinese Tallow-tree (Stillingia sebifera), and last year, through the Board of Revenue, got seeds of the African Palm-oil-tree, which have produced healthy plants. This latter will be a great acquisition.

Experiments with plants yielding oils and fats.

Introduction of Chinese Tallow tree.

Introduction of African Palm-oil-tree.

8. The Society has also given much attention to the cultivation of fibrous plants, indigenous and foreign, and to the best and cheapest methods of extracting their fibre. My predecessor, as Secretary, Dr. Hunter of the School of Arts, experimented largely in this department, and has added much to our knowledge of the subject. About 3 years ago, the *Rheea* (Boehmeria nivea) was got from Calcutta, and propagated in the gardens, from which it was afterwards distributed in Mysore and Coorg

Experiments with plants yielding fibres.

Introduction of Rheea, or Chinese Grass Cloth Plant.

in both of which provinces it is now thoroughly established. The fibre of this plant promises to become in a few years a most important export. At present the Society is endeavouring to introduce the cultivation of the New Zealand Flax (Phormium tenax), on various hill ranges, and has received the cordial aid of the Board of Revenue in this, and in getting information regarding a cheap machine used in New Zealand for extracting the fibre of this and other plants. The Society has also propagated and distributed the Manilla Hemp, a fibre yielding plant of easy culture and great importance.

Encouraging experiments with New Zealand Flax.

Distribution of Manilla Hemp plant.

9. The Society has also introduced new, and given attention in the culture of various indigenous medicinal plants ; such as Guaiacum, Logwood, Hyoscyamus, Ægle Marmelos, Nux vomica, Senna, Acacia Catechu, Abrus precatorius, Kino tree, Cajeput, Toddalia (Lopaz [illegible]), Datura, Lemon grass, Pharbitis nil, &c.

Introduction, &c. of Medicinal plants.

10. A reference to the Prize List of last year's Exhibition, page 5, will show that it is also endeavouring to foster improvements in the culture and preparation for the market of various articles of commerce, by offering prizes for those of superior quality. In this laudable object it has been warmly supported by the Government, who for some time have given an annual donation of 500 Rs. to aid the Society in giving these prizes.

Special efforts to secure improvements in the culture of articles of Commerce.

IV. Efforts for the improvement of Agriculture.—11. The Society has never lost sight of the intention of its founders to promote, as far as its means would allow, improvements in Agriculture generally. Allusion has already been made to its propagation and distribution of the Mauritius Sugar Cane, and up to 1868 it has generally given prizes for the best Canes brought forward at the Annual Exhibition. Mention has also been made of its earlier efforts to effect improvements in Cotton culture, and again during the American War it renewed these efforts with even greater zeal. A large piece of ground was liberally placed at its disposal by the Government as an experimental garden, and in this it tested every procurable species, and furnished the Government with much valuable information as to the commercial value of the fibre of each, and its suitability

Recent operations for the improvement of Cotton culture.

Cotton experimental garden, and Nursery.

or otherwise for the climate of Southern India. This garden also enabled the Government to distribute large quantities of the seeds of all the best kinds. During the same period the Society also experimented with the various Cotton gins brought to the notice of Government, and informed them as to their comparative merits.

Experiments with Cotton gins.

12. The Society has also aided the Government in the introduction of Carolina Rice, making the merits of this valuable grain generally known through its Proceedings, and distributing seed in Bengal, Ceylon, and the native states of Hyderabad and Travancore. From a very early stage of its career it has sought to improve the quality of indigo manufactured in South India, by offering prizes for the best samples produced at its annual shows. In the same manner it still seeks to encourage the production of superior crops of Indian corn, Carolina Rice and other grains. Of late years it has also offered prizes for the best silk, as the culture of the silk worm has become a most important branch of industry in Mysore and elsewhere. For many years it has also sought to improve the quality of Tobacco produced in this Presidency, and with that view keeps up and distributes supplies of seeds of all the best varieties of the plant. It has also of recent years been endeavouring to introduce new, and improve the cultivation of indigenous forage plants. Amongst the new plants of this class which it has sought to naturalise, may be mentioned the Sorghum saccharatum, Guinea grass, various Australian, American and European grasses, Maltese Cactus, and the Carob tree of Egypt. The two last on the list were introduced with the view of affording food for cattle in dry seasons, when the usual supplies fail or are scarce. Seeds of the famous Prangos pabularia of Thibet were also procured last year, but failed to germinate. Another attempt will be made to introduce this very useful forage plant.

Assistance given to Government in the introduction of Carolina Rice.

Encouragement of Indigo culture.

Prizes for ordinary agricultural products & silk.

Operations for improvement of Tobacco culture.

Attention given to Forage plants.

13. In the present year the Society still further extended its operations in the department of agriculture, by offering prizes for the best sheep, poultry and dairy produce. The result of this ex-

Prizes given for Sheep poultry and Dairy produce.

periment was most satisfactory, and it is the intention of the Committee to repeat these prizes, and to offer others for the best cows brought forward at the next annual exhibition.

14. As yet the Society has not done much in the way of introducing improved agricultural implements, having been prevented from entering on experiments in this direction, by its very limited income.

V. Services to Science, &c.—15. Shortly after its establishment the Society commenced the formation of a Botanical Garden, and collection of ornamental plants, and with the exception of the largely endowed Royal Garden in Calcutta, there is not in the East an institution of the kind containing a larger and more interesting collection of tropical and subtropical plants. South America, South Africa, Egypt, the West Indies, Java, the Malayan Peninsula, Birmah, China, Ceylon, and Mauritius have all contributed to it, and through the exertions and writings of its Honorary Secretaries, such as Drs. Wight and Cleghorn, it has done much to promote the progress of Botanical science in Europe, and other parts of the world. It has also, by the system of exchange, enriched other countries, such as South Africa, Singapore, Mauritius and South Australia with ornamental and useful Indian plants.

Formation of Botanical Garden.

Countries from which plants have been introduced.

Contributions of Garden to other countries.

16. The garden has also been of great service to the teaching of Botany, in the Government Medical College. Specimens of plants are supplied gratuitously for the Lecture Room of the Professor, and the pupils regularly visit the gardens to receive practical lectures on living plants. Indeed, it would not be too much to say, that without this valuable botanical collection it would be impossible to teach Botany properly in Madras. A List of the plants growing in the garden in 1853 is available, but it must be remarked, that numerous additions have been made since that date, more especially in the departments of Ferns, Orchids, and useful and ornamental shrubs and trees.

Importance of Garden to the Botanical Class in Government Medical College.

Plants growing in the Garden.

17. In 1855, the Managing Committee represented to the

Government, that the garden was then too limited in extent, and too much crowded to permit of their carrying out thoroughly the various objects of the Society. The Government thereupon liberally sanctioned the purchase of some contiguous ground, at a cost of 15,360 Rs., and placed it at the disposal of the Society. Various improvements were then effected in the garden, and being now laid out in a highly ornamental manner, and open at all times to the public, it forms a pleasant and healthful place of recreation.

Extension of Garden in 1855.

Donation of Government to purchase additional land.

Garden, a Place of recreation for the Public.

18. The annual importation and distribution of flower seeds and ornamental plants by the Society have also given a great stimulus to floriculture, a means of amusement well calculated to lessen somewhat the dull monotony of the English resident's life in India. The competition at the annual show for floricultural prizes is always very keen, and a reference to the Prize List will afford information as to the number of prizes offered, and the plants most cultivated. As yet the native population can hardly be said to take any interest in this branch of Horticulture, although some of its wealthier members often send specimens to the show, of what they consider new or rare plants.

Operations for the improvement of floriculture.

19. The management of the garden is vested in the Committee, but more especially in the Honorary Secretary, through whom all orders are communicated to the Superintendent. The ordinary work of the garden is conducted by the Superintendent, a first class English Gardener, who resides in the garden in a free house, and draws a monthly salary of 200 Rs. It may be mentioned in connection with this, that two of the Society's Superintendents have made important additions to Indian horticultural literature, viz., Brown's "Hand-book of Trees, Shrubs, and Herbaceous plants growing in Madras," and "Jaffrey's Hints to Amateur Gardeners."

How the Garden is managed.

Contributions of Garden Superintendents to Horticultural literature.

20. In connection with the garden, a large Green House is kept up, for nurturing and propagating tender exotics, and indigenous plants liable to suffer from the scorching winds of the hot season

Green House for tender exotics, &c.

The present Superintendent has made various improvements in this, such as the substitution of white cloth for glass in the roof.

Garden nursery.

21. A large nursery is maintained for keeping up supplies of the various plants, with which the garden is stocked. From this, during the year 1868, no less than 3,407 plants weregiven to members, 3,344 sold to the public, and 255 distributed gratuitously. Great attention is paid to this appendage of the garden, as it enables us to effect exchanges with kindred institutions in other parts of the world, is of great importance to the public, and proves an important source of revenue.

Scientific and practical inquiry regarding the Coffee Borer.

22. It has also to be mentioned, that the Society was the first public body in India to institute a scientific inquiry into the natural history of the Coffee Borer insect, and to seek to obtain some remedy for its terrible ravages, which have caused such loss to the planter. By certain concessions it secured correspondents in the Coffee districts of Southern India and Ceylon, and was thus able to place before the public in its proceedings, a large amount of useful information on this and other subjects connected with Coffee culture. When the Government of India, having its attention drawn to the subject, instructed the Government of Madras and the Chief Commissioner of Mysore and Coorg to nominate some one to investigate the ravages of the Borer, the present Honorary Secretary of the Society was selected to carry out the inquiry. His report on the subject has been published by the Madras Government, and he has been thanked for the manner in which he conducted the duty.

Society publishes monthly the Proceedings of Committee.

23. The Society also prints monthly for distribution amongst Members, &c. the Proceedings of the Managing Committee. In this publication many interesting papers on Botanical, Horticultural, and Agricultural subjects have appeared, and it forms an interesting record of the operations of the Society in all its departments. The Government also kindly place at the Society's disposal official papers and reports on subjects coming within its sphere, and these too are usually published in the Proceedings.

Contributions of Honorary Secretaries of Society to Science.

24. The many valuable contributions of the Society's Honorary Secretaries to Science and Economic Botany, also fall to be noticed here. The standard works of Dr. Wight are especially conspicuous, as they are known and highly appreciated wherever the science of

Botany is cultivated, and indispensable to the student of the Indian Flora. They are as follows :—

Prodromus Floræ Peninsulæ Indiæ Orientalis, 1 vol. 1834,
Illustrations of Indian Botany, 2. vols. 4to. 1838—53.
Icones Plantarum Indiæ Orientalis, 6 vols. 4to. 1838—53.
Spicilegium Neilgherrense, 2 vols. 4to. 1847—9.

Besides these he contributed numerous papers on botanical subjects, to various learned societies and scientific journals. Dr. Cleghorn, late Conservator of Forests in the Madras Presidency, has also submitted numerous botanical papers to learned Societies, which have appeared in their Proceedings, and in 1861, published his well known work the "Forests and Gardens of Southern India." Dr. Hunter, Madras School of Arts, in 1859 published in the Edinburgh New Philosophical Journal a paper "The Raw Products of India suited to the Manufacturing wants of Great Britain;" and the present Honorary Secretary is author of the "Undeveloped Fibres of India," Good Words, August, 1863; "Effects of Forest Destruction in Coorg," Journal of Royal Geographical Society, 1869; and "Report on the Ravages of the Borer in Coffee Estates, with a review of the existing Systems of Coffee Culture, &c." Madras, 1869.

Scientific Library attached to Garden.

25. Attached to the Garden there is a small Library, open to Members and others for consultation, containing works on Botany, Agriculture, Horticulture and several of the cognate sciences. These have partly been purchased, and partly presented by the Government and private individuals.

Society wishes to establish a Museum of economic botany.

26. The Committee are also anxious to add to the interest and utility of the garden, by the formation of a small museum and herbarium to illustrate the economic botany of Southern India, but have hitherto been prevented from doing so, by want of funds to erect a suitable building.

VI. Present state of the Society.—27. The object of the Society as it now exists is, "the promotion of Agriculture and Horticulture in all their branches, within the Peninsula of India." The present constitution of the Society is as follows :—

A Patron, usually the Governor of Madras.

Two Vice-Patrons, usually gentlemen holding high official positions at the Presidency.

A General Committee, consisting of 12 members, and an *Honorary Secretary* elected annually by the Members of the Society.

Honorary Members, paying no subscription, being gentlemen distinguished for their knowledge of, or encouragement of Agriculture and Horticulture. These are elected by the Committee.

Extraordinary Members, paying no subscription, and elected from the list of members as an honorary distinction, for important services to the Society, or to Agricultural science.

Ordinary Members. These may be gentlemen of any nation and are elected by the Committee. They pay a quarterly subscription of seven Rupees, which is one of the chief sources of the Society's income. The following is a list of Members on the 31st December of each year since 1849 :—

Year	1849,	Number of Members	80.
„	50	do. do.	83.
„	51	do. do.	82.
„	52	do. do.	91.
„	53	do. do.	84.
„	54	do. do.	88.
„	55	do. do.	85.
„	56	do. do.	78.
„	57	do. do.	78.
„	58	do. do.	66.
„	59	do. do.	92.
„	60	do. do.	96.
„	61	do. do.	109.
„	62	do. do.	96.
„	63	do. do.	95.
„	64	do. do.	84.
„	65	do. do.	87.
„	66	do. do.	94.
„	67	do. do.	97.
„	68	do. do.	115.

Present number of Members greater than at any previous period.

From the above it will be seen that the number of Members is subject to considerable fluctuation. At the present time (September 1869) there are 133 members on the roll, a larger number than at any previous period of the Society's history.

Management of affairs of the Society.

28. The management of the affairs of the Society is vested entirely in the Committee. The conduct of ordinary business and correspondence, and the general superintendence of the garden are entrusted to the Honorary Secretary. Should any subject of importance arise, he solicits and is guided by the special instructions of the Committee.

Committee meet monthly to conduct business.

The Committee meet on the first Wednesday of every month, and at other times when requisite, to conduct the business of the Society. At these meetings all communications for the Society are submitted, and all transactions reported by the Honorary Secretary.

Members assemble annually, to elect Committee and hear report of management.

In March of each year, an annual meeting of members is convened, to elect the Committee for the ensuing year, and hear the report of the retiring Committee as to their management of the affairs and funds of the Society during the previous year.

29. The income of the Society is derived from the subscriptions of members, the sale of seeds and plants to non-subscribers, and a monthly allowance from Government of 250 Rupees, of which it has been in receipt since the 7th August 1855. Prior to that, viz., from the 20th June 1844, the Government allowance only amounted to 150 Rupees per mensem, and anterior to 1844 the Society did not receive any stipend from the Government. The following statement of receipts and payments for the year 1868, will afford some idea of the state of the Society's finances.

Sources of Society's income.

INCOME IN 1868.

Income and expenditure in 1868.

	Rs.	A.	P.
Government allowance.....	3,000	0	0
Subscriptions of Members.....	2,620	6	8
Sale of Seeds and Plants.....	3,809	10	8
Cash in hand 1st January 1868.	593	0	8
Rs.	10,023	2	0

DISBURSEMENTS IN 1868.

	Rs.	A.	P.
English Seedsmen for seeds.....	3,038	12	6
Expenses of annual Vegetable and Flower Show.....	1,083	1	3

32. After the details already given, it will be unnecessary to say much more regarding the present status of the Society.

Present status, &c. of Society.

It is the only body at the Presidency which the Government can consult and seek assistance from in introducing new plants or improving those indigenous to the country. Such advice and aid are often asked, and always cordially given. It has the only Botanical Garden on the plains of Southern India, and is therefore the sole source from which other tropical countries can get useful plants belonging to the Peninsula, and botanists procure specimens of or information regarding the indigenous flora. From its infancy it has constantly been engaged in experiments, having for their purpose the improvement of Agriculture and Horticulture. It has introduced and distributed great numbers of new and useful plants likely to extend and improve the commercial resources of the country. It has added to, and improved the food supplies of the people in various ways, and for some years it has been trying to get for the ryot better forage plants than our pastures produce, to enable him to improve the breed of cattle, and feed them in dry seasons when ordinary supplies fail. Such have been, and such are still the objects of the Society, and it may be said briefly, that its capabilities for doing good, in the field it has so long occupied, are only limited by the amount of its income.

	Rs.	A.	P.
Plants purchased.....	549	8	0
Establishment.....	3,572	10	6
Sundry expenses.....	2,461	4	0
Total disbursements...	10,705	4	3
„ Income.....	10,023	2	0
Rs...	682	2	3

It will thus be seen that the Society at the beginning of the current year was in debt to the amount of Rupees 682-2-3. This was chiefly caused by arrears due to it on account of sales of seeds and subscriptions of Members, amounting to no less a sum than Rs. 2,244-10-3, but also to some extent by the rapid increase in wages and working expenses generally, which has taken place during the last few years. The pay of the English Superintendent had recently to be raised from 150 Rs. to 200 Rs. per mensem.

30. At the beginning of this year the Committee reviewed very carefully the financial state and prospects of the Society, and feeling that they could not with the existing income continue to carry out the objects of the Society in a satisfactory manner, solicited the Government to increase the rate of monthly allowance. This request was not complied with, but in March a liberal donation of Rs. 3,000 was sanctioned. This sum has relieved the Society of its immediate difficulties, and enabled it to re-establish exchanges with Botanical gardens in other quarters of the globe, from which many valuable contributions of useful plants are expected. It has also put it in a position to pay ready money for purchases of seeds and plants in England, an arrangement from which it is already beginning to reap various benefits.

Committee solicited additional aid from Government.

31. The future financial condition of the Society will of course chiefly depend on the number of Members on the roll being kept pretty nearly at the present rate, and on the Government continuing to give the present or an increased monthly allowance. It will also to some extent depend on gentlemen being found willing to give their services gratuitously to the Society as Managing Committee, and Honorary Secretary, the duties of the latter in particular being onerous and responsible.

Financial prospects.

The withdrawal of the Bank
must inevitably entail
the immediate collapse of
the Society - the sale of its property
the Society - the sale of its valuable
the Library of its valuable
to the Society. His Act of the Council
the Council in the
Case of [illegible]
I think, constitutes the
The particular under which
"Imperial" - became the property
but did not in the Union

the services transferred as
"Provincial". Had they been
so the Court would have been
transferred with it. The Public
Services in Calcutta are supposed
to be one of the best of the services
which are worthy of the name.
In the case of Institutions
like these it is impossible to
arrive at anything like a definite
determination of actual
results. But that the Hindu people
cannot be denied - it is
not known by its long existence.

the Public would not be lost
if were it useless - I take the case
known Hindus for years - as I
have been connected with
the Society as I have - can only
help to repeat its dissolution.
There is not a confirmed or profes-
sional Hindus & that does not bear
traces of its utter falsehood.
Opinions I know differ
as to the question how far "Services"
should be aided out of General
taxation - but the practice of every

Country in India sanctions it -
In England - our Parliaments being
ornamented with the Kick money -
and thousands are annually spent
in the mere decorations of Building
&c &c. the Houses of Parliament -
the new Law Courts &c. &c. in
the latter particularly in point.
name them for them - can it be
objected that the State receives
any direct return equivalent to
its outlay? & in the British
Museum - the National pillars &c
But in India the case is entirely

persons know it. In this country
the pt. is ruled by the Princes
& officials & Zemindars
of which a block of the best
& best. & but of the market all
that is civilising and elevating
must be originated by the pt.
for the people are still the backward
Bengal has it Native Journalists
that will be established at the
Native Capitals & Mofussil towns for
more than this paltry district.

I should deeply regret the
cessation of this work and
think we may fairly claim
£300 per ann: for that and
similar for the Capitals &
Mofussil towns in the Presidency
Ration of 30 millions.

J. Sl.

17

Agri Horticultural
Society of Madras.

I should view with
great regret the withdrawal
of the Govt. subsidy from
this Institution.
I believe that at
the present moment the
greatest interest is
evinced by the general
public in the operations
of this Society ~~at the present~~
~~moment~~ than at any
previous period of its
history. There has been
a considerable increase
in its roll of subscribers, and
amongst those who have
recently joined are
natives of good position
who have already taken
a good place in its exhibitions
and have shown a general
interest

interest in the Annual
working of the Society
Mr. Peters Chetty &
the Secretary & Council
are amongst these - I
am of opinion that the
in thus awakening a
taste for gardening and
Agriculture amongst
them of this Class the
Society is performing an
Educational work of no
mean value

I submit that it
is a mistake to suppose
that Agriculture forms
no part of the work of the
Society - It certainly has
no ground on which to
operate practically, but
it concerns itself theoretically
with all these matters -

It is to be supposed
that no benefit is derived
from

from the intelligent dis-
cussion of the various
methods of cultivating and
curing Tobacco - Sugar cane
Paddy & various kinds
of manures & soils for
them and dry forage -
the procuring and dis-
tribution of Exotic seeds
Trees &c All these matters
occupy the attention of
the Committee and Cor-
responding Members of
the Society -

Then again at
the Society's Shows are
not Prizes given for
high qualities in Agricul-
tural products of all
sorts including, besides
the above named articles,
Coffee - Tea - Cotton, Fibres &c -
I fail to see how the term
"Arts"

"Agri" Cannot be said to be a correct Translation of Journeymen dealing Merchants and all Members of this Society. I apprehend they have not chosen to style the Athletic aspect of the Question but from a belief that the Operations of the Society have a strong and practical bearing on the development of Sources of Trade and on the improvement of Roads.

I would especially strongly support the Request for the continuance of this Subsidy in a permanent form and this on the grounds of the excellent work the Agri "Horticultural Society" has already done and the benefits which may be expected to flow from its future operations —

Cs Ex 29/9/73 R 24/10

Ordered
29-9-73

In 2750 recorded

Hony. Secy: Agri. Hortl. Society. Madras
Observations relative to the objects for which the Society was established
6 Sept. 73. No. 410

To Hon Mr Sim with advertence to the notes recorded by the Hon Mr Robinson & H.E. the President - Special attention is requested to pp. 4, 6, 7 & 8 of the printed sketch showing what the Society has done for the Presidency at large

JJB

Observations of the Hony. the Madras Agri. Hort. Society upon the objects for which the Society was established

Hon. Sir

c. 26 Sep. 93 R. 8 Feb. 73 H. 24/10

I understand that
an annual grant
of £50 Rs a month is,
I think, except
Imperial & extra
Provincial charge—
If it is not,
I cannot expect
the Govt. of India to
continue it unless we
show a good case:
if it is not so, the Govt. of India
has no voice in the
matter—
Looking to the estimate
here framed by the Govt. of Madras

I will not oppose
the representation here
made with a view to
continuation of the
Imperial grant—because
I do not think that the
Government of India
has dealt fairly by
this Presidency in the
allotment of Provincial
Funds.

But I am free
to admit that I do not
think that this institution
has subserved any
Imperial—here (perhaps
Provincial—interests
or that it is doing so
at

at present

From an educational or industrial point of view, it has done little or nothing - save helping a few Medical Students to gain the slight Smattering of Botany required for their Examination. I do not know that it has ever turned out a Native Botanist and its influence has not been great on the Class of Native Gardeners even in the Presidency Towns. No body of trained gardeners has been turned out by it. It can scarcely be said to have been an efficient School of horticultural Art.

As regards field and farm agriculture, the Gardens have never had either the men or means and appliances to touch that department of public utility. The "Agri" which appears in the name is a misnomer.

At the same time it has been locally pleasant and most useful and no doubt has contributed to the Collection & Acclimatization of flora and perhaps of a few fruits; and the Institution has brought the Presidency into communication with Botanists & men in all parts of the world

J.H.

as to the degree which the operations of the Society have been conducive to the public interest I can entertain which is sufficiently confirmed by the Report of the Society's operations) I confess that I hardly feel myself in a position to recommend a continuance of the grant. The advantage upon which I lay it last is the assistance to Botanical

Lectures: but if I remember right, there are no Botanical Lectures at Madras.

The benefits derived do not on the institution appear to be great, and such as they are, they are chiefly of a local aesthetic nature, &c. They are objects to aid, in principle, [illegible] the proceeds of general taxation ought not to be applied. The grant is small: but there is a multiplicity of other

'cultures', pour which
equal x similar benefits
ought to be expected to flow,
and which ought therefore
claim the privilege of
application pour soi: and
then aggregate Espèces
and le variétés. If we
can Recommend the
continuance of this part
at all, I think it should
only be on the ground of long
prescription: and I do
suppose that this ground
will scarcely be admitted
in cases of this sort.
I Rule i

Lowe Quite worthy to
the best case made out
that we can make it
"chance it"
24/10

Rec 8th Oct 73 & 24/10
Ans 26 Oct 73

Revenue Department.

No. 1175.

Proceedings of the Madras Government

Dy. 25th Oct. 73.

Read the following letter from the Hony Secy: to the Madras Agri-Horticultural Society

Submits, for the information of the Govt of India, observations for which the Madras Agri-Horticultural Society was established

} H.E. 6th September 1873 No. 410.

Resolved that the foregoing letter with its enclosure be forwarded to the Govt of India with the strong recommendation of this Govt: that the annual grant to the Society be continued as there is no reason to doubt that for the last thirty-nine years the Agri-Horticultural Society of Madras have made persistent efforts towards development of the

Rec'd 18th Sept 73 Answ 24-10-73.

From
The Hony: Secy: Agri-Horticultural Society

No 2750

Dated 6 Sept 1873
Rec'd 8 ... 1873

Subject

Submitting observations on the question of the Madras Agri-Horticultural Society

410

Resolved that the foregoing letter with its enclosure be forwarded to the Govt of India with a strong recommendation from this Govt that the annual grant to the Society be continued, as there is no reason to doubt that for the last thirty-nine years the Agri-Horticultural Society of Madras has done much towards the improvement of the agriculture of the Presidency at large

To the Secretary to the Govt of India Revenue Department

Sir

I have the honor to forward herewith the observations which the Madras Agri-Horticultural Society was established to submit for the information of the Government of India

2. The Society has been in existence for thirty-nine years, and during that period has published a monthly Journal, which has been the means of disseminating much valuable information on agricultural subjects. It has also established a Museum of Economic Products, and a Botanical Garden, and has introduced many valuable plants and trees into the Presidency.

3. The Society has also established a Model Farm, and has imported and distributed many valuable implements and machines, and has done much to encourage the cultivation of cotton, coffee, tea, cinchona, and other valuable products.

4. The Society has also established a Veterinary Hospital, and has imported and distributed many valuable breeds of cattle, sheep, and horses.

5. The Society has also established a Library, and has published many valuable books on agricultural subjects.

6. The Society has also established a Museum of Economic Products, and a Botanical Garden, and has introduced many valuable plants and trees into the Presidency.

7. The Society has also established a Model Farm, and has imported and distributed many valuable implements and machines, and has done much to encourage the cultivation of cotton, coffee, tea, cinchona, and other valuable products.

8. The Society has also established a Veterinary Hospital, and has imported and distributed many valuable breeds of cattle, sheep, and horses.

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21. The Society has also established a Library, and has published many valuable books on agricultural subjects.

22. The Society has also established a Museum of Economic Products, and a Botanical Garden, and has introduced many valuable plants and trees into the Presidency.

23. The Society has also established a Model Farm, and has imported and distributed many valuable implements and machines, and has done much to encourage the cultivation of cotton, coffee, tea, cinchona, and other valuable products.

24. The Society has also established a Veterinary Hospital, and has imported and distributed many valuable breeds of cattle, sheep, and horses.

25. The Society has also established a Library, and has published many valuable books on agricultural subjects.

the Agricultural and Commercial
resources of this Presidency

Hony: Secretary Agri Hortl
Society, Madras. &c &c &c
Vol. of Records.

245
3

46
Grant to Mr. Sundaraya
Vontimittah Cuddy

Hon. Secy Govt

8th Oct/73 R 24 Oct

Revenue Department.

No. 1176. 25 Oct 73

To

The Secretary to the Government of India

Department of Agriculture

Revenue & Commerce

Sir

I am directed in reply to your letter dated 15th May 1873, No. 157, I am directed by His Excellency the Governor in Council to submit for the consideration of His Excellency the Viceroy and Governor General in Council the accompanying Proceedings of this Government embodying a report from the Honorary Secretary to the Madras Agri-Horticultural Society containing the information called for by the Govt. of India

2. As regards the benefits which the efforts of the Society have conferred upon the public at large I am also to request a reference

reference to the printed sheets which accompanies the Honorary Secretary's Report. It will be perceived that they have included the experimental introduction of plants yielding products useful in the Arts and Commerce; the general improvement of the Agriculture of the Presidency by endeavours to naturalize new forage plants and to give assistance towards the improved cultivation of Cotton, Indigo, Carolina rice, Tobacco &c. &c. as well as numerous services to Botanical science.

3. In conclusion, I am to request attention to the fact that the general grant for "Donations to Scientific Societies" to this Presidency which includes this grant-in-aid to the Agri-Horticultural Society is considerably lower in amount than the similar grants to Bengal* and Bombay and to add the strong recommendation of

* Bengal — Rs 20,778
Bombay — Rs 22,700
Madras — Rs 3,900

28

of this Govt that the present State assistance which is essential to the well being of the Society be continued [both on the grounds of long [illegible] and on those set forth in the Hony: Secretary's letter.]

Ind: Secy.

4. The Govt considers this long expected allowance of ₹ 300 per ann: a very inadequate subsidy for the Society whose and would view with regret its extinction. While it is entitled to be discontinued. Considering the means & prosperity of the Presidency, they trust this small contribution in aid of Botanical & Horticultural science will not be withdrawn.

Do: 8 Nov

Grant to the Cuyahoga
Dept Agr Soc for
Grant to the Cuyahoga
Agr & Mechanical Society

Contract
Deposited
Letters Patent