"When we consider that almost every great state in Europe has important and costly arrangements for the promotion of scientific agriculture. While in India scarcely a germ of anything of this sort exists, the urgent need of such a department, and the importance of the work, which it would have to undertake, requires no further enhancement. For one thing, experiments of the exact, elaborates scientific order, from which alone any useful result can be hoped, are at present impossible; there are neither experts fit to conduct such experiments, nor the material means of doing so. Institutions such as that, which Mr. Lawes has for many years maintained on a magnificent scale at Rothamsted, are required in every Indian Province, if any advance towards scientific agriculture is to be effected. Many thousands of acres, for instance, have of late years become barren from saline efflorescence, but its real causes and remedies little has been ascertained, except that the recklessness of canal engineers has in many instances contributed for its formation by closing up the natural drainage of the country, and so water-logging the soil. In the same way the structure of Indian soils, the effects of intense solar heat, violent electrical changes, sand storms, hot winds and the downpour of monsoon, the protection from drought which, in some soils, may be obtained from deep ploughing- these and a hundred other vital questions are, scientifically speaking, unexplained."

H. S. Cunningham of Famine Commission of 1880

This chapter is to explain and examine the evolution of agricultural policy; it would therefore consider the various conditions affecting the formation of policy. During the nineteenth and early twentieth century, administration of British rule in India was guided by the philosophy of classical political economy. Adam Smith, father of classical political economy, defined clearly the ideal duties and limitations for government and suggested stratified order of priority.

According to the system of natural liberty, the sovereign has only three duties to attend to; first, the duty of protecting the society from the violence and invasion of other independent societies, secondly, the duty of protecting as

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far as possible, every member of the society from the injustice or oppression of every member of it or the duty of establishing an exact administration of justice and thirdly, the duty of erecting and maintaining certain public works and public institutions.²

Strictly speaking these ‘duties’ enjoined the course of action which demanded that the Government attention and expenditure be concentrated on the maintenance of a large military force and a legal and administrative system geared to the maintenance of internal peace whereas fulfilling the third duty, government bore the responsibility only for those public works and institutions which were chiefly for facilitating the commerce of the society and for promoting the instruction of the people.³ The application of these ‘duties’ in India filtered through the doctrines and priorities of various utilitarian liberal administrators.

The most decisive impact exercised upon the Indian administrative policy is said to be one that came from the doctrine of James Mill’s utilitarian philosophy. The substance of Mill’s doctrine advocates that the Government should refrain from intervening in the economic or social process beyond the provision and maintenance of law and order. It argues that if the state provides this protection with certainty an economic and social revolution would take place. While the simplicity of this administrative model ended with Mill himself, successors of Mill sought to attach to Government “wider functions and responsibilities.” Dalhousie, Governor General 1848-1856 had introduced responsibility of government for public works, unlike Mill who responded that a system of justice and protection would provide the basis for evolution of a modern political and economic state. Dalhousie sought to encourage this development by providing modern communication, roads, railways, telegraphs and other public works.

It was in the post-mutiny years that the three components of Smith’s ideal duties and limitations of Government merge into the administrative policy changes. These changes emanated from the British realisation to rationalise the governing process and strengthen the British position. John Stuart Mill, son of James Mill, wrote that the protection of persons and that of property are the sole purposes of the Government, rather the admitted functions of the Government embrace a much wider field than can easily be included with the ring fence of any representative definition, and it is hardly possible to find any ground of justification common to them all, except the comprehensive one of general expediency, nor to limit the interference of government by any universal rule, the simple and vague one, that it should never be admitted but when the case of expediency is strong.

It was India’s susceptibility to famine, which caused the questioning of strict adherence to principles of political economy. The Famine Commissioners called for Government intervention in the improvement of agriculture. They called for increasing protective and productive works. The protective works were those which would be used in dry land cropping areas in times of drought. And the productive works were those which would increase areas and the output of existing cultivation areas.

British government in India while moulding the policies, worked meticulously to maintain balance between the two extremes; firstly, the demands of imperial system and secondly, feeling the pulse of the people and preserving the reputation of the government. It was felt deeply in the administrative circle that the “legitimacy and security of imperial system, its financial viability, its ability to sustain itself should not be jeopardised.”

A logical estimation of various factors that shaped policies, in general, reveals that colonial policies (with their fluctuations) worked towards maximum exploitation of the colony. In the nineteenth century, scientific and

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5 *Ibid*, p. 800.
technological developments in the west meant a worldwide expansion of imperialism. This directly and indirectly structured scientific policy for the colonies too.  

Colonial Scientific policy implied engagement of science in colony for more systematic extraction of economic benefits for the metropolis. The concept of science for the British in India was “closely related to the needs of empire. They were not oblivious to the great strides science was then making at home, but were quick to recognise the role and importance of science in empire building.”

The Indian agricultural arena was conditioned by metropolitan demands, British government’s administrative policies and commercial pressures on Indian rural structure. Scientific inputs and outputs generally varied with the fluctuations in the international and national market phenomenon. British government systematically and scientifically reorganised the agriculture, incompliance with the commercial shifts. Alexander Dow describes agriculture as auxiliary to commerce. While mainly focusing on the mercantilist interest involved in it, physiocrats viewed agriculture as the source of all wealth, and trade was regarded important only as an outlet for agricultural goods. Gradually, commercial outlook towards botany began to shape up into more practical agricultural achievements. The earliest step to assist agriculture came with the establishment of botanical gardens as early as 1780s when Company administration was in the process of consolidating its hold in Bengal. For a long time, botanical gardens represented as institutions of the coloniser for modernisation of the agriculture. Worboys argues “in every colony botanical

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9 In 1750 a school of political thinkers emerged in France who came to be called the physiocrats, they made natural knowledge central to a Programme of monarchical reform. Agriculture was central to the reform Programme offered by the physiocrats. This was because land was the original and recurrent natural source of all riches. Agriculture, one of the Physiocrats, Herbert wrote in 1765, was the real source of the wealth of nations.
gardens functioned as the nucleus for the department of agriculture."

**Famine Influence**

Series of famines in mid nineteenth century to a large extent influenced the laissez-faire attitude towards the economic conditions of the country. Famines affected revenue sources of the government. The Bengal and Orissa Famine in 1860’s attracted the attention of the government towards agricultural improvement. It was after the Orissa Famine of 1866, establishment of the agricultural department was initiated by John Lawrence (Viceroy, 1864-69) but it was regarded premature. It was next brought up in 1869 when then Viceroy Lord Mayo wrote “the Government of India is not only a government but the chief landlord... the duties which in England are performed by a good landlord fall in India in a great measure upon the Government.” Speaking generally, he stated, “The only Indian landlord who can command the requisite knowledge and capital is the state.” The conception then came into vogue that the Government in India was in a position of the supreme landlord, and this influenced the state policy in regard to famine relief.

It is a fact that needs to be emphasised here that Lord Mayo was the only Governor General who hailed from a farming family. He thought that improvement of agriculture was the immense need for the material progress of India, and prepared most comprehensive and a well-devised scheme for the agricultural development of the country as a whole. His conception of the (duties of such a) department sprang from the need for a more accurate knowledge regarding the agriculture and commerce of the country. By mid nineteenth century fresh demands were made for more government interventions.

Manchester was demanding a larger supply of cotton, with a longer staple and some sort of security that the bales exported should not consist

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largely of broken bricks. The tea planting on the north-eastern frontier had
grown into a greatest interest, with many wants to be satisfied, and a most
difficult labour problem to get adjusted . . . proposals were constantly being
made to government for introducing better sorts of seed, better processing of
agriculture, better implements of tillage, and more lucrative crops.12 “. . . The
present state of the cotton trade in Lancashire and other districts is an urgent
argument for the immediate adoption of the measures suggested by the
Association. The inadequate supply of cotton has raised the price so high, that
that manufactures find it impossible to escape from great loss in their
operations, and mills are gradually closing or going upon short time, while the
operatives are driven to emigrate or become a burden upon the local rates.”13

The lobby of the Cotton Association was powerful and the Secretary of
State could not ignore what the Association had suggested in the Memorial.
Hectic consultations followed between the Secretary of State and Lord Mayo,
which resulted in the formulation of a despatch by the Governor General on 9
April 1870, addressed to the Secretary State. A part of this despatch ran as
follows:

The experience of the last few years has led to the belief that much
administrative and material advantage would be obtained for our Indian
possessions, if more systematic measures were taken for securing constant and
intelligent efforts, on the part of this Government, for the improvement and
development of the agriculture, commerce, and industrial arts of India. We are
satisfied that closer attention should be given to the great products which
constitutes the staples of our agricultural and manufacturing industry, and of
our exports trade. Of all branches of Indian industry, agriculture, which
constitutes the occupation of the great mass of the people, is by far the most
important. We believe it to be susceptible of almost indefinite improvement. It
is not necessary to dwell upon the obvious and vital necessity of increasing, in
every practicable way, the supply of food available for the people of India.
How this consideration affects all the prospects of the permanent material
advancement of the country has of late years been painfully and repeatedly
shown by the terrible famines which have taken place, and to the recurrence of
which we shall ever be liable until the production of cereals is rendered more
certain and the facilities of conveyance immensely developed.14

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12 Govt. of India, Home, Public Branch, 9 April 1870, proc. no. 91-102. NAI.
13 Ibid.,
14 Ibid.,
Lord Mayo believed that agriculture was almost entirely neglected by the Government. In 1869 Mayo wrote, “the time has come when we ought to start some thing like an agricultural department in the Government of India with branches in the presidencies.” On finding the negative attitude of the Military and Finance Members in his council, Lord Mayo in his minute, dated 28 March 1870, stated “I must dissent from the statement that the proposal is in any degree premature. My astonishment is that it was not made 20 years ago, and I believe that the proposal will neither be difficult to carry out more costly in its operation.” He further argued “I can not agree in the opinion that the practical effect of scientific research on agriculture has been very moderate in Europe and America, and believe that the development of agricultural industry and the increase of produce in England is entirely due to the application of science to husbandry and the spread of education.” Mayo wrote:

“the extraordinary result of the application of artificial manures to the growth of the need upon the land; witness the results of through draining and its marvellous effects from one end of the country to the other; look at the peripatetic steam threshing machine which is used in every farm in Sussex, Lincolnshire, Norfolk and other countries where high farming is practised - the mowing and reaping machine now in universalise; see the results of box and stall feeding with oil cake; look at the extra-ordinary improvement in farm buildings. All this has taken place almost within my memory, certainly within the last 40 years, and it is really to the spread of the knowledge of what I call agricultural science that the whole of this is to be attributed.”

Mayo embittered by the opposition from members of his Council, caustically concluded that ‘at all events I shall make the proposal to the Secretary of State, and leave the responsibility of defeating a safe, easy, and cheap administrative reform to those who think it their duty to oppose it.’

Persuading over the need of the department Mayo wrote to Argill, then Secretary of State in 1870 that ‘for generation to come the progress of India must be directly dependent on her progress in agriculture... perhaps no country in the world in which the State has so much immediate and direct an interest in

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15 Ibid., 69
such questions... Through the greater part of India, every measure of the land enhances the value of the property of the State. The duties, which in England are performed by a good landlord, fall in India, in a great measure, upon the Government. Speaking generally, the only Indian landlord who can command the requisite knowledge is the state. Only one aspect of Mayo's belief were shared by many others, that of enhancing the revenue of the State. The results of Mayo's efforts and the advice of the India office brought forth the creation of the Department of Revenue, Agriculture and Commerce. The title was important in revealing the priorities of the Home Government. Mayo proposed the creation of a department of agriculture and commerce and the post of a director-general of Agriculture and Commerce. He stated, 'We propose to constitute a Department of Agriculture and Commerce as a separate branch of the Home Department and to place it under the supervision of a specially qualified officer, to be called Director-General of the department of Agriculture and Commerce.' He wanted Department for the improvement of the stock and quality of agricultural staples and the development of practical and scientific agriculture, the India office was concerned mainly with revenue. Mayo proposed the title 'Department of Agriculture and Revenue.' However, Argyll, the Secretary of State objected strongly to use the nomenclature stating with that such a title would give rise to the notion that 'the revenue subjects which are undoubtedly of the first importance are not so esteemed.' Moreover, he added that 'of such a paramount importance are these subjects (revenue) that it is obviously necessary that the officer appointed to the post of secretary of this department should always be chosen on account of his knowledge of the subjects connected with revenue rather than from any new knowledge which he may possess of agricultural or commercial matters.' That emphasis was laid more on revenue rather than agricultural improvement when the Department was created in 1871.

16 Quoted in Stratchey, pp. 354-355.
17 A.O. Hume, Agriculture Reform in India, Madras, Christian Literature Society for India, 1899, p. 8.
The Government continued to give priority to revenue concerns. It is revealed clearly when Government of India responded to the financial strain with a Programme of retrenchment. In this pursuit, a Committee was constituted by Lytton to review the expenditure of the Government of India. The Committee in its report advised that the Department of Revenue, Agriculture and Commerce be abolished because it failed to fulfil the primary intention of the Government, namely the enhancement of revenue.18 Thus the Department was doomed to ineffectiveness from the start, sandwiched between the two massive pillars of Revenue and Commerce. It collapsed finally in 1879 under the combined weight of interminable restrictions on its activity in the field, insufficiency of funds and lack of staff, and the unremitting pressures applied by the India Office.

The nine-year history of the agricultural department was chronicled by its first Director A. O. Hume in ‘Agricultural Reform in India’ which was published on his retirement from Government service in 1879.19 In this work, A. O. Hume thus explains why it had not done any thing material for the improvement of agriculture that ‘though originally designated the Department of Agriculture, this department had never, from the first, been so constituted as to permit of its dealing either directly or efficiently with agricultural matters.’ ‘There is not, and never has been any real agricultural department in India. There is a miscellaneous Department of the Government of India, which among its various titles bears the word agriculture but that Department has not and cannot from the nature of things exercise any potential influence on agriculture of the country.’20

For the most part, attempts to stimulate production of certain crops or to run experimental farms rested on provincial finances. There were no imperial

18 Ibid.
19 A. O. Hume, was a supporter of the introduction of capitalist farming in India and also the founder of the Indian National Congress.
20 Ibid. p. 8.
grants to help local governments to develop agriculture. The work of the Department was primarily that of keeping records on emigration, agricultural statistics, land revenue administration and survey and settlement. Hume complained that the only time he saw a field “was from a train on the occasion of a half yearly migration of the Government of India between Calcutta and Simla.”

In 1880, the Famine Commissioners once again brought forth the question of agricultural Department. The Commission headed by Richard Stratchy examined the system of administration, land tenures, communications, irrigation, and agricultural improvement. The Commission emphasised the duty of the administration, to take measure to prevent the famines as “the government stands in the place of the landlords to the agriculturists”. The report specifically recommended the diffusion and application of a scientific knowledge of agriculture in India and the provision of a class of officers in the public service who shall possess such knowledge and be in a position to apply it effectively. To accomplish this objective, the creation of agricultural departments in each province was also recommended for enhancement of meteorological research in order to forecast famines. The Commission further stressed a careful and organised enquiry into Indian agrarian conditions. The commission reported “in order to improve Indian agriculture, it is necessary to be thoroughly acquainted with it”. In 1882, the weight of this Famine commission and public opinion convinced the India Office and the Government of India to reinstitution the Department of Revenue and Agriculture. The functions of the new Department were to be agricultural enquiry, agricultural improvement and famine relief. Simultaneously, the provincial departments of agriculture (established in 1882) were established in

21 Ibid
22 Ibid
all presidencies in order to release the basic objectives of the department.\textsuperscript{23} They were entrusted with the responsibility of recording up to date land records, village maps, and to make necessary agricultural enquiries. The analysis included collecting the requirement of each tract “whether for protection against famine or the improvement of agricultural system.”\textsuperscript{24} But, while the Famine commissioners and the Government of India spoke in terms of agricultural improvement, the directives to the Departments of Agriculture in the presidencies revealed an emphasis once again on revenue.

As far as agricultural improvement was concerned, the new Department was never provided with adequate resources. The Government of India obviously considered it doubtful that it could promote agricultural improvement and felt strongly that the departments were established for that purpose would put undue burden on the State finances.\textsuperscript{25}

Creation of Madras Agricultural Department

Until 1882 a formal department of agriculture as a distinct organisation had not been created, but a committee was established in relation to administration of Saidapet farm under the Board of Revenue control. The work was carried with the help of an agency of experts consisting of the superintendent of the farm, Robertson and his assistants, Benson and later Schiffamayer who were products of Cirencester College of Agriculture.\textsuperscript{26} Such a small agency of experts was obviously a very inadequate substitute for a department. The nature of duties expected from this agricultural agency were farm experiments and research, the selection of seeds, manufacture of implements, making agricultural tours for observation and inquiry and the

\textsuperscript{23} Govt. of India, Home, Public, Sept 1882, proc. no 254, Part B, NAI.
\textsuperscript{24} Board of Revenue, Revenue Settlement, Land Records and Agriculture, 2 May 1885, proc. no. 518, TNA.
\textsuperscript{25} Ibid.
\textsuperscript{26} Cirencester College of Agriculture was the first of its kind, started as early as 1845. It conducted pioneering research and sent its products throughout the colonial empire.
agricultural education. The officer in charge of the farm and of the school of agriculture was at the same time also appointed to be agricultural reporter to the government of India whose chief function was to be the study of agricultural conditions of the different districts of the presidency and the proposal of the measures to remedy such defects as they may present. The officer was subordinated to the Director of the Department of the Revenue as regards his work as superintendent of farm and agricultural reporter and held charge of the school of agriculture under the control of the Director of Public Instruction. The work on the Saidapet farm was merely a part of the entire work to be performed by the expert agency, but work on the farm alone absorbed most of their time. Benson reported in 1879 that

"It may, however, be observed that the farm being the only institution of the sort in southern India, it has necessarily been obliged to undertake a great amount of work in experimental agriculture of a description not usually undertaken by experimental farms. From the entire absence of any writings on the agriculture of the country, the apathy and ignorance of the cultivators, and the imperfect character of the records of the results of previous efforts in improving native agriculture, there was no alternative but to institute experiments of the most eliminatory character."28

The Madras government in its policy on agriculture was guided by general guidelines set by the Imperial government, and adhered them in its priorities. The department of 'Land Records, Settlement and Agriculture' was formally set up in Madras Presidency in 1882. Agricultural Department in the province consist of two classes was that of a very high order of technical and scientific attainments and training in practical agriculture. The second class of officers was to be trained specialists. These men were appointed from England.

Mr. Wilson was appointed as the first Director of agriculture Department. Initially he was appointed as a member of the Board of Revenue, an arrangement which was in vogue in the reorganisation of 1887 when the

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27 Report on the Operations of the Agricultural Department, Madras, 1879, p. 66.

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department was merged with the Board of revenue and placed it under one of the commissioners.

In consequence of the new policy suggested by government of India, the actual focus on improvement was dropped and policy was diluted in favour of the collection of statistical facts for agricultural department. When the formal Department was established in 1882 in the Madras Presidency, the Department was mainly assigned with the duties of agricultural enquiry, land survey and settlement and district analysis. District analysis was to stress on land settlement, assessment and revenue statistics, prices and occupations. For this purpose the Department staff was to aid district collectors in their settlement operations by performing the tasks of resurvey to provide a comprehensive account of lands within the presidency. As F.A. Nicholson, collector of Coimbatore, an advocate of agricultural improvement, stated that the “enquiry was to be one of rural economy and not for agricultural investigations.” Provincial Department was not allowed spending public money on agricultural experiment. Nicholson opined that “experiment was subsequently abandoned in favour of enquiry, enquiry has largely dwindled to the collection of statistics: positive improvement barely exists; the only considerable operations are those against cattle disease which is described...as insufficient and inefficient and a disgrace to a cultivated country. Further he retorted a department “conceived in error, born by chance, bred by accident, developed in starvation, guided by change never had any vigorous vitality.”

Voelcker who came to India in 1889 to investigate on the improvement of Indian agriculture did not see any perceptible change in its functioning. He wrote that agricultural knowledge and improvement have remained much where they were when the Famine Commission (1880) issued their

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29 *Ibid*


31 *Report on the Operation of the Agricultural Department, Madras, 1884-85, pp. 69-70*

32 Madras Government had appointed a Committee to study and report on the working and progress made by the department of Agriculture and College of Agriculture; the Committee had submitted its report to the Madras government in 1888 *'Report of the Agriculture Committee, Madras.'*
recommendation after having carefully examining the current position of agriculture he strongly recommended for the reorganisation of a department for giving emphasis to scientific investigation. In this connection he wrote to Sir Edward Buck, Secretary to the Agricultural Department in March 1890 that the department had collected knowledge, but did not probe into the deficiencies of agricultural practices and their possible remedies. Provincial departments were, unable to make much progress mainly because they were not given a staff of specialists, skilled in agriculture and its allied sciences. They could not go beyond the collection of revenue data and famine relief operations.

Benson's Proposal on Reorganisation of the Madras Agricultural Department

Benson who was then deputy director of Agriculture Department proposed a scheme for reorganisation of the department of agriculture for the Madras presidency. He opted for "proper organisation of the existing staff of officers now engaged in work connected more or less directly with agricultural improvement, the government have the means of constituting a really powerful department and one which, if well supported by funds, might well become a power for good. The staff consisted of two Agricultural Officers, one chemist who has also passed through an agricultural training, one botanist, and one veterinary surgeon. Working together as harmonious parts of one organisation, these officers could obtain better results than can ever be hoped for under the present arrangement."

Since 1890 progress towards a proper science policy of agriculture rapidly advanced. It was also realised by the Secretary of State for India that without technical advice no advance was possible. On the advice of J.A.Voelcker, Government of India agreed to appoint a chemist and an

34 Proc. of Agricultural Conference held in the Revenue and Agriculture Department, Simla, 1890, p. 2.
35 Deepak Kumar, Science and Raj, Delhi, Oxford University Press, 1995, p. 96.
assistant chemist, accordingly in 1892 Dr. Leather and Collins were appointed for the posts respectively. With their appointment, scientific policy of agriculture entered a new phase. By the turn of the nineteenth century, government expressed its willingness to favour to the building of Imperial Agricultural Department proper with the Inspector General of Agriculture to be the head of the Imperial staff and principal scientific advisor of the provincial staff. His duties were specified as the "systematic study of Indian agriculture, its conditions and remediable defects; the supervision and development of provincial agricultural department, the establishment of improved agricultural methods and new staples and generally the direction of the agricultural policy of the government. An imperial mycologist and entomologist were also added to the department in 1901-03. For lack of laboratory establishment, Inspector General of Agriculture, Mollison was placed in Nagpur experimental farm and agricultural chemist and botanist were placed in Dehradun.

However a breakthrough came in 1902 when Sly Commission came with recommendation, which suggested for the establishment of an Imperial Institute of Agriculture Institute. Lord Curzon during his administration 1898-1905 himself was so committed to the programme of agricultural improvement that the 'past lukewarm efforts of agricultural development would now turn into a full-fledged assault.' His plans included scientific experts at both the central and provincial levels, reorganisation of the provincial departments an agricultural research centre and college at Pusa and at least one another in every province. The Secretary of State for India was informed that a "Government which owns the largest estate land in the world should do for more than we are now doing for the improvement of Indian agriculture. In 1904 Lord Curzon on receiving of a grant of thirty thousand pounds from one American philanthropist Sir Henry Phipps directed that money to construct Imperial Institute for agricultural education and research purpose. It was constructed under the direction of Inspector General of Agriculture, Mollison, on a formerly disused government estate of 1358 acres in Darbanga district in
Behar. The object was "to provide such facilities for scientific training as will eventually enable the country to depend on its own resources for the recruitment of its agricultural staff in the higher branches of administration." Imperial Agricultural Institute's main aim was to train Indians for government services and to promote research on specific agricultural problems of all India significance. With the establishment of Imperial Agricultural Research Institute three more officers were appointed in agriculture, bacteriology and economic botany that formed an Imperial cadre, which provided all the basic agricultural research. Imperial Agricultural Research Institute expanded the research departments for botany, chemistry, bacteriology, entomology and mycology, experimental farms for agriculture and cattle breeding and agricultural college.

Another major administrative reform came from the Imperial government in 1905 when a scheme was approved for reconstituting a separate provincial Agricultural Departments and for the same purpose allotted permanent grant of a sum of twenty-four lakhs of rupees. This measure of agricultural policy provided two divisions- Imperial and Provincial in agricultural organisation. According to the newly proposed scheme, each important province was to have an agricultural college and research institute of its own, and experimental farms for each tract. As science expanded, organisation of research work was based on the separate science and that the problems of Indian agriculture were to be approached by a number of specialists working independently at a Research Institute. With this large expansion of the provincial department, it was proposed to separate the land record branch and to appoint a separate Director of Agriculture, from a member of civil service.

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36 Albert Howard and Gabrielle L. C. Howard, Development of Indian Agriculture, Bombay, Humphry Milford, 1929, p. 20.
Reorganisation of Madras Agricultural Department

The rapid expansion of the provincial Department of Agriculture was followed by a change in the administration. The work on land records that includes the collection and examination of annual statistics of the important agricultural and economic facts of each village, district and province was separated from agriculture and two departments were created each under a civilian director. The Government of India made permanent financial grants to each province and initiated steps for appointing expert scientific staff. The Agriculture Department was made independent under the sole charge of a civilian officer.

Each province had its own agricultural college on the lines of Pusa Research Institute. The agricultural college established at Coimbatore functioned as a leading institute for Madras Presidency. Facilities were offered for developing improved varieties of the important provincial crops. Agricultural experts were appointed to various specialised branches. Economic botanists, agricultural chemists and mycologists worked on improvement seeds experiment with various manure and irrigation possibilities and teaching at the college. The initial groups of experts came from the west, the educational facilities expected to enable India supply its own staff.

While the more exacting research was pursued at Coimbatore, specific fields research stations were located different areas aiming to establish an experimental farm in each respective ecological area. These experimental farms would specialise in research in the cultivation techniques of the areas and the problems of local cropping. The farms were demonstrated the results of research and distributed improved varieties.

37 Revenue and Agriculture Department, Agriculture, November 1905, proc. no. 12-44, NAI. And also see Howard, Albert, The Development of Indian Agriculture, Bombay, Humphry Milford, 1929, p. 20.
38 Revenue and Agriculture Department, Agriculture, Nov. 1905, Proc. no. 12-44, NAI
The Madras Agriculture department had faced a number of technical difficulties from the very beginning such as poor staffing, lack of financial support and other bureaucratic difficulties. The lack of staff hampered the Department’s ability to reach village areas and retorted the advantage of scientific enquiry. Although the reorganisation of 1904-05 established a more complete administrative framework than had existed in the nineteenth century; it was never fully staffed. By 1915 it was apparent and a reordering was necessary. While the revisions in 1904 and 1915 slowly increased the Departments capacity to penetrate the Districts of the Presidency, the sanctioned staff strength was never completely filled. The administrative framework of the Department itself was inadequate. The Director who was to oversee the activities of the department was also to look after activities of the Board of Revenue, the Court of Wards and the Legislative Council. Deputy Directors who were in charge of a circle also controlled by him. In addition these responsibilities, the Director was to oversee the operations of the Coimbatore Agricultural College and Research Institute. The Deputy Directors and the scientific staff at Coimbatore were all members of the Imperial Agricultural Service appointed by the Secretary of State for India. 40 The Imperial Government to make good losses occurring at Pusa or other provinces used their right of transfer liberally. In one year the Department in Madras had four different Directors. 41 In the same year both Deputy Directors were recruited to special assignment elsewhere in the country and the Botanist was shifted to imperial sugarcane work. 42 The net result was administrative confusion and a slowdown in all phases of work.

Each circle into which the Presidency was divided had a network of experimental stations. 43 The Deputy Directors and these assistants were to

41 Operations of the Agriculture Department, Madras, 1919-20, p. 43.
42 K. Vijyaraghavan, Agricultural Administration in India: A Comparative Study, New Delhi, Concept publishing Company, 1994, p. 84.
43 Operations of the Agricultural Department, Madras, 1919-1920, p. 45.
oversee the experiments conducted on these farms and the extension work. The officers of the provincial agricultural service handled the farms. Although the original plan proposed was to built an experimental farm in every representative tract and demonstration farm in every revenue unit, their number at the outbreak of World War I there were only ten agricultural experimental stations, each with a maximum of three related demonstration farms and at the end of this study (1928) they raised into 26 stations. Yet vast areas of the presidency remained untouched by the Department. The Districts of Ramnad, Salem, North Arcot, Ananthpur, Cuddpah, Nellore and Ganjam had never been visited by any agricultural officer. Seven other districts had only one extension worker. Although a proposal submitted requesting to rise the staff was accepted in reorganisation of the agriculture department effected in 1915, but the increase in staff was halted due to the world war needs and financial requirements. By the end of the First World War the expert staffs of the department was further reduced as eight of its expert staff was transferred to Pusa and other parts of places.44

Even in 1924 the provincial staff strength amounted to no more than 169 of whom 83 were village demonstrators.45 The paucity of staff was the result of the Government conception of its role in agricultural department rather than a lack of qualified applicants. By 1919 almost the entire provincial staff was manned by Indian, while only 20 percent of the Imperial staff were Indians.46 It may be noted that despite the public service commission recommended as early as 1915 that staff of each of the service including agriculture should be filled with at least half by Indians, but Government took the position that European experts only could fill the scientific staff.47

However significant changes were introduced after agriculture was transferred to the provincial government responsibility. As it became more

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44 Madras Mail, April 11, 1922, P. 10.
47 Operation of the Agriculture Department, Madras, 1915-16.
expensive to employ European experts, and as Indian discontent grew louder, the constitution of the Imperial service in Madras gradually changed. The object of the Government was that an expert staff, aided by Indian extension and research workers were to develop and extend the scientific side of agricultural improvements. The Real extension of improvement was to be left, as it had been in England, to private associations and market forces. Government role was simply to guide and initiate. These principles were guided works of research, education and demonstration.

The manner in which the Department pursued the course of development indicated government reluctance to interfere too deeply in the advancement of agricultural progress. The role was neither one of restricted enablement or coercion nor even encouragement. The Department presented its findings to landlord and substantial cultivators but offered few incentives to encourage their adoption. The commitment of agricultural development measured in terms of funding and staff was also minimal. At no time did the Government of Madras spend as much as one percent of its total budget on agriculture. Also, at the height of its staffing the Department numbered no more than 180, of whom only half were involved in actual village level demonstration work. This amounted to one departmental staff member for every 45,000 rural families. However, the stage appeared to be set for the transformation of traditional agriculture into scientific agriculture. Mackenna summed up the progress made by the government by saying that the ‘foundation for modern agriculture had been laid. The Department of Agriculture’s effectiveness was hampered largely by policy guidelines rooted in laissez-faire principles. These principles dictated that the cultivator should assume the risk of improvements. These policies suggests that only a small portion of wealthy cultivators could benefit from activities of the department and hence, that the experiments were never able to address the needs of the smaller cultivators.