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FORMULATION OF AGRICULTURAL POLICY IN
IMPERIAL INDIA 1872-1929: A CASE OF THE
MADRAS PRESIDENCY.

UNIVERSITY OF HAWAI'I, PH.D., 1979

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FORMULATION OF AGRICULTURAL POLICY
IN IMPERIAL INDIA 1872 - 1929:
A CASE OF THE MADRAS PRESIDENCY

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN HISTORY
MAY 1979

By
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I profited greatly from discussions with scholars, too numerous to mention, who helped in many ways during the research for this study. My greatest debt is to Dr. Burton Stein and to my husband, Bruce L. Robert, Jr., both of whom contributed extensive advice, criticism and time during the final writing stages of this work. My task benefited greatly from their patient assistance.
ABSTRACT

This dissertation is an examination of the evolution and execution of British policies of agricultural improvement in Imperial India particularly in relation to the institution of the Central and Provincial Departments of Agriculture. The objective of this study is to elucidate upon the structural constraints of colonial rule which served to undermine the success of government activities in promoting agricultural improvement. The Madras Presidency was used as a case in point.

The British Government in India, as its administration officials viewed it, was supported by two foundations, physical power and just administration. India also played a larger role in the sphere of empire as the cornerstone of the Eastern Empire. These two foundations of colonial rule consumed virtually all the administrative energy and revenue of the Government of India and inhibited the assumption and fulfillment of wider responsibilities of governance.

In the last quarter of the nineteenth century the recurrence of famine forced the Government of India to consider the assumption of much wider responsibilities. High famine mortality and extreme economic dislocation prompted a questioning of strict adherence to the principles of \textit{laissez-faire}. Government had difficulty coping with the political and economic repercussions of famine which threatened the stability of her rule. The programs devised by
nineteenth century administrators to ameliorate the effects of famine included agricultural improvement. Significantly, Government programs were aimed more at increasing revenue than improving agriculture.

By the turn of the century the Government of India found herself confronted by a larger problem. Government success in providing grain to famine areas served to demonstrate that famine was caused by the dire poverty of a large section of the agricultural population who could not buy food. The political repercussions of this realization, while they caused Curzon's Government to adopt a more interventionist posture, did not overcome the basic constraints of colonial rule.

Although the Government of India spoke in terms of improvement, Government aid and guidance to development, she was unable to provide more than the bare framework of a program. To seek more remained contradictory to the governing philosophy of liberalism. Moreover, the Department of Agriculture was one of many "development" departments, all of which competed for a portion of a very small financial pie. Military and civil administrative costs consumed an average of eighty percent of the budget, leaving twenty percent to be divided among the various departments concerned with economic development and welfare of the population. In the Madras Presidency agriculture never received as much as one percent of the budget.

In addition to limited funding and the staffing problems
this created, the Madras Department of Agriculture's effectiveness was hampered by program guidelines rooted in laissez-faire principles. These principles dictated that the cultivator assumed the risk and paid a high price to adopt improvements. These policies suggest that only a small portion of wealthy cultivators could benefit from the activities of the Department and hence, that the Department was never able to address the needs of the smaller cultivators. As a result the economic impact of the Department, measured in terms of extension of improvements and increased yield, was minimal.

The situation did not change after 1919 when the responsibility for agriculture was transferred to elected Indian officials under the provisions of the Montagu-Chelmsford Reforms. The interests of the Justice Party in Madras were political rather than economic. As a result the Department of Agriculture, which did not lend itself to political manipulation, was largely ignored and left to function in the manner which it always had.
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I. INTRODUCTION

During the last quarter of the nineteenth century the British established a vast centralized bureaucracy in India. This bureaucracy absorbed approximately one-third the budget and employed about 2,000 superior British administrators and thousands of Indian subordinate officials. The main work of this vast machinery was to provide a rational and efficient legal-judicial system, to administer the revenue agencies and to provide various public services. The whole effect of this work was to lead to a modern, strong Government.

An Imperial Department of Agriculture was part of this administrative structure from 1872 and like other departments, was justified on the basis of increasing the revenue of the country as well as fulfilling an obligation of the Government of India for providing increased welfare to the Indian subjects of British rule. This Department of Agriculture was re-organized in 1882 and once again in 1905. These re-organizations were thought to strengthen, rationalize and make efficient the administrative machinery which was to promote the development of agriculture. Yet, by 1929, at the onset of the Great Depression, it was conceded that Departmental efforts had barely scratched the surface of the immense agrarian problem. After close to fifty years of Governmental activity and effort to promote agricultural improvement whether measured in terms of
increased revenue or welfare the efforts of the Government had failed.

The purpose of this study is to present reasons for the failure of Government attempts to improve Indian agriculture. The fundamental reason for failure was prefigured in the structure of colonial rule which inhibited and often negated the functioning of Departmental programs. The argument of this study is that the failure had little to do with inherent technical problems of Indian agriculture or the assumed conservatism of the cultivator. Neither was the failure due to want of effort on the part of individual members of the Department. The failure was the result of the administrative machinery of colonial rule which was geared toward the maintenance of law and order and military power rather than to the economic development of India. A structure in which all but certain forms of economic development were neglected and often inhibited.

Although agriculture was the primary source of livelihood and revenue throughout the British rule there are few studies on Government efforts to promote welfare through agricultural development in India under the Raj. Cotton development is an informing exception, and that development has provided the basis for the recent studies of Peter Harnetty and Arthur Silver. 2 Both of these authors are concerned, however, with the strength of British textile interests in convincing the Government of India to ignore its principles of laissez-faire for the benefit of Manchester
and Lancashire cotton industries. While these studies clarify much of the mid-nineteenth century imperialism of free trade they merely emphasize the generalized failure of the Raj to promote and encourage economic development intended to strengthen the productive and welfare capacity of Indian agriculture.

Similarly, there is no literature which deals with India's economic development in the context of the administrative framework set by the Raj although there is a copious literature dealing with revenue and land tenure. Since agriculture was (and is) India's paramount industry and employer, it is important to examine the role of Government in its development. Such an examination informs us of the way in which the British perceived themselves in relation to the Indian economy and particularly their commitment to the assumption of an active role in changing that economy. Further, it allows us to determine the policies and forces which served to rationalize and motivate the limited Government involvement in agriculture. Finally, such a study will allow us to discern the forces which undermined the success of that involvement.

It should be noted at the outset that the failure of the Departmental activities is measured against the criteria set forth by the Government of India, not by any objective measures provided by hindsight. As the Royal Commission on Agriculture (1929) judged Departmental efforts to have failed, this study seeks only to elucidate upon that
assessment.

**Scope and Focus of the Study**

This study spans the years 1872-1929, a period in which both British administrative officials and Indian politicians grappled with the problem of agricultural development in the framework of the colonial administrative machine. Crises define the period under study. It commences with the efforts of the Government to deal with the basic agrarian problems revealed by famines from the mid-nineteenth century to 1900. The study closes in 1929 on the eve of the World Depression which introduced a new set of economic issues. These latter, although they relate to agriculture, departed very substantially from the basic questions of Governmental policies of improvement.

While the study concerns the policies adopted by the Government of India and the constraints imposed by the entire colonial structure, Madras Presidency will be used as a case in point. Madras was considered by the British to be the most backward of the Presidencies: Lord Willingdon, Governor of Madras, 1919-1924, called it the "Cinderella" Province and decried its lack of economic development. Economically, Madras was overwhelmingly based on agriculture. There were at the turn of the century, few industries to speak of and the city of Madras could not rival Bombay or Calcutta as a commercial center. Moreover, a larger portion of her land area was subject to repeated famine and drought
which retarded any economic advance and contributed to the general poverty of her agricultural sector.

Chapter II consists of a discussion of those principles of political economy which supported the prevailing philosophy of government in nineteenth century India. This discussion necessarily concerns itself with the development of late nineteenth century thought on Governmental responsibility for the welfare of India's agricultural population, particularly in light of the repeated occurrence of famine in the subcontinent. Accordingly, this chapter will highlight the constraints of the Governmental structure on development policy both in the nineteenth century and as they relate to the direction of future policy.

Chapter III deals with an important re-definition of the agrarian problem again as it relates to the occurrence of famine. The British determined that while famine remained the "spectre at the feast," the real problem was that of rural poverty. Poverty, the Government reasoned, was the result of the improvidence of cultivators, and the low quality and productivity of agriculture. This chapter will also explore the political atmosphere which served to force the Government to adopt a more interventionist role in agricultural improvement. This discussion will also seek to demonstrate the change in British views on Governmental responsibility to the welfare of the population, and how this alteration was reflected in the reforms of Curzon's viceroyalty. Opinion in late Victorian and Edwardian England
was shifting to allow Government to assume greater intervention in the alleviation of the condition of the poor. It will be noted that although the language of intervention is new and the motivation for involvement appears to be new, the structural constraints have not disappeared.

Chapter IV deals with the structure and functions of the Department of Agriculture in Madras and will demonstrate how the Department was inhibited by the structural demands of colonial rule. This discussion deals with the elaboration of the bureaucratic structure as a means of solving problems of agricultural development.

Chapter V examines and explains the minimal impact of the Department of Agriculture in Madras in terms of the development of agriculture and the welfare of the population. This is done by a brief analysis of cropping and yield patterns and the distribution of the economic benefits, in order to emphasize the limited impact of the Department as a result of its Imperial constraints.

Chapter VI assesses the progress of the Department of Agriculture under the Indian Ministries in the 1920's. As the period was one of continuity of policy, the chapter will necessarily seek to explain the continuity in terms of the goals of the Indian Ministers. It will be seen that the continuity of policy was in large measure the result of the political aspirations of the elected officials.

The argument of this study is that the failure of Government efforts to improve Indian agriculture resulted
from the environment in which agricultural policy was formulated in relation to other ends of the Government of India. The very structure of colonial rule which demanded primary attention to law and order and the maintenance of military power insured that matters of welfare and development received inconsistent and slight attention.
NOTES


II. POLITICAL ECONOMY AND GOVERNMENTAL RESPONSIBILITY

Classical political economy was the guiding philosophy of British rule in India during the nineteenth and early twentieth centuries. The responsibilities prescribed by the proponents of political economy are important for the present study because they serve to both rationalize and to explain the British emphasis on military power and law and order which worked to forestall substantial Government involvement in and thus the economic growth of Indian agriculture. Adam Smith, the father of classical political economy, clearly defined the ideal duties and limitations of Government and suggested an 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 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.¹

Strictly speaking these "duties" enjoined a course of action which demanded the Government attention and expenditure be concentrated on the maintenance of a large military force and a legal and administrative system geared to the enforcement of internal peace. In 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."²

Although Adam Smith provides the best definition of the ideal "duties and limitations" of Government it is not until the last half of the nineteenth century that this definition becomes applicable to British administration in India. The application of these "duties" filtered to India through the doctrines of various Utilitarian and Liberal administrators of India. In turn, their doctrines were tempered by Indian conditions.

The most decisive impact upon the Indian administrative form came from the Utilitarian philosophy as propounded by James Mill. Mill's purpose of centralized administration was to provide a framework of law which would protect the individual and his property, thereby releasing individual effort to take advantage of the free rein given capital and labor.³ Government should refrain from intervening in the economic or social process beyond the provision and maintenance of law and order. If the State provided this protection with certainty, a veritable economic and social revolution would take place. While the simplicity of this administrative model died with James Mill, the fundamental basis of the protection of person and property, through an exact administration of justice, was laid.

Mill's simplicity was confounded by later administrators who sought to attach to Government wider functions and responsibilities. Dalhousie, Governor-General 1848-1856,
introduced Governmental responsibility for public works. While Mill reasoned that a system of justice and protection would provide the basis for India's evolution to a modern political and economic state, Dalhousie sought to encourage this development by providing modern communication, roads, railways, telegraphs and postal works. 4

Superceding these currents, good law and a system of public works, was the protection of the State by military force. The East India Company's army and Royal troops had helped to extend the area of India under the British and served to protect it from outside invasion. By 1885 the Indian army was approximately twice the size of the British army in England and was frequently employed outside India. 5

It was in the post-Mutiny years that the three components of Smith's ideal duties and limitations of Government merge into the administrative rhetoric of India. The transference of India from Company to Crown was accompanied by administrative and policy changes which were intended to rationalize the governing process and strengthen the British position. Although the necessity of military force and the provision of law and order were the paramount responsibilities of the State, John Stuart Mill and others raised the question of whether there were further responsibilities in the latter half of the nineteenth century. "It is not admissible," John Stuart Mill wrote, "that the protection of persons and that of property are the sole purposes of Government." 6 Rather, the admitted functions of
government embrace a much wider field than can easily be included with the ring-fence of any restrictive 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, save the simple and vague one, that it should never be admitted but when the case of expediency is strong.7

It is doubtful that Smith would have disagreed with him for Mill did not question the primacy of the responsibilities of protection and law and order, he merely added to them and allowed for slightly greater freedom within them.

The application of these tenets of political economy became important in the latter half of the nineteenth century. This was the period in which the Government of India, under the direction of men influenced by the Utilitarian philosophy of James Mill and the more Liberal philosophy of his son, John Stuart Mill, set up the administrative machine which was to rule India until 1947. It was the fulfillment of the first two obligations, as defined by Smith, and the strict adherence to nonintervention except "when the case of expediency is strong" which was to undermine the fulfillment of the third "duty", as defined by Smith and modified by Mill.

The third "duty" of government as propounded by Adam Smith was the erection of public works and institutions. These were not just any works or institutions, but only those of such a nature that the profit could never repay the expense to any individual
or small group of individuals and which it therefore cannot be expected that any individual or small number of individuals should erect or maintain.  

These were public works to facilitate the commerce of the nation. The institutions Smith would allow Government to establish and maintain were chiefly those for the education of the people. An important adjunct to these allowances was that they must be managed to furnish "revenue sufficient for defraying their own expense." Thus Smith allowed only for the State to initiate works and institutions which must then pay their own way.

John Stuart Mill was to modify this position slightly. He reasoned that "there is scarcely anything really important to the general interest which it may not be desirable, or even necessary that the Government should not take upon itself, not because private individuals cannot effectively perform it, but, because they will not." For a population incapacitated either by poverty or intelligence "a good government will give all its aid in such shape as to encourage and nurture any rudiments it may find of a spirit of individual exertion...its pecuniary means will be applied when practicable, in aid of private efforts rather than in supercession of them." This was the case particularly in which the population had been "conquered and...retained in subjection." Hence, in a country such as India, Mill would allow Government to spend its revenue resources to accomplish almost anything necessary to the general interest, which was
not provided by private individuals and which was within
the perceived capacity of the Government to fund.

Government's first two responsibilities were doggedly
adhered to in India. The edifice of British rule was girded
by military force and what purported to be a firm unequivocal
system of justice. James Fitzjames Stephen, Legal Member
of the Viceroy's Council in the 1870's, gave the most
elloquent expression of this position.

The British power in India is like a bridge
over which an enormous multitude of human
beings are passing...if it should fall,
woe to those who guard it, woe to those
who are on it, woe to those who would
lose with it all hopes of access to a
better land. Strike away either of its
piers and it will fall, and what are
they? One of its piers is military
power; the other is justice by which I
mean a firm and constant determination
on the part of the English to promote
impartially and by all lawful means,
what they (the English) regard as the
lasting good of the natives of India. 12

The purpose of this administrative and military machine was
dictated by the position which India occupied in the broad
sphere of Empire. As Anil Seal has said, "India became the
second centre for the extension of British power and
influence in the world." 13 Insofar as this was true, "the
Raj was being worked in the service of interests far larger
than India itself, since they bore upon the British position
in the world." 14 Indeed the military of which Stephen spoke,
served to extend the boundaries of empire to Burma, Malaya
and East Africa and to protect the subcontinent from invasion.
Invasion from Russia remained a lively concern throughout
the last quarter of the nineteenth century. Curzon, who was to be India's Viceroy, 1898-1905, wrote in 1889,

> Whatever be Russia's designs upon India, I hold that the first duty of English Statesmen is to render any hostile intentions futile and to see that our own position is secure, and our frontier impregnable, and so to guard what is without doubt, the noblest trophy of British genius, and the most splendid appanage of the Imperial Crown.\(^{15}\)

That this defense was in fact the first priority of the English in India was amply borne out by the position the military occupied in the expenditure of the Government of India from the middle of the nineteenth century. Between 1890 and 1920 the military consumed approximately 40 percent of the budget. (Table IIA)

Neither did the Government of India neglect the second "duty" prescribed by political economy, the maintenance of internal justice and order. The lessons of the Mutiny had rendered this responsibility all the more necessary. The Mutiny left the British "suspicious and alert" now convinced that theirs was an unwanted presence.\(^{16}\) The civilizing mission was to be maintained through physical and military power. Again Stephen enunciated the position most clearly,

> The English in India are the representatives of a belligerent civilisation. The phrase is epigrammatic, but it is strictly true, The English in India are the representatives of peace compelled by force...the belligerent civilisation of which I spoke consists... in compelling by force all sorts and conditions of men in British India to tolerate each other...No country in the world is more orderly more quiet, or more peaceful than British India as it is; but,
## TABLE II A

**IMPERIAL EXPENDITURE, 1891/92-1920/21**

**AS PERCENTAGE OF TOTAL NET EXPENDITURE**

<table>
<thead>
<tr>
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<td>100</td>
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<td>100</td>
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</table>

Source: Vera Anstey. *The Economic Development of India* (London: Longmans, Green and Co., 1952) p. 631. The percentage figures have been calculated from her absolute figures.
if the vigour of the Government should ever be relaxed if it should lose its essential unity of purpose, and fall into hands either weak or unfaithful, chaos would come again like a flood.\footnote{17}

Internal peace was maintained at great cost. Civil administration, which included Courts of Justice, police and general administration, was nearly as expensive as the military. Together military and civil administrative costs consumed up to 80 percent of the total Government expenditure between 1890 and 1920. (Table IIA)

There was no hesitancy on the part of the Government of India to fulfill the two primary "duties" of Government as dictated by the adherents to political economy. The expansion of Russian control in Central Asia alone gave the Government justification for increasing the military budget. John Strachey, considered by one recent historian to be one of the most influential Civil Servants in India, said,

The proximity of a great European power has profoundly altered our position in India,...It has thrown into the minds of men uncertainties and hopes and fears regarding the future; it has seriously disturbed the finances...The result was a determination to increase both the European and Native Army.\footnote{18}

Internal peace was, along with external security, of paramount importance. But, as Strachey emphasized, these concerns "seriously...retarded the progress of works essential to the prosperity of the country."\footnote{19} Another influential official Richard Temple, Finance Member during the 1870's, put the matter in a similar way: "the demands
of a progressive age [public works and institutions] were constantly causing increase of expenditure...but, there remained the question as to how the needful money was to be found." Since the question of money was never satisfactorily answered, the extent to which Government would fulfill her third obligation was limited to the point of non-existence.

It was India's susceptibility to famine which caused the questioning of strict adherence to principles of political economy. Indian welfare and revenue were notoriously dependent upon the favorable regularity of the monsoon. When the rains failed, huge tracts of the country became liable to famine: a dearth of food and employment resulting in high mortality. From the British ascension of power in 1765 to 1900 the country experienced thirty-one large scale famines, nineteen of which occurred after the transfer of governance to the Crown. The economic disruption caused by these famines and the inability of the agricultural population to withstand them called into question the limited perceived responsibilities of Government and the efficacy of strict adherence to the "laws of political economy".

Famine in India and the "laws" of Political Economy

Famine was an occurrence with which the Government of India and the Presidencies dealt with difficulty. Initially the British sought to mitigate the effects of drought and the resultant dearth of food through interference in the
grain trade. In the famines of the late eighteenth and early nineteenth centuries the East India Company prohibited the export of grain from famine areas and imposed stiff penalties on merchants who hoarded or enhanced grain prices. 22 Responses to famine began to alter after 1810 as a result of the popularity of the philosophy of political economy. The doctrines of free trade and *laissez-faire* government policy framed the formulation of famine policy. Basic to these doctrines was the belief that man left alone to act in his self-interest would act in the best interest of society as a whole, with a minor compassionate departure of Poor Laws and wider famine relief.

Adam Smith had sought to directly apply his principles to famine. Scarcity, he claimed, may result from bad seasons or even war, but "a famine has never arisen from any other cause but the violence of Government attempting, by improper means, to remedy the inconveniencies of a dearth." Further, "the unlimited, unrestrained freedom of the corn trade, as it is the only effectual prevention of the miseries of a famine, so it is the best palliative of the inconveniencies of a dearth." 23 This meant that the laws of supply and demand would operate to fulfill the exigencies of a famine situation and that Government interference in the trade mechanism was unwarranted and indeed detrimental. The Government of India, during the famine decades of the late nineteenth century and certainly after 1810, adhering to these dictates of political economy,
adopted a noninterventionist policy in relation to the grain trade.

Although the Government adopted the policy of *laissez-faire* in regard to trade, it was difficult to ignore that a consequence of the failure of the rains was the decline of agricultural employment and, hence, a serious reduction in purchasing power for the large rural labor force. Government from the beginning of the nineteenth century took it upon itself to develop famine relief works for the employment of the able bodied who were willing to avail themselves of the opportunity. The helpless and the infirm were seen to be the responsibility of private charity. The massive mortality of the Orissa Famine of 1866—nearly one million dead—caused the Government to modify this view. Hence, during the famines of the Northwest Provinces and the Punjab, 1868-69, District Officers were advised that they would be held personally responsible for any preventable deaths in their areas. In addition, Government declared its intention to supplement private subscriptions to charity.

Notwithstanding the Government's willingness to assume broader responsibilities of charity, she continued to rely upon the "laws" of political economy to regulate the grain trade. According to the "laws" the grain trade would automatically supply areas of short supply because the prices would be higher. In 1839-40 John Thomas, a longtime Madras Civil Servant, challenged this view, denying that the Indian trader was in a position to supply the needs of the numbers
stricken in any given famine. He maintained that only 
Government had the machinery and energy to supply grain on 
the level demanded during the famine. This opinion was 
repeated by Dalyell, an investigator of the Madras Famine 
of 1866. Dalyell found that Indian traders not only lacked 
the means to supply the stricken areas but the cost of 
transportation and the high risk involved offset the gains 
of high prices. For many traders the best option was not to 
sell if prices became too high; selling at this "advantageous" 
level the trader would risk retaliation by townsmen or 
villagers who might loot his shop. Dalyell went on to 
question the actions of a "Christian Government" which would 
adhere to the "so-called rules of political economy" and 
allow its subjects to die in phenomenal numbers. The 
mortality rates during the mid-nineteenth century famines 
and general mismanagement by Government began to undermine 
belief in the doctrines of political economy as applied to 
famine.

Not until the famine of 1876-78 did the discrepancies 
of the situation appear in sharp relief. At the start of 
the famine the Government was of the opinion that grain 
shortage was not so much a problem as was the lack of employ-
ment. Relief works providing cash wages were initiated 
early to meet this contingency by providing increased pur-
chasing power. However drought continued and prices of grain 
soared. Under these conditions of increased prices merchants 
and rich farmers, for reasons already mentioned, refused to
release their grain for sale, thereby compounding the situation. Although the Collectors in Madras reported stocks of grain, there were none on the market. The cash wages paid on relief works were meaningless so long as there was no grain for sale. In October 1876 the situation became dire and Collectors asked permission to pay for work on the relief projects in grain rather than cash. The Madras Board of Revenue refused. Finally, at the end of the month the Government of Madras realized it could no longer rely on "the ordinary processes of supply and demand" and sanctioned the clandestine purchase of grain through private firms. In January the Government of India severely criticised this procedure and prohibited further interference in the trade. Only after grain riots loosened the shopkeepers from their hoarded grain did prices fall. By this time the situation had become so bad that the army was called in to protect grain transport from marauders. At the end of the famine in 1878 nearly 30 percent of the population of the Ceded Districts in Madras had perished.

Disaster on this scale could not easily be accepted by either the British public or Parliament. The famine was reputed to be one of the worst to have ever hit India. The Times alleged that the death toll in Southern India had exceeded six millions, other public journals carried yet more spectacular stories. The India Office responded with an All-India Famine Commission. As unofficial reports came in from India the Secretary of State was subjected
repeatedly to Parliamentary inquiry regarding the extent of the famine, the mortality and the Government handling of it. To all queries, the Secretary of State counseled patience and urged them to wait for the Famine Report. The built up anticipation insured that the Famine Commissioner's Report would not be overlooked.

The recommendations of the Famine Commissioners were extensive. After lengthy debate, they advocated interference with private trade when "exceptional circumstances" (famine) required it. However, they hoped to avoid these "exceptional circumstances" by a three pronged program which, while it would not guarantee the monsoon, would alleviate the distress of its failure. The program consisted in the devising of famine codes, the extension of railways, irrigation systems, roads and the improvement of Indian Agriculture.

The principles of the Famine Codes were to enable Government to forecast scarcity and to initiate a system of relief. Separate codes were to be developed for each drought-prone area and were to be based on the intensive collection of agricultural and meteorological statistics as well as information regarding the health and economic condition of the populace. The code would enable Government to gauge the approach of famine and its severity in order to tailor their relief measures accordingly. These measures were similar to those of earlier famines; public work was to be provided at State cost, gratuitous relief in villages
and poor houses would be provided for those unable to work.\textsuperscript{37}

Improved and extended communications, transport, and irrigation systems were also called for by the Commission. Transport and communication systems would lead to improved internal trade during normal times and greatly enhance distribution in times of regional scarcity.\textsuperscript{38} Development of irrigation works were also stressed. Two types of irrigation works were classified by the Famine Commissioners: productive and protective. Productive works were those which would increase acreage and output of existing cultivation areas. Charges for water would eventually pay the cost of these works. Protective works were those which would be used in dry-land cropping areas in times of drought. As they could not be expected to yield regular revenues, the Commission advised that income from the remunerative works should be used to offset the costs of the unremunerative protective schemes.\textsuperscript{39}

The Commissioners also called for Government intervention in the improvement of agriculture. They argued that past attempts to improve agriculture had been unsystematic, based on ignorance of Indian conditions; thus, they directed an agency be set up to advise the Government on all matters relating to agriculture, and to direct efforts to improve it.\textsuperscript{40} In 1881 the Secretary of State for India declared that the recommendations of the Famine Commission meant "a policy of maintaining agricultural operations at the highest attainable standard of efficiency...[and] implies
the full sustenance of agricultural labor and the complete provision of agricultural requirements.\textsuperscript{41} Although production was important, improved mechanisms of distribution held the key to solving persistent problems of scarcity.

The Government of India fulfilled its obligation to provide some public works with relative ease. A network of railway lines begun in the 1850's yearly increased its web over the subcontinent. Irrigation works and canals, although not so popular as railways, were also undertaken by the Government. The reasons are not so difficult to discern. Both railways and irrigation systems were remunerative. Railways gave a guaranteed return of 5-8 percent and were sanctioned on the strength of their capacity to yield revenue. Irrigation works operated in much the same manner, although the return was not as high.\textsuperscript{43} Moreover, some railways had the added advantage of serving military purposes, such as those on the Northwest Frontier. Government initiatives in pursuing public works or institutions which were directly related to economic ends alone were less easy to promote.

The need to not only control but to prevent famine prompted John Strachey to argue that "the duties of the Government of India go far beyond those which we expect from a Government in countries like our own."\textsuperscript{44} But how far beyond and at what cost were questions answered with difficulty. The mid-Victorian Liberal view, still clinging to political economy conceptions, held that Government duties should include only military protection, the maintenance of
law and order and a few remunerative public works and institutions. Attempts of Government to interfere in the lives of the population beyond these restricted functions were unwarranted. The Famine Commissioners in their recommendations for "protective" irrigation works and the improvement of agriculture appeared to be going a step further than the Liberal philosophy. A more progressive view, held by men such as Strachey, and Vicerois Mayo (1869-72) and Ripon (1880-84) leaned to the opinion of Mill which bid Government to not only satisfy the first two "duties" but to substantially broaden the third.

Significantly, all shades of opinion held that in any case, whatever the Government activities in enhancing the welfare of Indian subjects, they should be remunerative. Hence there were two basic constraints to the fulfillment of Government's third responsibility. Government intervention was to be practicable and it was to be remunerative. These were the guide lines of Mill's vague rule of "expediency".

A Department of Agriculture

The Famine Commission recommendation to form a Department of Agriculture was not the first time the idea had been raised in India. After the Orissa Famine of 1866, the idea had been broached to John Lawrence (Viceroy 1864-69). Lawrence, believing the idea to be premature, rejected it immediately. It was next brought up in 1869 by Viceroy
Mayo who believed that "the time [had] come when we ought to start something like an agricultural department...agriculture on which every man here depends is almost entirely neglected by the Government." Mayo's intention to initiate such a department sprang from his belief that,

For generations to come the progress of India...must be directly dependent on her progress in agriculture...There is perhaps no country in the world in which the State has so immediate and direct an interest in such questions... Throughout the greater part of India, every measure for the improvement 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 beliefs were shared by many others, that of enhancing the revenue of the State.

The result 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. While Mayo wanted a 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 with revenue. Mayo used the title "Department of Agriculture and Revenue." Argyll, the Secretary of State for India, objected stating 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, Argyll added,

Of such 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 knowledge which he may possess of agricultural or commercial matters.49

The emphasis on revenue was clear when the Department was created in 1871; it became clearer in 1878 when the Department was abolished.

The post-Mutiny Government of India conceived itself in a perpetual financial crisis, but Lord Lytton's Government (1876-80) had special reason to feel itself under financial constraints. Pressured by the Secretary of State to exempt certain cotton goods from import duties the Government of India stood to lose 200,000.50 In addition to this loss, the disasterous Second Afghan War of 1878-80 left India's financial state in ruins.51 The Government of India responded to the financial strain with a program of retrenchment. A committee appointed by Lytton to review the budget of the Government of India advised that the Department of Revenue, Agriculture and Commerce be abolished because it "had not fulfilled the primary intention of the Government... namely the development of revenue."52 Thus the Department conceived with the idea of promoting agriculture was abolished because it did not generate revenue for the state.

To appreciate the full irony of the situation, it must
also be understood that the Department had done nothing for agriculture. A.O. Hume, the Secretary of the Department said,

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.53

For the most part, attempts to stimulate production of certain crops or to run experimental farms rested on Provincial finances. There were no Imperial grants to help local governments develop agriculture.54 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 the half-yearly migration of the Government of India between Calcutta and Simla."55

The Famine Commissioners of 1880 once again brought up the question of an agricultural department. In 1882, the weight of this Famine Commission and public opinion convinced the India Office and the Government of India to institute the Department of Revenue and Agriculture. The functions of the new Department were to be "agricultural inquiry, agricultural improvement, and famine relief."56 But, while the Famine Commissioners and the Government of India spoke in terms of agricultural improvement, the directives to the Department of Agriculture in the Presidencies revealed an
emphasis once again on revenue.

Agricultural inquiry, according to the Famine Commissioners, meant "the more complete and systematic ascertaining and rendering available of the statistics of vital agricultural and economic facts for every part of India." The Government of India defined it more narrowly as Survey and Settlement--key terms in revenue administration. In 1884 the picture was clear as the reorganization was finalized and the Department of Agriculture became part of the Department of Land Records and Agriculture. As the Director of Madras Agriculture caustically put it, the statistics collected were "to be of use in enabling the authorities to localize all cases in which the revenue was falling off." Statistics were also to provide the measures by which the Government could gauge the approach and severity of famine through an analysis of prices and rainfall patterns. The more complete accounting of production was also to enable Government to recognize areas of grain surplus which could be directed to areas of shortage. In giving direction to the Provincial organizations the Government of India laid particular stress on the development of the village record system. This improved system of local records would also reduce the cost of revenue settlement and provide a more secure basis for revenue assessment and collection.

As far as agricultural improvement was concerned, the new Departments were never provided adequate resources. The Government of India obviously considered it doubtful that
it could promote agricultural improvement and reasoned that to consider that the departments were established for that purpose would put undue burden on the State finances. Accordingly, special training in agriculture was no longer seen as necessary for members of the Department. Ironically, a degree in agriculture did not guarantee employment in the Department of Agriculture, even if that had been the person's post prior to his special training.

In Madras Presidency the duties of agricultural inquiry, as conducted in the Department of Agriculture, were land survey and settlement and district analysis. District analysis was to stress land settlement, assessments and revenue statistics, prices and occupations. For this purpose the Department staff were to aid District Collectors in their settlement operations by performing the tasks of resurvey to provide a complete systematic account of lands within the Presidency. As F.A. Nicholson, Collector of Coimbatore and advocate of agricultural improvement, put it, the inquiry "was to be one of rural economy and statistics for famine purposes only and not for agricultural investigation." Provincial Departments were in fact "debarred from expending public money on agricultural experiment save under careful restriction." Nicholson condemned the utility of the Department as it functioned.

Experiment was subsequently abandoned in favor of inquiry; inquiry 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 civilized country...[a
Department] conceived in error, born by
chance, bred by accident, developed in
starvation, guided by change, never had
any vigorous vitality.65

The Government of India and the Finance Commission of 1889
did not share the views of Nicholson. Agricultural inquiry
throughout the sub-continent had increased Government
revenues. Huge tracts of land, heretofore unsurveyed and
hence unassessed, were assessed and added to the rent
rolls.66 Through a more thorough procedure of revenue
assessments and a decrease in staff, the Government of India
achieved a net gain in revenue.67 The Department of Revenue
and Agriculture was, in the eyes of the Government, a
success.

While the Government of India congratulated itself on
the successful operation to increase land revenue, the
Indian monsoon continued its havoc. Widespread famine hit
India almost continuously from 1896-1900. The devastation
once again acted as a spur to provoke the questioning of
Governmental responsibility and programs.

**Famine and Government Responsibility**

In the wake of the 1896/97 famine, the Government
appointed a commission to examine the system of relief,
inquire into the degree of success attained in meeting
famine, record the lessons and recommend further measures.68
No sooner had the Commission submitted its Report than came
another famine of greater intensity. Predictably, another commission followed with virtually the same instructions for inquiry.

The two commissions wrote their reports closely to specifications. They detailed numbers of people receiving relief, numbers employed on relief works, costs of works and mortality of humans and live stock. By and large they were satisfied that the Famine Codes, with slight modifications, were adequate to the task. Yet, some aspects of the famines were disturbing.

A greater percentage of people applied for and received assistance in these famines than previously thought likely. The early Commission (1880) judged that a maximum of 15 percent of the population would ever be in need of relief, and that 7 to 8 percent was the average. In the 1899/1900 famine the average was 15 to 20 percent of the rural population which rose in some areas to 44 percent. The 1901 Commission attributed this increase to the rush for charity which took the administration off guard and resulted in a laxity of tests to prove necessity.69 The 1898 Commission ascribed somewhat different causes for the mounting distress of famine. It was argued that the extension of railways had worked to increase market integration which during famine tended to level up prices of food grains all over India.70 Combined with this was the disturbing finding that a large section of the population was living so precarious an existence, often with high indebtedness, that they were
incapable of paying famine inflated prices. 71

The Commissions also found that while Government had devised adequate schemes of predicting and dealing with the famines she had done little in the way of encouraging or enabling the cultivating classes to take care of themselves. Government had done nothing in drought-prone areas to develop drought-resistant strains of food and fodder crops. Also, few of the protective irrigation projects suggested by the Famine Commission of 1880 had been undertaken. This, in addition to the chronic indebtedness of the agricultural classes, made rapid recovery from the famine extremely difficult.

The findings of the Commissions brought quick action from the Government. As a result of their recommendations to extend irrigation to famine susceptible areas, an Irrigation Commission was appointed to report on the feasibility, need and costs of protective works. The allegation that the land tenure system was a cause of the cultivator's inability to withstand famine brought a study of the land revenue systems of India. 72 Also, the inability of the cultivators to buy available food, allegedly caused by their indebtedness, persuaded the Curzon administration to embrace Nicholson's scheme for rural cooperative banks. 73 Having appointed Commissions and Committees to investigate the major conclusions of the Famine Reports, all that remained was for Government to respond to the pleas of the 1901 Commission that "steady application to agricultural problems of expert
research is the crying necessity of the time."  

It was Curzon's viceregal administration, 1898-1905, which finally committed itself to a program of agricultural improvement. Curzon informed the Secretary of State for India that the past "lukewarm efforts" of agricultural development would now turn into a full fledged assault. His administration immediately granted, on a permanent basis, two million rupees to Provincial Governments to "enable them to take effective steps for the development of agricultural research, experiment, demonstration and instruction."  His plans included scientific experts at both the central and provincial levels, reorganization of the provincial departments, an agricultural research center and college at Pusa and at least one other in every province. The Secretary of State for India was informed that a "Government which owns the largest landed estate in the world should do far more than we are now doing for the improvement of Indian agriculture."  It seemed that the Government of India was entering a new era in agricultural improvement.

Summary

Throughout the latter half of the nineteenth century the doctrines of political economy held sway. Government attention to India focused on the fulfillment of what were seen to be the primary responsibilities of a sovereign: the maintenance of a military force and the internal
administration of law and order. Government's concern with all other aspects of rule was dominated by the necessity of generating revenue to maintain these two purposes. Although there was discussion and some conflict of opinion over Government's obligation to fulfill her responsibility for welfare, there was no attempt to question her primary "duties" or to lessen their force. John Stuart Mill's vague rule of "expediency"--where practicable and the constraint of remunerative works--also provided curbs to fulfillment of the perceived third responsibility of government.

Famine provided the impetus to enlarge Governmental responsibility for welfare. This was not unrelated to Government emphasis on her paramount responsibilities. Famine seriously disrupted the regular collection of revenue and often caused Government to remit revenue. Famine and the death and economic dislocation it caused drew attention to the moral justification for imperial rule and directed criticism to the Government of India. As such famine posed a complex political threat. There were hazards to British ministers from parliamentary opposition and popular elections. A discontented Indian population was a source of unrest and hence a vital threat to this the "most splendid appanage of the Imperial Crown." Sir Richard Temple, Finance Member and Foreign Secretary in the 1860's and 1870's, voiced the concern of the Government at large.

The empire is safe, provided that vigilance is unceasingly exercised. It is fraught with elements of trouble
and surrounded with dangers,...British rule has two supporting pillars—just administration and physical power—together with the flavouring influences [native troops] within the country, will keep the Government settled as on a rock. 77

Famine brought into question the "good government" provided by the British and caused the Government to maneuver to meet criticism of her policies.

It will be seen in the chapters which follow, dealing with the early twentieth century, that the Government of India will attempt to meet the criticisms of her rule through the avenue of agricultural improvement. She will tightly define the agrarian problem and bureaucratise it, but the agricultural program will never function in the economic realm. Neither agricultural production nor income will be substantially altered by the agricultural programs of the Government of India. The reason for this will be seen as the same as we have seen in the nineteenth century. The prime concerns of Government remained military and law and order. The preoccupation with these concerns precluded financial support of programs of economic development, particularly those which bore no promise of immediate financial return.
NOTES

1 Adam Smith. An Inquiry into the Nature and Causes of the Wealth of Nations 1776 (London: 1905) v. II, p. 242. It should be noted that Smith's "duties" are ideal. In 1818 a Parliamentary Committee saw Jeremy Bentham's proposals for a Ministry of Police as "a plan which would make every servant of every house a spy on the actions of his master, and all classes of society spies on each other." see A.P. Thompson The Making of the English Working Class. (New York: 1962) p. 82. The individual in eighteenth and early nineteenth century, as Thompson portrayed him "claimed few rights except tht of being left alone...A standing army was deeply distrusted." p. 81. Not until the mid-nineteenth century did Smith's ideal duties of Government come to be accepted.

2 Smith, p. 242.


5 Harries-Jenkins, Gwyn. The Army in Victorian Society (London: 1977) pp. 4-5. Also Strachey, John. India (London: 1888) pp. 54-60. It should be noted also that the size of India's army was often used as justification for not increasing the size of the army in Britain.


7 Ibid., p. 800.

8 Smith p. 242.

9 Ibid., p. 280.

10 Mill, p. 978.

11 Ibid., my emphasis.

12 Stephen as quoted in Stokes, p. 300.


14 Ibid.


18. Ibid., pp. 54-55. Stokes is the historian who regards Strachey so highly. p. 282.

19. Ibid., pp. 54-55.


24. F.C. 1880, Ibid., p. 11.

25. Ibid., pp. 15, 32.


27. Ibid., pp. 153-156.


29. Ibid., pp. 8-9.

30. Ibid., pp. 14-15, 16, 19. The Report emphasized that during a famine situation there was no time for the laws of supply and demand to work. The Report noted that the "laws of nature (greater than economics) will not stand to suit the grain trade. people will die." The private company with whom the Government of Madras sought to deal was Arbuthnot, a large import export firm in Madras.

31. Ibid., p. 22.


Lord Napier and Ettrick, former Governor of Madras, in an impassioned speech declared that Her Majesty's Government was bound to tell the truth and answer all questions since it had so recently "silenced the one voice of the People of India... The Native Press that one channel and agency by which we could occasionally be told the truth."

36 Ibid., pp. 36-7.
37 Ibid.
41 India. Revenue and Agriculture (Famine) Proceedings. No. 6 of December 1881. Secretary of State for India to the Governor General of India December 8, 1881. p. 32.
43 Great Britain. Parliamentary Papers. Report from the Select Committee on East India (Public Works) together with the proceedings of the Committee, Minutes of Evidence and Appendix. (London: 1878) Provided in this is an excellent discussion of the pros and cons of railways and irrigation works by the administrators of British India. See also Strachey, p. 134.
44 Strachey, p. 120.
45 F.C. 1880, v.I, pt.I contains a history of attempts to improve agriculture as well as attempts to set up an administrative agency.
48 India. Revenue. Collections to Despatches. No. 27 of 3 August 1871. Secretary of State for India to Governor General of India.
49 Ibid.
50 The Times (London: March 17, 1878)
51 Strachey, p. 55.


54 Ibid. pp. 59-63. Also see Peter Harnetty Imperialism and Free Trade: Lancashire and India in the mid-Nineteenth Century. (Vancouver: 1972) p. 96.


59 India. Department of Revenue and Agriculture. Note on the Principle measures of Administration under Consideration in the Revenue and Agriculture Department during the Vice-royalty of the Marquis of Ripon. (Calcutta: 1884) p. 9.

60 Ibid.

61 India. Home (Public) No. 12 of September 1883.


66 MDA. Report.

67 India. Agricultural Conference. p. 2. See also The Resolution of the Governor General in Council, printed as Appendix A of the Report.


India. Revenue and Agriculture. Proceedings. No. 16 of January 1905 and No. 44 of November 1905.

Ibid.

Temple. pp. 508-509.
III. RURAL POVERTY
AND A POLICY OF AGRICULTURAL RESPONSIBILITY

Ironically, the famines of the 1890's demonstrated the success of Government efforts in meeting the problems caused by drought. People died from plague or diseases related to malnutrition, but the Government was able to move food about the country. Although there were still lessons to be learned in the provision of relief and relief works, Government was satisfied that the problems would be overcome. The Secretary of State for India could happily report that history would judge British rule by "what we have been able to do to render India permanently more free, more immune from the periodic desolations by famine."1

All measures adopted after 1882 were seen as successful in combating famine. The main difficulty during famine had been food supply and the organization of relief. The extension of railways, which had doubled since 1880, was credited with the prevention of starvation for it made possible the transportation of grain to areas of need. The collection of agricultural statistics enabled Government to recognize the approach of famine and to organize relief more promptly and effectively.2 Too, Government, through its statistical knowledge, knew the conditions of food supply throughout India and was able to insure that areas of surplus could supply areas of need. The London Times reported: "even in the worst times India has practically no
need to resort to foreign countries for food."³

(Table III A) Indeed, India remained a net exporter of food grains throughout the 1890's.

Yet, behind the success lay a grimmer picture. More people applied for famine relief than ever before. The Famine Commissioners felt this due in part to the laxity of tests for need and the "rush for charity."⁴ Still they admitted of a large sector of the population who simply had no means to sustain themselves.⁵ The Secretary of State, in demonstrating the success of Government programs, also pointed to this other reality when he said that famine was now a problem of purchasing power, not food supply. W.S. Caine, a member of Parliament, quickly recognized in Hamilton's statement "an awful admission of the state of things to which the country had been reduced. Poverty, not scarcity is the root cause of Indian famines."⁶

It was India's poverty which fueled the controversy over India policy and formed the agricultural development policy of the Government. Indian critics of Government and their European supporters had long claimed India to be poor. The admission of poverty by the Government now necessitated the adoption of means to alleviate the problem. The means Government devised were, however, more a product of British economic philosophy and a reaction to the protests of the critics than a direct attack upon poverty itself.
TABLE III A

BALANCE OF TRADE AS A MEASURE OF IMPORTS AND EXPORTS OF FOOD GRAINS FOR BRITISH INDIA INCLUDING BURMA 1891/92 - 1898
in CWT

<table>
<thead>
<tr>
<th></th>
<th>1891/92</th>
<th>1893/94</th>
<th>1895/96</th>
<th>August 1897 - March 1898</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPORTS</td>
<td>55,030,718</td>
<td>39,241,201</td>
<td>39,042,895</td>
<td>30,891,275</td>
</tr>
<tr>
<td>IMPORTS</td>
<td>470,292</td>
<td>394,430</td>
<td>246,236</td>
<td>1,072,413</td>
</tr>
</tbody>
</table>

Net Export 54,560,426 38,846,771 38,796,659 29,818,862

In regard to the export of food grains it should be noted that these figures include exports from Burma which contributed the bulk of India's rice export. Also, during the period 1891/2 - 1900/01 India imported 8,140,000 cwt of rice (Annual average) from Burma, this figure does not appear in the above table. (See Cheng, p. 211).
The Political Climate

During the last quarter of the nineteenth century much of Indian criticism of Government revolved around the economic issues of the Imperial connection. The main tenet of their agitation was the theory of the "drain" and the poverty of India first propounded by Dadabhai Naoroji in 1878 and refined in the 1890's by Gopal Krishna Gokhale. These arguments became the basis of political criticisms leveled both in India and in England by the Indian National Congress. Although the bulk of the drain theory rested upon criticisms of the balance of trade and the Government expenditure, by the turn of the century Gokhale and R.C. Dutt had focused the question on the problem of rural poverty.

Naoroji had argued that Britain was draining India's productive capacity through excessive expenditure on European services and the annual debt. The theory, broadening to include all aspects of the economic connection, was then utilized to espouse the view that Indian revenues paid for projects which were at base in the political and economic interest of England rather than India. Britain's military necessities were increasingly paid for by India. The Indian army, used throughout the Empire, was kept on a war-time basis to suit Imperial policy. In addition to the military expenditure was the expenditure on European salaries and pensions. By 1900 the cost of the military and the civil administration was over 80 percent of total expenditure.
Opponents of Government policy maintained that Government's internal expenditure also increased the drain. Although improved communications were ostensibly in the interests of Indian economic development, in practice they too satisfied Imperial concerns. The railways, which saddled India with an annual debt of six million sterling, were built for military and export commerce. It was charged that many of the lines, designed to serve strategic needs, were unremunerative. Moreover, railways assisted British commercial interest by easing the importation of European manufactured goods and the export of India's raw materials. The Government, if it were truly interested in India's welfare, would do better to invest their revenues in irrigation, agriculture and the support of indigenous industry.

Until the opening of the Legislative Councils in 1892 most Indian critics of Government had only the annual Congress session during which to air their economic and political grievances. While the majority of resolutions dealt with questions of political representation, the 1888 debate on a resolution concerning representative institutions dealt directly with India's poverty. The resolution called for the extension of representative institutions as "one of the most important practical steps towards the amelioration of the condition of the people." A number of Congressmen found the resolution difficult to accept. The causes of poverty, they said, were not all political and no extension
of representative institutions would alter that fact. Imperfect agriculture, the neglect of industrial pursuits compounded by overpopulation all caused poverty. A representative from Calcutta felt they "should see whether it is any undue increase in the population which prevents their being supplied with food, or the scantiness of the production due to imperfect agriculture. We must look into all causes, we must realize the fact not of a single cause, but of a great many causes." One Congressman submitted that the destruction of indigenous industry was the fault of Indians for allowing it to happen and for not modernizing to compete with foreign manufacturers. The resolution passed only when it was made clear that representative institutions would enable Government to more fully realize the economic problems. In his 1902 Congress address Surendranath Bannerjea reiterated the position. Only with representative councils "will economy be ensured, the burden of taxation lightened, the material prosperity of the people stimulated and financial position...placed on a sound and satisfactory footing." The opening of the Legislative Councils in 1892 to Indian non-official participation in budget debates gave the Congressmen a platform from which to inform the Government of their specific economic concerns.

Participation in the budget debates carried no official power. Non-official members could not propose any resolutions or demand a vote of the Council. A competent member could, however, use the position as a platform from which
to publicize particular views to a larger audience. In large measure this was the way in which Gokhale functioned throughout his membership in the Imperial Legislative Council (1902-1913). Through his budget speeches, he refined and articulated the moderate nationalist economic viewpoint.

Gokhale's program of rural economic reform reflected his political philosophy. His approach was liberal and reformist. He did not seek to sever the Imperial connection, rather he sought a gradual reform of its worst aspects. In the days of *laissez faire* principles Gokhale sought increased Government intervention along the lines advocated by contemporary British Socialists. He saw the duty of Government as fostering and insuring the material prosperity of the country. It was Government's duty and responsibility to see that her subjects were fed and clothed, and it would be to her ultimate benefit to do so.

Does not the security of the country lie in the real prosperity of its teeming millions? Does not the permanence of the British rule mean that the Natives should live, should be able to pay taxes, should be able to save and should be strong and healthy to meet any other foreign power?¹³

He was in full support of Curzon's programs of rural cooperative societies, scientific agriculture and technical education.

After the continuous opposition which it has fallen my lot to offer to ...Government [he said] it is both a pleasure and a relief to me to find myself in a position to give my cordial and unequivocal support to the present [Credit Co-operatives] Bill...¹⁴
The adoption of a policy which aimed to maintain an active Department of Agriculture "indicate that the Government at last have made up their mind to recognize in a practical manner the supreme importance of scientific agriculture in this land." Gokhale, and the Congressmen whose views he reflected, believed in and supported the ideals of modern progress and economic development. They felt, as did Curzon, that India was destined to assume a place in the world as an industrial power and a partner to Britain.

The economic policies of the Government of India drew a wider and more powerful audience than a vocal group of Indian critics. Annually, India policy was subject to the criticisms of Parliament. In 1889 some members of Parliament constituted themselves as the British Committee of the Indian National Congress. In 1893 the group broadened their base and established themselves as an Indian Parliamentary Committee pledged to attend to Indian interests in the House of Commons. By 1905 the group and their public members numbered over two hundred.\(^5\) This group, unlike non-official members of the Legislative Councils, could propose legislation and seek to divide the Parliament on India questions. In its ability to raise embarrassing questions and to sully the reputation of the Government of India it was a powerful opinion-maker. In its constant threat to subject Indian policy to an annual Parliamentary inquiry, the lobby was a force to indirectly shape that policy.\(^6\)

From 1888 through 1906 the Parliamentary Committee
sought continuously to pressure the Government to ameliorate India's material condition. The basis of their criticism was that India was poverty-stricken and that the poverty was chronic and increasing. The substance of every presentation of the India Office was India's growing prosperity, the land revenue, her exports and length of railway lines all indicated progress. The lobbyists disagreed and alleged that anyone who had gone to India had seen poverty in every part. William Digby unearthed the results of Dufferin's inquiry into the conditions of the lower classes and added substance to the claims of the lobbyists. From a comparison of income figures released by Curzon's Government and those of Dufferin's inquiry Digby found the absolute average annual income to have declined by one third between 1880 and 1899. Curzon's attempt to save the situation by a re-calculation of Dufferin's figures and his own did not satisfy the opposition. The situation in Parliament was touchy when the Secretary of State made his inadvertant admission that India's problem was poverty. Although he would not admit of India being the poorest of all countries under Western rule, Hamilton finally conceded the standard of life and comfort of Indians to be "far below that of European nations." The Government of India was thus backed into a consideration of the question of poverty, its causes and remedies.

The Poor

Who were the poor whom everyone now agreed did exist?
Given the rural nature of the population both the critics and Government agreed that it was primarily a problem of the agricultural sector. The preponderance of Government research regarding poverty was connected with the Reports of the Famine Commissions. The true test of poverty, as far as the Commissioners were concerned, was the inability to withstand famine. Those who were dependent upon Government relief works and charity were the landless laborers, small tenant farmers and unskilled artisans. Insofar as mortality from nutritional deprivation was an index of poverty, these were the poor. Dufferin's inquiry into the conditions of the lower classes resulted in the same conclusions. Landholders and tenants with occupancy rights could borrow against the security of their holdings. The landless and tenants at will were impoverished as a result of low wages and limited credit opportunities.

The critics of Government policy were not so concerned to find out exactly who the poor were. Their argument was that India was poor. The statistics they used to demonstrate poverty were aggregate income statistics. Thus they spoke of an "average annual agricultural income" which they counterbalanced against the expenditures of landless laborers. To the critics, the agricultural sector was poor, the laborers simple more poor than others.

Just how poverty-stricken these people were was a question the Government answered with difficulty. Dufferin's inquiry demonstrated a wide divergence of opinion in the
Madras Presidency. A sufficient diet in Madras was thought to be three meals a day of rice or ragi, meat once or twice a week, toddy but no butter, buttermilk or ghee. The Government report concluded "no considerable proportion of the population suffer from a daily insufficiency of food."  

Not all reports from the Collectors supported this view. In Vizagapatam it was reported that the agriculturalists lived miserably and could not afford food; "the labourer is probably the poorest creature in the world." The Collector of North Arcot said, "grinding poverty is the widespread condition of the masses." But in Bellary it was "thought that the standard of comfort has risen."  

The conclusions of the Government report notwithstanding, there was no clear picture. 

The Famine Commission of 1898 surveyed the previous twenty years and refuted the comforting conclusions of the Dufferin inquiry in Madras. The Commissioners reported that there had been a general increase in the incomes of the landholding and cultivating castes; these groups appeared more capable of withstanding famine. But beyond these classes there existed a large section of the population who lived "hand to mouth." These were the day laborers, small tenants and unskilled artisans. Their incomes had not risen in proportion to the rise in their necessary expenditure. Finally, the Deccan ryots were in a worse position than before 1878. The frequency of bad seasons and the devastating effects of the 1876-78 famine had retarded any
advance. The conclusion was that the really poor who lived at a subsistence level were those with no secure stake in the land or alternative employment.

There is very little reliable data regarding wages of agricultural labor in India. One of the main difficulties is that labor was often paid in kind rather than cash with the result that conversion of the wage to approximate a cash wage is difficult. The analysis of agricultural wages conducted by Dharma Kumar has taken this factor into account and her conclusions support both the views of a few individual collectors in 1888 and the conclusions of the Famine Commission. In Bellary there was a 32 percent rise in real wages between 1873/75 and 1886/1900. Between 1886/90 and 1896/1900 the wage of the Bellary laborer fell 53 percent. (See Table III B) Overall, however, the trend of the period was a general decline in real wages from 49 percent in Vizagapattam to 8 percent in Salem. Only Tanjore saw a rise of 36 percent. The standard of living for the average laborers had in fact shown a steady deterioration.

British Views on Poverty and their Application in India

The British view of poverty in India was closely allied to discussions of the "social problem" in Britain. At the turn of the century British social reformers and politicians were deeply concerned about poverty in urban areas, its causes and remedies, the discussion of which would lead in later years to England's programs of social welfare. The
### TABLE III B

INDEX OF AVERAGE ANNUAL RURAL WAGES IN GRAIN FOR SELECTED DISTRICTS IN MADRAS FROM 1873 TO 1900

<table>
<thead>
<tr>
<th>Years</th>
<th>Ganjam</th>
<th>Vizagapatam</th>
<th>Bellary</th>
<th>Tanjore</th>
<th>Tinnevelly</th>
<th>Salem</th>
<th>Coimbatore</th>
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<tr>
<td>1873-1875</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<td>100</td>
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<tr>
<td>1876-1880</td>
<td>61</td>
<td>65</td>
<td>79</td>
<td>110</td>
<td>86</td>
<td>67</td>
<td>76</td>
</tr>
<tr>
<td>1881-1885</td>
<td>82</td>
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<td>1886-1890</td>
<td>73</td>
<td>69</td>
<td>132</td>
<td>156</td>
<td>82</td>
<td>122</td>
<td>114</td>
</tr>
<tr>
<td>1891-1895</td>
<td>72</td>
<td>53</td>
<td>84</td>
<td>130</td>
<td>56</td>
<td>82</td>
<td>83</td>
</tr>
<tr>
<td>1896-1900</td>
<td>61</td>
<td>51</td>
<td>79</td>
<td>136</td>
<td>61</td>
<td>92</td>
<td>66</td>
</tr>
</tbody>
</table>

Source: Dharma Kumar, *Land and Caste in South India*, p. 164. These figures differ slightly from those of Kumar. The above figures were calculated on a three-year base period (1873-1875).
attitudes which surfaced in the period 1890-1905 were reflected in the policies adopted in India during Curzon's Viceroyalty.

The attitude of the mid-Victorians to poverty was a product of their belief in economic liberalism and individualism. The poor were depicted as deserving poor and undeserving poor. The deserving poor were the old, infirm and children who were needful of charity and relief. Those undeserving of charity were poor as a result of personal flaws and character deficiencies. The mass of the "really poor" were notable for their lack of foresight and self-control. Private relief or charity when given was to be of a nature to stimulate self-help and responsibility. The greatest fear of relief organizations was that charity, if not wisely administered, would destroy the few seeds of responsibility left in the poor. This fear formed the basis of the nineteenth century Poor Laws, noted for their harshness, and was a guiding force in social legislation until World War I. The view was also explicit in every Famine Commission Report in India. Relief works in India were designed in much the same fashion as relief in London. The poor were not to be encouraged to seek aid and Government aid was to be withheld unless absolutely necessary.

The turn of the century saw a shift in the perception of the role of society in poverty and its alleviation. Britain's tremendous industrial growth had encouraged the belief that industrial advance would eradicate poverty or at
least its worst aspects. Detailed statistical studies by men such as Charles Booth and Seebohm Rowntree, however, demonstrated that no less than thirty percent of England's population was living considerably below what was regarded as a subsistence standard. The studies, based on the income and budgets of the poor, pointed out that many of the poor, far from being thriftless, simply earned too little to escape the poverty cycle. Rowntree in particular came to the view that poverty was the result of the very social and economic environment which was thought to solve it. Only Government intervention in the form of minimum wages and social security could alleviate the poverty he saw. The revelations of Booth and Rowntree sharply undermined certain nineteenth century assumptions and drew attention to the question of the role of the State in alleviating poverty.

The first decade of the twentieth century saw Government intervention in the realm of the deserving poor. School meals for children and pensions for the old were the major social reforms of the period; there were also major shifts in the educational policies to emphasize technical and scientific education. Importantly, neither Government nor the mass of public opinion came to view the Government or the economic system as the cause of poverty. The individual still was responsible for his fate and Government measures of amelioration and enablement were based on the idea of stimulating self-help and responsibility.

Two aspects of the British discussion of poverty and
the social problem had immediate relevance to the Indian situation at the turn of the century. The first was the transference to India of the basic British notion that man was the ultimate cause of his state of deprivation. Although the tests for famine relief were eased during the 1890's the Famine Commissioners still held the opinion that Indians "rushed for charity" and were reluctant to leave it to go back to their farms. Secondly, although the state did not accept the responsibility as a cause of poverty, it was willing to consider reform measures and state action in stimulating the poor to help themselves. The Government of India did not labor under the same political constraints as Parliament. Critics of British rule pressed for reform. Liberal reformers, such as Gokhale, viewed social problems in much the same light as the British socialists. Thus, the Indian Government under Curzon felt constrained to press for Government stimulation of social and economic reform.

Much of the difficulty in maintaining consistent economic policies in India stemmed from the fluctuations of British politics. Although India policy was theoretically free from party politics, in practice it did reflect the economic philosophy of the party of power. The Cabinet which placed Curzon in office was the Conservative Ministry of Salisbury and the ministry remained in Conservative hands throughout Curzon's tenure. In the Conservative Party there was a growing section which openly criticized the doctrine of laissez-faire. Government intervention was often necessary
and desirable when it was economically and politically
advisable. Curzon had great sympathy with this point of
view and was thus willing to increase Government sponsored
economic reforms. His reforms called for Government guidance
to agriculture, education, commerce and industry. The tone
was essentially Liberal and progressive. Government would
guide and enable India to develop along lines Government
perceived to be desirable. While Curzon was willing to inter­
vene in the economic process, the extension of political
power to Indians was not part of his plan. His successor,
Minto, and the Secretary of State, John Morley, believed
in a reverse policy.

The Liberal Party, which put John Morley in the posi­
tion of Secretary of State for India, came to power in 1906,
largely on a platform of economic freedom. The Liberal creed
was *laissez-faire*. To John Morley "the role of Government
was to pursue a policy of peace, retrenchment, and national
education and leave as much freedom as possible for the
application of capital for the exercise of skill and indus­
try and the general operations of trade." The philosophy
of Morley was to effectively retard Government encouragement
of industry in India. Had his Viceroy, Lord Minto, been of
a weaker sort Morley would have also reduced the role of the
Department of Agriculture.
The Causes of Poverty

The acceptance by the India Office and the Government of India of the fact of poverty, given the political climate in India and England, entailed the need to more fully define the causes of the problem and to effect a remedy. In this the Government saw two tasks. On the one hand it was necessary to refute the claim that poverty was the result of British rule. On the other hand it was necessary to promote an alternative, acceptable thesis to that of the critics. Since India's poverty was primarily in her agricultural sector and land revenue policy was put forward as a cause of poverty Curzon chose to refute that claim.

During Curzon's first years in office he received a series of letters from R.C. Dutt, a retired Civil Servant. The substance of Dutt's letters was that the non-zamindari land revenue systems, through their high fluctuating demand, caused India's poverty and hence the inability of agriculturalists to resist famine. In 1900 the Secretary of State received a Memorial from Dutt, and other, European, retired Civil Servants reiterating Dutt's thesis and requesting certain strictures on the land revenue assessment.33

The request for a revision in the land settlement in non-zamindari areas was rooted in the belief that fluctuating assessments were a basic cause of poverty. All the ryots' surplus, it was felt, was given to the State in the form of land revenue. The ryot was incapable of turning to any other
source for aid but the moneylender. In contrast to areas of temporary assessment, Dutt raised the image of a prosperous, progressive Bengal, flourishing under the zamindari settlement. Bengal, he said, possessed an "educated and influential class of landlords", a "strong and intelligent middle class [who form] the strongest element in a progressive society." Moreover, the peasantry was "resourceful" and able to resist failure of their crops. Only in Bengal did Dutt see the peasants and landlords reaping the profit of their efforts. Dutt was not explicitly requesting the extension of the zamindari settlement, but he appeared to be doing so implicitly by referring to Bengal's settlement as the only one encouraging agricultural prosperity. Gokhale also indicated a preference for the Permanent Settlement of Bengal.

Dutt's thesis was not new when he raised it in the late 1890's. The effect of the fluctuating demand had long been debated among British Civil Servants. Administrators such as John Lawrence and Dunlop Smith criticized high assessments as being ruinous to the cultivator. Long before Sir Thomas Munro had also. But these views were in the minority during the late nineteenth century. Sir Richard Temple, Finance member in the 1870's, spoke for the majority when he claimed assessments not only to be moderate but also an encouragement to the ryot to control his natural indigence and laziness. The Famine Commission of 1880 which investigated the question agreed with Temple and concluded that
there was little connection between the land revenue assessment and the ryots ability to withstand famine. The Commission decision held ground until the time of Dutt's letters to Curzon.

Dutt's letters and the Memorial of 1900 raised two separate issues to Curzon. The first was the question of the severity of the fluctuating revenue demand. The second was that of the extension of the Permanent Settlement. Curzon took a personal interest in the questions to the extent that he drafted the final Government resolution. With the aid of Sir Anthony McDonnel and Sir Bampfylde Fuller, he set himself to the task of formulating "an answer to our critics and laying down the lines of a sustained and liberal policy in the future." 38

The Resolution on the Land Revenue was delivered to Parliament in January 1902. In it Curzon demonstrated that the land revenue assessments were not sufficiently severe as to render the cultivator under a fluctuating assessment more susceptible than the cultivator under a fixed assessment to the effects of drought. 39 While he admitted that assessments were often too high and collected with unreasonable exactitude and promptness, he pointed out that those most effected by famine were the landless. Landholders could borrow on the security of their land. In addition, land assessments had progressively diminished over the previous decades, yet famines had become more intense, not less as Dutt's argument would have predicted. Finally, the cost of famine relief
had been, in the Central Provinces alone, as high as the land revenue demand and the farmers had sustained losses many times over the cost. Even with no assessment, cultivators could not have sustained themselves.

Next, Curzon turned to the question of the Permanent Settlement. He demonstrated that Bengali cultivators, far from being immune to the ravages of famine, had themselves suffered over the years. But the real thrust of Curzon's denial of the extension of the Bengal system lay not in its effects upon famine, but rather in Curzon's conservative, anti-aristocratic approach.

As regards the condition of the cultivators of Bengal who are the tenants of the landowner instituted as a class in the last century...There is still less ground for the contention that their position, owing to the Permanent Settlement, has been converted into one of exceptional comfort and prosperity. It is precisely because this was not the case, and because, so far from being treated generously by the Zemindars, the Bengal cultivator was rack-rented, impoverished and oppressed that the Government of India felt compelled to intervene on his behalf, and by a series of legislative measures to place him in the position of greater security which he now enjoys.40

He conceived of the Government of India as the protector of the "real" India, "the patient humble millions toiling at the well and the plough", not the India of the educated middle classes. Over the years Government had sought to give security of tenure to tenant farmers. In the midst of protecting the "rustic cultivator" and the zamindari tenant, the Government was not about to extend the settlement which
created elite, urban middle classes. The opinion of Government critics regarding the Permanent Settlement simply demonstrated how out of touch with the "real" India these men were.

The Resolution on the Land Revenue was a policy landmark. Curzon accepted for India a policy of revenue assessment based on the cultivators' ability to pay rather than State demand. The principles of future assessment were to be based upon "greater elasticity in the revenue collection, facilitating its adjustment to the variations of the seasons and circumstances of the people." Further, the Resolution advocated a "more general resort to reduction of assessments in cases of local deterioration." While the Resolution did not fully satisfy objections to the land revenue settlement in non-zamindari areas, it hastened a decline in the proportion of land revenue to the total revenue. (Table III C)

An Alternate View

In disposing of the linkage between land revenue and famine the Government of India came up with an alternative view of India's poverty, one which closely reflected the spirit of opinion in England. The destitution of India's agricultural sector was the result of certain character failings. Indians could not manage their money. In the field of agriculture, "in the economy of the means of production and in the practice of organized self-help, the Indian cultivator is generally ignorant and backward."
### Table III C

**Imperial Revenue by Source as Percentage of Total Revenue 1891/92 - 1920/21**

<table>
<thead>
<tr>
<th>Source</th>
<th>1891/92</th>
<th>1901/02</th>
<th>1911/12</th>
<th>1920/21</th>
</tr>
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<tbody>
<tr>
<td>Land Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Revenue</td>
<td>40.04</td>
<td>40.49</td>
<td>35.10</td>
<td>21.84</td>
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<tr>
<td>Forests</td>
<td>2.54</td>
<td>2.67</td>
<td>3.40</td>
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<tr>
<td>Tributes from Native States</td>
<td>1.26</td>
<td>1.28</td>
<td>.69</td>
<td>.43</td>
</tr>
<tr>
<td>Opium</td>
<td>10.74</td>
<td>7.49</td>
<td>9.17</td>
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<td><strong>Taxation</strong></td>
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<td>Stamps</td>
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<td>Excise*</td>
<td>8.83</td>
<td>9.28</td>
<td>13.21</td>
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<tr>
<td>Provincial rates</td>
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<td>.96</td>
<td>.04</td>
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<tr>
<td>Customs</td>
<td>2.85</td>
<td>8.64</td>
<td>11.03</td>
<td>21.99</td>
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<tr>
<td>Assessed Taxes**</td>
<td>2.85</td>
<td>3.15</td>
<td>2.88</td>
<td>14.85</td>
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<tr>
<td>Registration</td>
<td>.68</td>
<td>.70</td>
<td>.77</td>
<td>.79</td>
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<tr>
<td><strong>Sub Total</strong></td>
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<td>45.16</td>
<td>42.69</td>
<td>63.79</td>
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<td><strong>Commercial Revenue</strong></td>
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<td>1.94</td>
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<td>Irrigation</td>
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<td>.38</td>
<td>1.40</td>
<td>1.26</td>
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<td>Posts and Telegraphs</td>
<td>----</td>
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<td>.01</td>
<td>.13</td>
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<tr>
<td>Miscellaneous</td>
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<td>.11</td>
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<td>.31</td>
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<td>Exchange</td>
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<td><strong>Total</strong></td>
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<td>100</td>
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Source: Vera Anstey, *The Economic Development of India* (London: 1952) p. 630. The percentage figures have been calculated from Anstey's absolute figures. In Madras land revenue declined from 47.6 percent of total revenue to 19.4 percent between 1882 and 1933, see Baker and Washbrook, *South India: Political Institutions and Political Change, 1800-1940*, p. 209.

*Excise: liquor, cigarettes, drugs

**Assessed Taxes: Income taxes
Finally, the overwhelming reliance of a growing population on agriculture as a source of employment caused the per capita income to decline. Thus, Government saw its task as encouraging thrift, industry and aiding the development of agriculture.

On the question of the perpetual indebtedness of the cultivators the Government had a mass of material from which to draw her conclusions and eventual course of action. The Reports of the Famine Commissions pointed out the universality of indebtedness. It was thought to be "undoubtedly an institution of rural life in India", a condition which stemmed from the "peculiarity of the rustic" in his "fondness for borrowing." It became problematic because of the rapacious moneylenders and the tendency of the "oriental character...to succumb to difficulties and accept them as inevitable." By the turn of the century the only hope was Government stimulation of self-help, thus Nicholson's scheme for rural agricultural cooperative societies was readily adopted. The scheme was advantageous for it addressed a perceived central problem and did not demand substantially increased expenditure. The move was heartily endorsed by Gokhale in the Legislative Council and rural politicians everywhere.

Curzon was convinced that industrial development was vital to make India "more and more self-providing in the future," and to provide more employment opportunities. In England it was understood that he "more than any living
Englishman" realized the necessity of India's industrial development. The Conservative Ministry in London supported Government of India efforts in promoting the exploitation of mineral resources by both Indians and Europeans, and encouraging investment. To the minds of Curzon and his Council, industrialization was to be pursued, in addition to steel and coal, by fostering the development of industries based directly upon agriculture.

The most important step which can be taken...will...be found in the development of industries based directly upon agriculture, that is in locally working up our raw products, extracting our own oil from seeds, producing our own textiles from silk, cotton and wool, tanning our own hides.

To stimulate and guide this development Curzon created in 1905 the Imperial Department of Commerce and Industry.

The crucial question was how far Government ought to go in playing an active role in the encouragement of industry. In Madras the Government since 1898 had played an active role. Mr. Alfred Chatterton, an engineer connected with the agricultural department, developed the aluminium industry. With the aid of a Government grant he started a business which once it was successful was turned over to private hands.

This type of Government activity, although a rarity, was strongly disliked by the European business community who considered it a threat to their sphere of activity. In 1910, when the Provincial Governments expressed an interest in expanding their activities further along the lines of the
introduction of new industries, the Secretary of State voiced strong disapproval. Morley made it clear that Government intervention should be left to instruction in technical and industrial activities. "It must be left to private enterprise to demonstrate that...improvement could be adopted with commercial advantage." Morley's position grew as much from the pressure exerted by European businessmen in India as it did from his laissez-faire ideology.

Morley's objections to the encouragement of industries could not be applied to agricultural development for three reasons. Firstly, there was no threat to European enterprise. Agricultural development could only help the European trading firms who exported the raw commodities. Secondly, Government was not involving herself in commercial activities. The basis of agricultural development was to be scientific research and education. Agricultural experiment stations and model farms would not be turned over to private hands once successful. Thirdly, although Curzon's belief in Government's role as landlord did not seem to find sympathy with the Secretary of State, John Morley, Minto, Curzon's successor as Viceroy, was of the opinion that where the Government derived such a large share of its revenue from the land, it was the State's duty to work for its material development.

The Agricultural Solution to Rural Poverty

The manner in which the Government sought to redress
rural poverty through agricultural development was circuitous at best. The rural poor were landless laborers and small farmers. The Government devised a program of research, education and demonstration through which to introduce scientific methods to Indian agriculture. How was scientific agriculture, adopted by more substantial ryots, to alleviate the poverty of the landless? The answer lay in the model of economic development which would in the long run, theoretically, raise the standard of living of all India.

Roughly the model was the following. The productive capacity of India's agriculture was rarely measured but considered to be low. Since India's trade was rooted firmly in the export of commercial crops, her products had to be improved in order for the producers to gain a surplus which they could invest. This investment would theoretically be in industries. Any industrial development was seen as necessarily beginning in agriculturally related activities, thus commercial products needed to be developed to feed these industries, as well as to export. The increased economic activity and creation of industries would raise the living standard of the poor by opening other employment avenues and relieving the pressure on the land. This conformed to a model of development supported by classical economic theory.

Adam Smith saw a "natural" order of development stages. The improvement of agricultural technology and the division of labor in rural areas produced a growth of agricultural surplus. This surplus provided a basis for the growth of
towns which, in turn, became markets for agricultural surplus, towns pursued manufacturing and commerce hence producing goods to be exchanged for the agricultural surplus. John Stuart Mill saw the progression in this manner:

> All nations which we are accustomed to call civilized, increase gradually in production and population...the progress of civilized society is a continual increase in the security of person and property... of this increased security one of the most unfailing effects is a great increase both of production and of accumulation [and] an improvement in the business capacities of the general mass of mankind...As wealth increases and business capacity improves we may look forward to a great extension of establishments, both for industrial and other purposes [and]...a great increase of aggregate wealth, and even, in some respects, a better distribution of it.

In both cases, "civilized" progress emerged from a base of increased agricultural production.

But the gains were not simply in long run trends. An early version of the "trickle down" theory was in vogue in Indian circles. This version, implicit in the writings of Naoroji and Dutt, was based on the assumption that any increase in the wealth of India would be equitably distributed. Naoroji believed that if India's produce remained in country, there would be a per capita rise in prosperity. All export contributed to the poverty of India. Dutt's view was more directed to the agricultural sector and the land revenue demand. A severe land tax or rent took away from the prosperity of the cultivator who then employed less labor at low pay. "Where the cultivator is lightly taxed
and has more to spare, he employs more labour and labour is better paid." The logical extension of this view was that any increase in the productivity of the soil, which thereby benefited the landlord or cultivator, would be passed on to the landless poor or tenant at will.

The Government of India's plan to encourage agricultural development through research, education and demonstration commended itself to public opinion for a variety of reasons. The agrarian outlook of the Nationalists was, according to one historian, the "weakest link in their chain of economic thinking." If this was true it was so only because of the peculiarities of their political position. At the turn of the century the Nationalist movement was a middle-class phenomenon which did not pretend to be a mass movement. While they demanded a reduction in land revenue, they opposed legislation of tenant rights in Bengal and the Punjab Land Alienation Act. In all questions concerning class relations in India the Nationalists were either silent or squarely in the camp of the middle class. Agricultural improvement would help the substantially landed primarily and the landed were politically important to both the Government and the Nationalists.

The development scheme also fit with their ideas of long term economic development. Early critics were convinced of the need to develop along the lines of the West. This view dictated the importance of industrialization and commercial enterprise and hence the transformation of the
agricultural economy. Critical opinion, when it addressed the needs of rural India, objected not to the type of cultivation encouraged by the British but to the terms of trade and land revenue policies which inhibited the producer's realization of the rewards of his efforts. Gokhale, one of the few to address specific agricultural problems, perceived them in much the same light as did the British. In his first budget speech he decried the diminution in net cropped area. But, he was careful to point out, the cropped area was a subordinate factor since the profitability of agriculture depended primarily on "the kind of crop grown and the crop yield obtained." His concern was specifically the area and yield of superior crops, wheat, sugarcane, oilseeds, cotton, jute and indigo. Even R.C. Dutt indirectly recognized the benefits of commercial cropping to the Indian cultivator. He believed the areas of Bengal which exported rice were "more resourceful in the present day...owing to the large increase in cultivation." Rice producing areas of Madras were not so well off owing to the fluctuating land revenue demand. It was for later politicians to decry the expansion of commercial cropping and the perceived destruction of the "self-sufficient village republic". At the turn of the century Indian opinion welcomed the entry of Government into the field of commercial agricultural development.
The Path to Agricultural Development

The thirty years of experience and record gathering since the institution of the Departments of Agriculture lead to a recognition that Government's primary task was to apply European scientific methods to Indian agriculture. These scientific methods meant systematic and controlled research into crop improvement through cross-breeding and acclimatization, research into disease and pest control and proper fertilization. In addition, it meant rigorous training and education of individuals who could demonstrate the new knowledge to the Indian cultivator. To further this aim Curzon's Government re-organized the Imperial and Provincial Departments to more effectively deal with the triple functions of research, education and demonstration.

The Imperial Department of Agriculture was the first to undergo a transformation. In 1901 an Inspector General was appointed to oversee and coordinate the agricultural development of India. Curzon's concern for agriculturalists so impressed an American, Mr. H. Phipps, that he gave £30,000 to be applied to any scheme of development Curzon desired. The grant made possible the foundation of the Agricultural College and Research Station at Pusa. The aim of the college 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]." Pusa's role was
to train Indians for Government service and to research specific agricultural problems of an all-India significance. The real work of agricultural development was to be pursued on a Provincial level.

The Provincial Departments of Agriculture as organized in 1882 were subsidiaries of the Department of Land Records and Settlement. Their funds and personnel came from the larger Department of Revenue and Agriculture. The inherent difficulties with this system were a lack of operating funds and staffs which were rarely qualified or experienced in agriculture. The recognition of the necessity of placing local governments in receipt of funds and experienced staff was one of Curzon's first goals of the Provincial Departments. The Government of India made permanent financial grants to each Province and initiated steps for hiring expert scientific staff. The Departments were made separate under the sole charge of a civilian officer unconnected to the Revenue Department.

To complement Pusa, each larger Province was to have an agricultural college. In Madras this was to be at Coimbatore. Facilities for developing improved strains of the important Provincial crops would be the basis of the research work. Expert staffs of economic botanists, agricultural chemists and mycologists would work on new seeds, experiment with various manures and irrigation possibilities, and teach at the college. Although the initial groups of experts were to come from the West, the
educational facilities would enable India to supply her own staffs.

While the more exacting phases of research were to be pursued at Coimbatore, specific field researches would be located elsewhere. The ultimate aim of Government was to establish an experimental farm in each representative ecological area. These experimental farms would specialize in research in the cultivation techniques of the area and the problems of local cropping. The farms would also help to demonstrate the results of research and provide a base from which to distribute improved seed varieties.

The stage appeared to be set for the transformation of the rural economy. It remained to be seen how committed the Government was to a Department of Agriculture and to the alleviation of rural poverty through agricultural improvement.

Financial Commitments

Curzon's reforms appeared to indicate Government's firm commitment to active involvement in pursuit of economic change. Unlike his predecessors in the nineteenth century he was willing to risk initial expenditure in the hope of long term gain. But the basic fact remained as he well knew, that "Indian fiscal policy was settled and decided... not in Indian interests but British." Regardless of the personal philosophies of viceroys and influential Civil Servants, Indian policy was directed by the interests of the British empire. This fact became glaringly apparent
during the term of John Morley, Secretary of State for India, 1906-1910.

The economic philosophy of Morley, as one of his biographers noted, was a "mid-Victorian mixture of laissez-faire and retrenchment."69 As we have seen, his policies of laissez-faire precluded government involvement in the encouragement of Indian industry. His policies of retrenchment went further. Morley spent his years at the India Office cutting budgets. His retrenchments were pursued with a view "to 'enrich' India through measures of 'greater economy' which would allow the government to 'lighten tax-ation'."70 Although Morley's retrenchments did not alter the dominance of administrative and military costs, the military budget did come under his axe.

The Anglo-Russian convention of 1907, which produced a diplomatic solution to the Russian menace, removed the threat of Russian invasion. This led Morley to conclude that the "time has now arrived when Indian military expenditure should be reviewed." Moreover, he instructed Minto, Viceroy of India, "If it may safely be reduced,...it is your duty to effect reduction without delay."71 A reduction of £500,000 was made in 1907. But Morley was subject to greater powers and in 1908 was forced to add £300,000 to Indian expenditure to help pay for the training of British reservists for the War Office. Again in 1909 India was forced to meet the demands of the British Empire and to contribute £100,000 to a Foreign Office loan to Persia.72
Regardless of the plans of the viceroys, India was clearly subject to the greater demands of the Empire. Within the total framework of colonial rule and imperial needs, the improvement of agriculture was to occupy a low rung on the ladder of priority.

Summary

At the turn of the century the Government of India and the India Office, reacting to criticism of imperial rule, redefined the agrarian problem and developed a program of solution. The agrarian problem was defined as one of poverty due to, in addition to other factors, low productivity of agriculture. Curzon's government re-organized the Departments of Agriculture in a manner which, it was reasoned, would be conducive to promoting agricultural improvement and hence an increased standard of living.

While the Government of India and the India Office now seemed committed to a responsible role, the basic structure of colonial rule had not altered to allow for a full commitment. As John Morley's experience with the War Office and the Foreign Office demonstrated, Indian finance, in addition to being constrained by the demands of the two pillars of Imperial rule, military power and just administration, was subject to the greater interests of the British Empire.
NOTES


3The Times (London, August 20, 1901).


5FC 1898. p. 363.

6Hansard, August 16, 1901, col. 1242-1243.


9Royal Commission on Indian Expenditure. Evidence of Gokhale.

10Ibid.


14India. Imperial Legislative Council. See the budget speeches of Gokhale for the years 1904 and 1905.

15Mary Cumpston. "Some early Indian Nationalists and their allies in the British Parliament, 1851-1906." English Historical Review, LXXVI, 1961. pp. 279-297. The makeup of this parliamentary group was Irish nationalists, socialists and others in addition to those who were particularly
interested in India. It functioned as a consciousness group for Imperial activities.

16 S. Gopal, British Policy in India, 1858-1905 (Cambridge 1965) p. 181. Hansard, February 3, 1902, p. 267. and June 21, 1905, p. 1306. Members of this committee sought to amend the recommendations of the Famine Commission of 1901 by adding that the Indian population had not prospered under British rule. Periodically they introduced resolutions to subject India to periodic Parliamentary inquiry.


19 Hansard, August 16, 1901. p. 1211.


21 FC. 1898. p. 363.


25 Ibid.

26 FC. 1898. p. 361.


demonstrated the existence of the "primary poor", those who did not earn enough. His was the first recognition of this class of poverty. See also Briggs for a discussion of Rowntree and his impact.

30 D. Read, pp. 164-175. In regards to the Poor Law legislation was held up until W.W.I.. There had been a Commission to study the Poor Laws but the Socialists would not agree with the majority report as far as maintaining the structure of aid. They did agree that aid should be given in a way so as to stimulate responsibility and self-help. The Liberal Party, in power at the time of the report, did not know how far to go in supporting reform as they had previously been in opposition to any reform measures of the Conservatives.


33 Great Britain. Parliamentary Papers. Papers regarding the land revenue system of British India, 1902. India Office Records file contains all correspondence previous to and including the Resolution.

34 Dutt, p. 461.


37 FC. 1880. Vol. I. p. James Caird wrote a note of dissent strongly suggesting the high land revenue demand was ruinous to the landholder.


39 Papers regarding the land revenue system. Resolution on the Land Revenue Assessments, January, 1902.


41 Papers regarding the land revenue system. Resolution.
42 Martin, p. 171, Zetland, p. 174-175.
43 FC., 1898, p. 113.
44 India. Legislative Council, March 27, 1901, p. 328.
45 FC., 1882, Vol. III. Evidence of the Collector of Cuddapah, Mr. Price. FC., 1901, p. 449. Dufferin's inquiry also found indebtedness to be a universal characteristic of the Indian.
48 The Times, January 21, 1898.
51 Ibid. p. 71. Quoted from Morley's despatch of June, 1910.
52 India. Revenue and Agriculture, Proceedings, File 66 of 1906, Government of India to Secretary of State, July 26, 1906.
53 Hansard, August 16, 1901, p. 1236.
56 Naoroji, p. 124.
57 Dutt, p. 606.


60 India. Legislative Council. Gokhale's budget speech of 1902, especially his appendix.

61 Dutt, pp. 349-350.

62 India. Statement exhibiting the Moral and Material Progress and Condition of India, 1907-1908, p. 85.

63 India. Revenue and Agriculture, Summary of the Administration of Lord Curzon of Kedleston, Viceroy and Governor General of India in the Department of Revenue and Agriculture, Simla, 1905, India Office Records, Mss. Eur. F. III.


66 Madras. (Presidency) Department of Revenue and Agriculture, Report, 1905-1906, p. 3.

67 India. Revenue and Agriculture, Proceedings, No. I of April, 1905.

68 Quoted in Wolpert, p. 223.

69 Ibid., p. 211.

70 Ibid., p. 213.

71 Ibid., pp. 86-87.

72 Ibid., pp. 216-217.
IV. THE ADMINISTRATIVE ORGANIZATION
OF THE MADRAS DEPARTMENT OF AGRICULTURE

When the Government of India, in response to criticisms, finally devised a program of agricultural reform, the program was one of tentative and restricted technical solutions. Government was to provide the scientific foundation for increased production of cash crops. This, it was supposed, would improve the economic condition of the population and provide encouragement to industry which would diversify employment opportunities and thus relieve poverty. In effect, the Government was assuming that she need only to provide a modest, technical framework for development, and economic laws would take their natural course to fulfill the goals.

The means adopted by the Agricultural Department did not appear modest—they were to be research, demonstration and education. Nor was the goal of the Government modest in appearance; it was the "development of the gross output on which the agricultural population depends." This was to be accomplished according to the "generally accepted principle that effective improvement in Indian agriculture depends largely or mainly on the application of European science to Indian conditions." Government was also intent to provide "facilities for the best agricultural training... made available in India in order that the country may become self-supporting... in the scientific development of agricultural methods."
The method of demonstration was to follow the lines set out by Ripon some twenty years before.

Government is very far from being able to do all and it is a very great mistake to suppose that only Government is capable of doing for the people of any country that which they can do better for themselves: and therefore it is to native Gentlemen, to the great proprietors of India, to those who have a large stake in agriculture, that the Government must look to aid them in this work, to take the lead and to set an example to those who are less wealthy, have less means and less intelligence.

This avenue of extension through a small number of substantial cultivators tended not surprisingly to shore up their positions and to hamper the extension of benefits. Substantial cultivators were generally those who paid over Rs. 30 in revenue. This meant that the attention of the Department was to be directed to approximately ten percent of the landholders in the Madras Presidency, (Table IV A). The very skewed landholding pattern in the Madras Presidency meant that less than 10 percent of landholders controlled over 50 percent of cultivated land, in holdings which averaged over 15-16 acres. It was this small group which could, as a result of the nature of the Department's activities, derive any benefit. Another aspect which should be noted is that the ranks of the small holders became larger over time while that of the large holders was decreasing. This suggests that small holders were increasingly cultivating land on the margin and experiencing fragmentation.

In developing the framework for agricultural improvement
### TABLE IV A

**RENT ROLL MADRAS PRESIDENCY**

<table>
<thead>
<tr>
<th>Rs.</th>
<th>Pattas</th>
<th>Acreage</th>
<th>Average holding (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>1,620,898 (68.9)</td>
<td>5,884,746</td>
<td>(19) 3.63</td>
</tr>
<tr>
<td>10-30</td>
<td>501,761 (21.3)</td>
<td>8,156,594</td>
<td>(26) 16.25</td>
</tr>
<tr>
<td>30-50</td>
<td>118,033 (5.0)</td>
<td>4,305,618</td>
<td>(13.9) 36.48</td>
</tr>
<tr>
<td>50-100</td>
<td>74,458 (3.2)</td>
<td>4,820,863</td>
<td>(15.6) 64.75</td>
</tr>
<tr>
<td>100-250</td>
<td>29,959 (1.3)</td>
<td>4,334,527</td>
<td>(14) 144.68</td>
</tr>
<tr>
<td>250-500</td>
<td>6,255 (.3)</td>
<td>2,048,185</td>
<td>(6.6) 327.44</td>
</tr>
<tr>
<td>500</td>
<td>1,911 (.08)</td>
<td>1,269,924</td>
<td>(4.1) 664.53</td>
</tr>
</tbody>
</table>

Total 2,353,275 (100) 30,820,457 (100)

<table>
<thead>
<tr>
<th>Rs.</th>
<th>Pattas</th>
<th>Acreage</th>
<th>Average holding (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>2,505,658 (73.8)</td>
<td>8,139,971</td>
<td>(22.5) 3.25</td>
</tr>
<tr>
<td>10-30</td>
<td>617,093 (18.18)</td>
<td>9,466,741</td>
<td>(26) 15.34</td>
</tr>
<tr>
<td>30-50</td>
<td>144,721 (4.2)</td>
<td>4,952,134</td>
<td>(13.6) 34.22</td>
</tr>
<tr>
<td>50-100</td>
<td>83,230 (2.4)</td>
<td>5,211,883</td>
<td>(14.4) 62.63</td>
</tr>
<tr>
<td>100-250</td>
<td>32,835 (.9)</td>
<td>4,628,286</td>
<td>(12.8) 140.95</td>
</tr>
<tr>
<td>250-500</td>
<td>7,042 (.2)</td>
<td>2,256,905</td>
<td>(6.2) 320.50</td>
</tr>
<tr>
<td>500-</td>
<td>2,404 (.07)</td>
<td>1,492,572</td>
<td>(4.1) 620.87</td>
</tr>
</tbody>
</table>

Total 3,392,983 36,148,492

Figures in parenthesis indicate percentages of total

Source: Madras. *Reports of the Settlement of Land Revenue of the Districts of the Madras Presidency.* (1905/06, 1925/26)
the Government of India was constrained by the fact that she had no model of Government intervention in agricultural affairs. She did have, however, the British experience of agricultural development. It was this experience which largely shaped the activities of the Departments of Agriculture in India.

**The British Experience**

In Britain a Department of Agriculture was first established in 1889. Like its counterpart in India, this organization spent the first two decades of its existence collecting and collating statistical information. The scientific development of Britain's agriculture throughout the nineteenth century was the work of private individuals who established research institutes, colleges and agricultural associations.\(^5\) Parliament kept out of agricultural affairs to such an extent that although England suffered a massive depression in the farming industry during the last quarter of the century the Government did nothing save appoint Commissions to study the effects.

State intervention in agriculture came slowly. In 1890 Parliament empowered County Councils to spend money on technical and agricultural education. There was no incentive for all Councils to raise local rates to do this thus only those dominated by farmers cooperated. In 1909 the Board of Agriculture made grants of £12,300 for agricultural research and education through private institutions. The
following year Parliament established a Development Com-
mission charged with the economic development of agriculture
and forests. By 1914 the outline of an organized Government
effort in agricultural development began to appear through
the establishment of more colleges and research institutes.

British Government participation in agriculture was
based upon private organizations which preceded Government
involvement. British farmers and interested benefactors
established the Rothamstead Research Institute. Rothamstead
and the Royal Agricultural Society, both founded before
1850, were the most notable of private endeavors. Their
research and publication covered a wide variety of agri-
cultural topics. By the latter decades of the century,
private seed firms were developing and marketing improved
strains and fertilizers. With more modern scientific
methods and equipment, the gap between the new knowledge
and common practice was too wide for private endeavors to
bridge. It was primarily the need for education which the
British Government stepped in to fill, although she also
took a hand in guiding and funding research.

The activities of the Imperial and Provincial Govern-
ments of India must be viewed in the light of the English
developments. Notably, it must be recognized that the Raj
was creating a situation which had been developed in England
without the direct involvement of Government. In admin-
istrative terms, the Raj was developing a structure with
which she had no previous experience. The parsimonious
nature of the Government of India, combined with the recency of State intervention and contribution to English agricultural development, possibly accounts for the general tentativeness of the Government of India and the low priority of agriculture in the budget. In Madras the Agricultural Department would barely approach one percent of the total budget. (Table IV B) This led to a constant lack of staffing and constricted all Departmental activities.

Administration

Inadequate staffing plagued the Madras Department of Agriculture from its inception. The lack of staff hampered the Department's ability to reach village areas and retarded the advance of scientific inquiry. Although the reorganization 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 that the framework itself was insufficient and a re-ordering was necessary. While revisions in 1904 and 1915 slowly increased the Department's 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, a member of the Imperial Civil Service, in addition to overseeing the activities of the Department was a member of the Board of Revenue, the Court of Wards and the Legislative Council. Directly under him
## TABLE IV B

MADRAS GOVERNMENT AGRICULTURAL EXPENDITURE  
(in Rupees)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Expenditure</th>
<th>Agricultural Expenditure</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1902/02</td>
<td>69,181,409</td>
<td>1,36,300</td>
<td>.19</td>
</tr>
<tr>
<td>1907/08</td>
<td>59,310,064</td>
<td>2,69,705</td>
<td>.45</td>
</tr>
<tr>
<td>1912/13</td>
<td>86,130,941</td>
<td>4,41,934</td>
<td>.31</td>
</tr>
<tr>
<td>1917/18</td>
<td>89,046,708</td>
<td>6,61,952</td>
<td>.75</td>
</tr>
<tr>
<td>1922/23</td>
<td>137,307,242</td>
<td>11,59,428</td>
<td>.84</td>
</tr>
<tr>
<td>1927/28</td>
<td>164,750,389</td>
<td>14,70,357</td>
<td>.89</td>
</tr>
</tbody>
</table>

*Source:* India. Finance. *Civil Estimates*, 1902-1930. The figures are the actuals rather than the estimated expenditure.
were two Deputy Directors, each in charge of a Circle of the Presidency. In addition, 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. These, although funded by the Provincial Government, could be transferred by the Government of India. The Central 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. In the same year both Deputy Directors were recruited to special assignments elsewhere in the country and the Botanist was shifted to Imperial sugarcane work. The net result was administrative confusion and a slowdown in all phases of the work.

Each Circle of the Presidency commanded a network of experimental agricultural stations. The Deputy Directors and their assistant were to oversee the experiments conducted on these farms and the extension work. The farms were handled by the officers of the Provincial Agricultural Service. Although the original plan was to have an experimental farm in every representative tract and a demonstration farm in every revenue unit, the goal was never fulfilled. By the outbreak of World War I there were only ten agricultural experiment stations, each with a maximum of three
related demonstration farms.

In 1914 it was decided that the spartan structure and staff needed to be broadened. Vast areas of the Presidency were totally untouched by the Department. The districts of Ramnad, Salem, North Arcot, Anantapur, Cuddapah, Nellore and Ganjam had never been visited by an agricultural officer. Seven other districts had only one extension worker. The scientific staff for two years had also served as extension staff to the detriment of their research. To improve this situation permission was requested and received to divide the Presidency into seven circles (later to be eight) each comprising three or four districts. The circles were each to be under the charge of a Deputy Director. A total Provincial staff strength of 213 was requested including additions in every level of work. The reorganization was effected in 1915, but the increase in staff was halted due to the war needs and financial retrenchments. By the end of the War the Department lost eight of her Imperial service officers, or half her expert staff, to Pusa and other parts of the Empire. Even in 1924 the Provincial staff strength amounted to no more than 169, of whom 83 were village level demonstrators.

The paucity of staff was the result of the Government's conception of her role in agricultural development rather than a lack of qualified applicants. By 1919 almost the entire Provincial staff was Indian, while only 20 percent of the Imperial staff were. Although the Public Services
Commission of 1915 recommended that at least half of each service should be Indian, the Government took the position that European experts only could fill the scientific staff.\textsuperscript{17} As it became more expensive to compete for European experts, and as Indian discontent grew louder, the constitution of the Imperial Service in Madras gradually changed.\textsuperscript{18} The underlying principles of the Government were that an expert staff, aided by Indian extension and research workers, was to develop and extend the scientific side of agricultural improvements. Real extension of improvements was to be left, as it had been in England, to private associations and market forces. Government's role was simply to guide and initiate.\textsuperscript{19} These principles were implicit in the working of the three branches, research, demonstration and education.

Research

Prior to 1905 the activities of the Madras agricultural department, when not gathering statistics, had been in attempting to introduce exotic varieties to India. The efforts were mostly unsuccessful and the new Department resolved to concentrate its efforts on the improvement of indigenous strains and cultivating practices. Research revolved around the production of high yielding staple varieties, improved cultivation techniques and fertilizers.

**Crop Development:** The first priority in the development of strain quality and yield was to be in those crops which were
of the "greatest economic importance to the Presidency". The crops which received the most attention were: cotton, sugarcane and groundnut. Rice strain improvement initially received less attention because it was found that since only certain types were eaten by cultivators, they would not grow others. As a result, cotton and sugarcane received the bulk of the attention.

Departmental efforts to increase the productive capacity of Indian crops were constrained for two reasons. The first was the need to engender confidence and trust of Indian cultivators by improving those crops which "promised the quickest return." These were necessarily crops which had the greatest marketability. This view was in large measure correct. Cultivators, it was found, would not adopt any new seeds or methods which did not promise a significant increase in return. The second constraint under which the Department worked was that agricultural science had not yet reached a stage where it was possible to seek to create both high quality and high yielding seed strains. Thus research was confined in the early years to improvements in quality of the crop rather than the yield.

Efforts to produce long staple and irrigated cotton resulted in the development of four indigenous varieties and the extension of a new variety. In the Ceded Districts, the Northernns and Westerns varieties of cotton were refined. Uppam and Karunganni strains were developed for the Southern districts. The striking success, however, was the
development of Cambodia cotton, an irrigated variety which could be grown on red soil.

The possibilities of growing irrigated cotton had long been debated. Every time the prospects of irrigating the dry tracts of the Ceded Districts became brighter, the discussions of irrigated cotton came up. The Ceded Districts, holding an average of 45 percent of the total Presidency cotton acreage, were extremely important to the cotton trade. The report of the Irrigation Commission which recommended the development of the Tungabhadra Irrigation system, instigated a closer survey of the effects of irrigation on Ceded District dry land cropping. At the same time, the Department began to investigate the possibilities of "irrigation of paddy and cotton on black cotton soils such as are met with in the tracts commanded by the Tungabhadra Irrigation Project." Although the Tungabhadra Project was abandoned, the irrigated cotton research developed the Cambodia cotton strain. This was a long staple variety which could be grown with excellent results on the red soils of Coimbatore and Salem.

The emphasis on cotton was natural in view of the export trade and the pressure exerted by British mills. From the first, the British Cotton Growers Association, a non profit corporation for cotton promotion, granted large sums to be devoted to seed selection and distribution. Initially, the Association wished the Government of India to establish a separate cotton department. Lancashire's
influence was not as forceful as it had been in the past. The Government of India refused to separate cotton from the whole effort of agricultural improvement, although this action seems to have come from financial considerations rather than other. The Association had to be content with cotton development within the context of general agricultural development.

Preoccupation with sugarcane stemmed from import difficulties rather than the export trade. India, which had the world's largest sugarcane acreage, was importing sugar in increasing quantities. In the 1890's, a large portion of imported sugar came from European beet sugar (Table IV C). Curzon's countervailing cess on European sugar was ostensibly to give impetus to the faltering Indian sugar industry. While it altered the trade pattern, the cess did little to encourage the extension of indigenous sugar.28 As Mauritian sugar gave way to Javanese and India's imports rose (Table IV C) more attention was given to increasing the indigenous sugar production.

The Samalkota Agricultural Station at Coimbatore was begun in 1904 to stop the spread of sugarcane red rot disease in South India. The Station introduced new disease resistant varieties, such as the Red Mauritius, and, with the aid of Parry Co., was successfully extending their use.29 Samalkota's success and India's increasing imports resulted in the station becoming an Imperial concern in 1912.30 From then on the station was under the direct control of the
### TABLE IV C

TOTAL IMPORTS AND ORIGIN OF IMPORTS OF RAW SUGAR AS PERCENTAGE OF TOTAL 1895 - 1931/32

<table>
<thead>
<tr>
<th>Year</th>
<th>Java</th>
<th>Mauritius</th>
<th>United Kingdom</th>
<th>Austria-Hungary</th>
<th>Other</th>
<th>Imports in cwt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1895/96</td>
<td>4</td>
<td>54</td>
<td>0</td>
<td>0</td>
<td>42</td>
<td>2,730,965</td>
</tr>
<tr>
<td>1901/02</td>
<td>5</td>
<td>33</td>
<td>5</td>
<td>39</td>
<td>18</td>
<td>5,276,790</td>
</tr>
<tr>
<td>1905/06</td>
<td>22</td>
<td>26</td>
<td>5</td>
<td>29</td>
<td>18</td>
<td>8,271,129</td>
</tr>
<tr>
<td>1911/12</td>
<td>79</td>
<td>16</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>12,241,636</td>
</tr>
<tr>
<td>1915/16</td>
<td>85</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>12,854,880</td>
</tr>
<tr>
<td>1922/23</td>
<td>82</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>7</td>
<td>10,080,600</td>
</tr>
<tr>
<td>1927/28</td>
<td>95</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>16,458,040</td>
</tr>
<tr>
<td>1931/32</td>
<td>73</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>19</td>
<td>11,125,480</td>
</tr>
</tbody>
</table>

Source: India, Statistical Abstract for British India, 1895/96-1931/32. The large increase in imports from Java after 1905 resulted in a drop in price of Javanese sugar that accompanied a dramatic expansion of acreage and productivity of sugarcane as a plantation crop.
Inspector General of Agriculture, and was geared to the development of improved varieties for the entire country as a means of reducing sugar imports.

Groundnut improvement was effected in the 1890's prior to the Departmental reorganization. In 1905 the Palur Agricultural Station in South Arcot, a major groundnut production area, was established to monitor the crop and to encourage its extension. Palur was charged with developing labor-saving cultivation techniques so that groundnut could be extended to areas of short labor supply. Other aspects of the station's research were designed to combat any disease which threatened the crop and to provide alternate varieties in the event the dominate ones deteriorated.

Improved Cultivation Techniques

The Department took upon itself the development of improved tools and cultivation techniques. Few of such improvements were imported from the West, for European tools were often unsuited to Indian conditions. In the case of the iron plough it was found that Indian cultivators did not have strong enough draught cattle. Also, implements had to be repaired in the village which militated against sophisticated machines. In addition, tariffs upon the importation of equipment made it far too expensive for the cultivator to purchase European tools. Given these constraints, the Department planned to concentrate its efforts on the development of indigenous tools and techniques.
In conjunction with private firms, the Department helped to develop new tools. Massey and Co. and Burns and Co., two local European firms, produced light-weight iron ploughs which the Department demonstrated on its farms. The manufacture of the archimedian screw lift for irrigation was taken up by private firms in Tanjore and Trichinopoly. While the Department would introduce the use of the new equipment, it did not wish to supplant private industry in supplying rural areas. Consequently, the price of Department implements was higher than from private firms to allow the latters' entry into the business. As it happens, private firms did not enter the business to any great extent.

The Department also sought to spread indigenous technology. The seed drill, developed in Bellary for the sowing of cumbu and cotton, was introduced into Tinnevelly. Classes were given at various demonstration farms to teach the use of the drill in effort to supplant the common broadcast method. The advantage of the drill was that it made intercultivation easier and enhanced the growth of the crops. Although it took many years, the acreage under the drill rose from 70 acres in 1910 to 19,173 in 1919. The Tinnevelly ryot used the drill for the sowing of cumbu, but was reluctant to use it extensively for cotton.

Improvements were also directed to rice cultivation. Transplanting of paddy instead of broadcast was stressed. The advantages were in the amount of seed used and the crop yield. The Department calculated that they could save over
300,000,000 pounds of paddy worth Rs. 1,00,00,000 a year, if they could extend the transplant method throughout the Presidency. A major constraint to the spread of the method was the increased labor it demanded and the uncertainty of the season.

The improvement in cotton cultivation required more than merely strain selection. Once the pure strain was secured, the problem became one of maintaining its purity. Cotton cross-fertilized in the field to a greater extent than had been realized. The Department had to encourage ryots to grow fields of pure cotton. This was first attempted by offering a premium of 2 annas per acre of pure cotton. The incentive was insufficient. During the first year of the program, 1906, 13,000 acres in the Nandyal Valley in Kurnool District were claimed to be pure, only 2,400 (.54 percent of cotton acreage) were found to be so. During the next two years the Department did not bother to keep records and the scheme was quietly dropped in 1909. The Department next turned its efforts to encouraging special seed farms in order to maintain strain consistency. This direction proved to be successful until the late 1920's when cultivators began to mix their improved strains with the inferior pollachi variety.

Fertilizer: Increased crop output was largely dependent on the use of fertilizer. Although the Indian cultivator was generally criticized for using cattle manure as fuel rather
than as fertilizer, early research demonstrated that local products used as fertilizers, such as oil cakes, bonemeals, and fish guano, were rich in plant nutrients. Another useful fertilizer for certain crops was green manure which could be grown by the cultivators. Artificial manures, such as sulphate of ammonia, were too expensive and not well-known. Improved crop strains made increased demands on the soil which could only be met by the application of fertilizer.

The benefits of fertilizer application could only be realized if certain conditions were met. These were a stable crop price and low fertilizer cost. Oil cakes, bonemeal and guano were, however, export commodities of increasing importance. So long as they commanded high prices on the world market and their export was unrestricted, the use of indigenous fertilizer was prohibitively expensive for the average farmer. The bulk of India's export in these commodities came from the Madras Presidency which stood to gain the most through a cessation in trade.

The Madras Agricultural Department consistently requested, if not complete prohibition of the export of indigenous fertilizer, at least a tariff. The weight of interest in favor of the export was too strong. The trade was carried on by European firms, Parry, Ralli and a nascent Indian fishing industry. These firms claimed that although constraints on export might help the farmer, they would be disastrous to the fishing industry and the export trade. Moreover, the trade in manure was to Ceylon and the Straits
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Settlements where it was used on tea and rubber plantations. Although the agricultural officers regarded manures as property of the Presidency, the Government, in refusing to slow its export, clearly regarded it as property of the Empire.

The Department was left then with its efforts to develop green manure. Green manure was the product of leguminous or nitrogen-rich foliage which the ryot could grow as a catch crop to be plowed into the soil. As manure it was best for paddy, although the Department tried to develop types which would benefit other crops. The agricultural stations distributed green manure seeds and encouraged its use.

It mattered little what research developed if that information could not be dispersed throughout the agricultural population. The crucial feature of the Department's work was, then, demonstration and extension. The problems faced in this area were enormous and critical to the success of the program. The manner in which both the Government of Madras and the Department sought to mitigate the problems determined the effectiveness of demonstration.

Extension and Demonstration

The extension methods of the Department were, on balance, based upon persuasive techniques. Only in regards to pest and disease control and cotton purity did Government attempt to legislate improvements. At no time did the
Government dictate the type of crop to be sown. Methods of extension varied from year to year thus the following account details only the outstanding methods which had some measure of continuous use.

In order to disseminate the results of scientific investigation throughout the rural population and to chronicle the research of the Department, publications played a major role. Bulletins, leaflets and village calendars were produced on topics ranging from cultivation techniques to strain development and disease control. Although the publications were written in English and the major vernacular languages the masses of illiterate ryots were dependent upon village karnams or school teachers to read them. Agricultural officers realized that the best ways to reach the cultivator was through visual demonstration, preferably on his own land, through his own efforts.

The avenue through village demonstration was not without its shortcomings. A successful demonstration needed two plots of land: one grown by the cultivator and one by the Department. The immediate constraint was available land. The agricultural demonstrator could only work through the larger landowners who would, and could, risk a plot in experimentation. That in itself was difficult enough but it was compounded by the Department's perpetual lack of staffing. Demonstration plots had to be at least overseen, if not worked, by the agricultural demonstrator. The constraints imposed by the planting season meant that the
demonstrators were restricted to a very few plots within close proximity of one another. At the height of the plot program there were only 600 demonstration plots spread amongst millions of cultivators.\textsuperscript{51}

In addition to problems of field demonstration, the Department was not in a financial position to distribute seeds, fertilizers or scientific advice free of cost. The ryot was accustomed to buying his seed on credit, a practice which the Department was unwilling to adopt.\textsuperscript{52} Nor could the Department, at all times understaffed, provide the manpower to distribute and sell the goods itself. From the beginning, the Government of Madras urged the development of District Agricultural Association and close connections with the Co-operative Department, with the object of using these agencies for demonstration and distribution.\textsuperscript{54} Other means the Government urged were agricultural fairs and cattle shows.

The Department, initially willing to pursue any line of demonstration, formed a number of agricultural associations and encouraged agricultural fairs. They soon wished they had not. In following the advice of Government they formed associations in collaboration with large landholders. By 1907 these organizations were in a state of "suspended animation" due to the "general ignorance of practical agriculture which prevails among the educated classes which include many of the largest landowners," these men were rarely cultivators. The following year the Department
informed Government that farmers would not take advice from the amateurs who ran District Associations. The Agricultural shows fared no better. 55 Descriptive comments on various fairs and cattle shows ranged from "distinct failure" and "total waste" to "farcical". The shows rarely were geared to the demonstration of agricultural practices or products. Cattle shows were successful in showing improved breeds, especially in the Ongole tract, but the winners were usually breeds which belonged to rajahs, zamindars and vakils (lawyers). 56 It was simply another avenue for the influential to show their wares. Smaller farmers had no means to breed cattle to compete on this scale.

The Government also prodded the Department to work with the Co-operative Department for purposes of demonstration and distribution. The Co-operative Department, begun in 1904 for the purpose of developing agricultural credit societies, had a network of organizations which penetrated to the village level. The Societies were run by Indians and, theoretically, were to alleviate the chronic indebtedness of the agricultural population. Their leaders were typically village politicians who used the Societies more to shore up their positions than to relieve poverty or indebtedness. 57

At the first Provincial Co-operative Conference, one agricultural officer warned that work through Associations on any level would fail if run by the "wrong sort of men." His comments were pointed. Men who had only a "dilettante interest in their lands and whose time and attentions
were] engrossed in other money making activities" pre-
cominated in rural associations. Any attempt at agricultural
demonstrations or distribution by the leaders of these
associations would fail because they were distrusted by most
cultivators. Five years later the Agricultural Department
was firmer in its dislike of credit co-operatives. Agri-
cultural improvement was hampered by the poverty of the
tenants at will, yet, the Co-operative Department had done
nothing to supply cheap credit to this class of farmers
although it was ostensibly the reason for their existence.
Until the Co-operative Associations could fulfill this need,
the agricultural officers felt there was little ground for
interaction between them. This did not stop the Govern-
ment from pursuing this avenue relentlessly.

The irony of the position of the Agricultural Depart-
ment should not be overlooked. Agricultural improvement
was to help alleviate poverty yet, it was inhibited by the
poverty of the agriculturalists. Most of the developments
of the Department were too costly for the poorer cultivator.
Experimental stations and demonstration farms often sold
improved seed above the cost of common seed, and did not
accept credit. Even soil and fertilizer analysis by the
Agricultural Chemist cost a not insignificant amount. The
private enterprises which dealt with improved seeds and
fertilizers, catered to the richer farmers, for they too
did not extend credit. The District Associations, run and
patronized by the substantial landholders often did not
welcome the entry of the less well to do.

Legislation: In the area of pest and disease control the Department had one of its few experiences in legislating agricultural improvements. The Cambodia cotton strain was highly susceptible to boil worm infestation. The only hope for the eradication of the pest was to force the cultivator to uproot his plants for three months of the year. The time chosen for the uprooting fell from August to September, overlapping the period of the second harvest. The Madras Government passed the Agricultural Pest and Disease Act of 1919 which demanded the uprooting of the Cambodia cotton plants. Yearly, revenue inspectors, village headmen, accountants and all available agricultural officers were brought in to enforce the Act. Resistance from the cultivators was immense for they stood to lose a great deal of the crop's second harvest. The Act failed to eradicate the bollworm so long as the ryot could obtain a high price for his cotton, he was unwilling to destroy his plants early in the season. The legislation was more successful in combating the fungus disease of the palmyra and coconut insects.

Cotton improvement also came under all India legislation. The Cotton Transport Act III of 1923 was brought into force to protect the purity of the Northern and Westerns of the Ceded Districts, the Tiruppur Cambodia and the Tinnevellies. The Act restricted the transport of cotton lint from one tract to another except under special
license. Again, it was an Act difficult to enforce, for the Presidency could not monitor all avenues of transport.

The interest of Government in commercial cropping, especially cotton, is apparent in their legislation. Adulteration of all agricultural commodities was common but the problem was more one of marketing and trade than cultivation practices. The cultivator received the same price for his crop regardless of the quality. Therefore, unless the yield promised by improved seed or cultivation techniques was substantially higher than common strains and practices, there was little incentive to adopt that which the Department advocated. Government did not see fit to regulate trade and market practices partly because of the difficulties such regulations entailed and partly because such regulation was deemed to be beyond the scope of Government activities. Markets were controlled by municipal and local boards, thus Government regulation of them was an infringement of their rights. Too, the Royal Commission of Agriculture in recommending local Governments take up regulated markets, was fully aware that those who would manage the markets would not be representative of the cultivators who were supposed to benefit from the regulation. 64

Many of the problems of adoption and improvement would be obviated by the expansion of education. The spread of education, particularly scientific education, it was thought, would make cultivators more readily adopt the fruits of Government research.
The Department of Agriculture also promoted the extension of agricultural education. Efforts were made to establish college degree courses and rural education which would emphasize agriculture. In terms of devising a cohesive program, the college course at Coimbatore was relatively successful.

In 1906 building began in Coimbatore for an agricultural college and research institute. Three scientific experts, including a chemist and botanist, were hired to teach practical and theoretical courses and to staff the research institute. The opening of the College in July 1908 was hailed as marking the "beginning of large improvement to be effected in agriculture of real advancement and progress in the conditions of the millions behind the plough." Coimbatore was prepared to admit up to a total of 60 students of "as many castes as possible." There was no tuition or lodging fee. Admission requirements consisted of a matriculation certificate, which could be waived if members of the agricultural classes possessed sufficient English. The guiding principle of the college was "that students likely to be connected with the land as owners, or preferably as actual cultivators, were preferred." As no Government employment was to be promised, the college aimed to teach students enough practical knowledge of ordinary agricultural operations to command the confidence of
the cultivators when they returned to their lands.\textsuperscript{69}

The College ran into immediate problems. Of the twenty students first enrolled, only half were sons of landowners whose apparent object was to learn to "better manage their estates."\textsuperscript{70} The rest had no connection with the land. In terms of major agricultural communities in Madras caste breakdown of the first class is interesting.\textsuperscript{71}

<table>
<thead>
<tr>
<th>Caste</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Christians</td>
<td>1</td>
</tr>
<tr>
<td>Mahommedan</td>
<td>1</td>
</tr>
<tr>
<td>Brahmans</td>
<td>11</td>
</tr>
<tr>
<td>Kshatriya</td>
<td>1</td>
</tr>
<tr>
<td>Vellala</td>
<td>1</td>
</tr>
<tr>
<td>Other, Non-Brahman</td>
<td>3</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

In Madras only the rice-growing district of Tanjore had significant numbers of Brahmans connected to the land. Too, the much lauded cultivating caste, the Vellalas, had only one representative. The caste breakdown in agricultural education resembled that in the regular arts colleges, where Brahman numbered at least half the enrolled students.\textsuperscript{72}

The Department discovered that few of the sons of landowners had any interest in scientific agriculture and so altered the program of the college to better meet the perceived needs of that community. By 1913 the program consisted of a four year course, as opposed to the previous three years. The first two years of the new system were practical agriculture and thought to be sufficient to train good farm managers and cultivators. The second two years were purely scientific and could be pursued by those students
who wished to enter Government service. 73

There was apparent confusion over the purpose of the Agricultural College. The Government of India, in planning the colleges, had delighted in the thought that they would open a new field of employment to Indians, 74 ie., staffing the Agricultural Departments. The Government of Madras, under the Governorship of Lawley, contrarily felt that students desiring to enter Government service was exactly what had been wrong with previous attempts at agricultural education. 75 But, in 1914, the Department complained that too few students wished to enter the Department. Of the twelve who graduated in 1913, only six were willing to join.76 Four years later the Department was complaining "there is little demand as yet for agricultural education for its own sake, and the agricultural college is looked on as a cheap way into Government service, if the main way, through the University, fails."77

The educational policy was altered in response to political and administrative pressures, rather than agricultural needs. During the first years of the College, the Government of Madras felt its aims to be agricultural education for the "sake of education.": education without the promise of Government employment. Yet, the configuration of the student body reflected the traditional Brahman predominance in education. Agricultural groups were not interested in education; the Brahmans who came for education with a view to Government service were, by and large, uninterested in
agriculture. In 1912-13 when the Department was particularly short-staffed, this indifference of the students came to be an annoyance, especially as the Public Services Commission recommended that at least half the Services should be Indian. By 1917 it was clear that the majority of students were interested in Government employment, but not in the agricultural department.

In 1919 the Principal of Coimbatore, R.C. Wood, complained that the quality of the students had deteriorated. Political pressure had forced the Department to admit more non-Brahmans. Wood felt that the result of attempting to recruit students from every possible district and caste had lead to a decrease in the quality. To fulfill all the demands they had recruited too many students and had overburdened the teaching staff.\(^7\) Too, they were still attracting only the educated classes for whom agriculture was not a popular profession. His feeling was that the Department and Government had to offer materially increased employment prospects to attract the right kind of student. Government decided to offer scholarships of Rs. 25 per mensem to twenty students as "encouragement...to induce students from the educated classes to take to an agricultural career."\(^7\) For the time being both the Government and the Department, in their efforts to adjust to the political atmosphere, ignored their aims of education "for its own sake".

Agricultural education in rural schools also received the attention of the Government. Again, this was one of
Curzon's projects. He felt the aim of rural agricultural education was to enable students "to be observers, thinkers, experimenters, to protect them in their business transactions with the landlord and the merchant." The problem lay in convincing the Department of Education of the efficacy of any type of agricultural training.

The Government of India laid down three principles in regard to rural agricultural education. It was felt that agriculture should not be taught as a separate subject, but used as illustrative in all other subjects. Village maps, records and instruction in simple commercial accounts should be taught in all schools. Finally, each school should make agriculture an optional subject. The Director of Education in Madras responded to these principles somewhat negatively:

I have never seen a village map or a land record (he wrote) and do not know their peculiarities. But I imagine that everyone who has been taught the nature of a map will have no great difficulty understanding any particular map. Geography is taught as an optional subject...all trained teachers understand the nature of maps and are generally able to draw them very well. As to Land Records, boys are taught to read and they may apply the art of reading to the land records if they have nothing better to read, if however, it is meant that they should be instructed in the meaning of land revenue terms and to understand the legal effects of deeds dealing with various interests in the land...I doubt whether it is desirable to turn every ryot into a lawyer.

Although the Imperial Inspector General of Agriculture wished to make compulsory all the Director of Education had derided,
the most that could be done was to instruct schools which had competent teachers in science to instruct the more promising students. It is doubtful that even this sufficed. Not only was agricultural education under the purview of the Department of Education, it was controlled by Local Boards who, in the words of one Collector, "represented the monied, educated, landowning classes" who were not interested in primary education "for it makes Labour more difficult to handle." Once rebuffed, the Department of Agriculture was not to involve itself in the question of rural education for another fifteen years.

Summary

Government's commitment to change must be questioned simply on cursory view of the workings of the Department of Agriculture. The basic constraint of the Department was that of finance. The miniscule budget of the Department precluded the possibility of adequate staffing and negated her ability to successfully penetrate the agricultural sector. The overburdened staff was then forced to expend its efforts encouraging the formation of District Agricultural Associations, a tactic which had more political relevance than economic.

Policies pursued by the Department in the realm of extension and sale of improvements by their very structure would guarantee that only a very few would benefit. Research on only the profitable crops meant that the Department did
not involve itself with the subsistence farmer, or probably even the land revenue payer of less than Rs. 10. Extension programs were constrained by remnants of *laissez-faire* principles; they had to be remunerative or at least to help pay their own way. Departmental innovations such as improved seeds and machinery were deliberately priced high in order to encourage private enterprise to enter the market. The Government seemed to be insuring that she would only achieve minimal success.
NOTES 115

1 India, Revenue and Agriculture, Summary of the Administration of Lord Curzon of Kedleston, Viceroy and Governor-General of India in the Department of Revenue and Agriculture (Simla: 1905) p. 6.

2 India, Statement Exhibiting the Moral and Material Progress and Condition of India, 1907/08, p. 85.

3 Ibid.


7 Ernle, pp. 362, 369.

8 Orwin, pp. 373-374.

9 MDA. Report, 1905/06, p. 25. See also, Madras, Department of Agriculture, A Popular Account of the Work of the Madras Department of Agriculture (Madras: 1922).

10 The Presidency was divided into a Northern Circle, mostly Telugu speaking area, and the Southern Circle, Tamil area and West Coast Districts.


12 IRA, Proceedings, File No. 16 of 1905. Despatch to the Secretary of State for India, 12 January 1905. See also File No. 81 of 1905 for the collection of correspondence between the Government of India and the Provinces.

13 Ibid., File No. 176 of 1914.

14 Madras Mail, April 11, 1922, p. 10.


16 India, Revenue and Statistics, File No. 4648 of 1919. Government of India (Finance) to Secretary of State 10 July 1919.

17 Great Britain, Royal Commission on Public Services in India, Evidence on Agricultural Services. See evidence of Barber, Government Botanist. Also, IRA, Proceedings, File


19 These principles were stated only indirectly in reports on seed farms, district agricultural associations and collaboration with private companies.


21 Ibid., 1909/10.

22 Royal Commission on Agriculture in India, Vol. 3, Evidence of R.D. Anstead, p. 64.

23 Popular Account, p. 32.

24 Accounts of cotton development can be found in every report of the Department and the Cotton Commission Report of 1919.

25 Great Britain, Parliamentary Papers, Report from the Select Committee on East India (Public Works), 1878. Discussions on the possibilities of irrigated cotton comprise a large part of the evidence presented by Sir Arthur Cotton and George Campbell to the Committee.


27 IRA, Proceedings, File No. 204 of 1905. This file includes a memorial from the the Cotton Growers Association and the Reply of the Government of India and Board of Agriculture. Sly, the Inspector General of Agriculture informs the Association that the reason they cannot make the separate cotton department was financial.

28 The Economist (London) June 10, 1899, p. 833. The paper alleges that the cess was adopted to give preference to Mauritian sugar rather than to encourage Indian sugar industries.

29 Madras, Notes on the Administration of His Excellency the Honourable Sir Arthur Lawley, Governor of Madras, 1906-1911 (Madras: 1912) p. 64. See also the MDA. Report for accounts of the Samaldota Station and the Indian Sugar Commission Report 1919.

30 MDA. Report, 1912/13, p. 8.

32 *MDA, Report*, 1904/05 p. 2; 1907/08, p. 5.


36 *India, Board of Agriculture, 1910*, pp. 56-57.


43 A.P. Cliff, "The Relations Between the Departments of Agriculture and Cooperation", in *The Agricultural Journal of India*. (March, 1929) pp. 104-114.

44 *MDD, G.O. No. 168 Development* 20 September 1924.

45 After years of requesting the prohibition of manures in annual reports and conferences, the Agricultural officers publicized their views in an agricultural journal which was reviewed in the *Madras Mail*, June 6, 1922.

46 *MDD, G.O. No. 168 Development*, 20 September 1924.


48 Vera Anstey, pp. 170-173; *MDA, Report*. In each year the annual report included a section on green manure experiments.

49 *Great Britain, Royal Commission on Public Services, Evidence on Agricultural Services*, p. 264.
50 Rao Bahadur D. Ananda Rao, *Results of Demonstrations of Agricultural Improvements in the Madras Circle carried out in 1924-1927* (Madras: 1929). The author recounts the difficulty of getting substantial ryots to donate plots for demonstration. In one district the Department had to use the land of the Raja of Panagal, unusual in that they usually acquired the land of an owner who at least lived in the village, if not actually cultivating his own land.


52 Madras, Board of Revenue, *Proceedings*, No. 303, 9 August 1906.

53 Government's interest in District Agricultural Associations dated from 1872, See Chapter II.


55 Ibid., 1909/10 p. 11.


57 Robert, *Credit Cooperatives*, passim.


60 Madras, Department of Agriculture, *Village Calendar*, (yearly). Each calendar contained a list of services of the agricultural chemist. These consisted of soil and fertilizer analysis which cost from Rs. 5 to Rs. 30 although a discount was possible, provided the cultivator was certified by a Deputy Director of Agriculture, of which there were never more than eight in the Presidency. Improved seeds sold at up to 100 percent above the market rate.


62 G.O. No. 817 Development, 26 April 1924. Indian cotton growers made a representation at Coimbatore, February 23, 1924. The representation asked for a halt to the enforcement of the act, the request was denied.


65 MD A, Report, 1907/08, p. 2.
67 MD A, Report, 1907/08, p. 4.
68 Ibid., p. 10.
69 Note on the Administration of Lawly, p. 63.
70 MD A, Report, 1910/1911, p. 11.
71 Ibid., 1908/09, p. 9.
73 MD A, Report, 1911/12, p. 3; 1913/14, pp. 3-4.
74 IRA, Proceedings, No. 44 of November 1905.
75 Note on the Administration of Lawly, p. 63.
76 MRA, Annual, 1913/14, p. 3.
77 Ibid., 1917/18, p. 5.
78 Madras, Revenue (Special), Proceedings. G.O. No. 1796, 24 September 1919.
80 IRA, Administration of Lord Curzon, p. 9.
82 MD A, Report, 1900/01, p. 10; 1902/03, p. 6.
V. THE IMPACT OF THE DEPARTMENT

This chapter will examine the economic and institutional effects of the Department of Agriculture in Madras as they pertain to the development of agriculture and the distribution of benefits. The immediate effects of agricultural improvement, as measured in acreage and yield, will be analyzed. Socio-economic effects are more difficult to assess. It will be seen that the middle to rich farmer and not the laborer benefited from the Department's activities. Also, the Government's commitment to economic transformation or the exploitation of India for British industrial enterprise will be examined.

The long range goal of the Government agricultural development program was to trigger an economic transformation. Both Curzon and his Finance Member, Edward Law, anticipated that "the result of the various measures [of agricultural development] will be a gradual improvement in the material prosperity of the classes directly dependent on the land."¹ They also sought to "encourage industries which little by little will relieve the congested fields of agriculture, [to] develop the indigenous resources of India and gradually make that country more and more self-providing in the future."² The immediate goals of the Department of Agriculture were more modest. The Department sought an increase in agricultural productivity and quality through the introduction of new seeds and cultivation methods. She also
sought to supply India with the scientific and organizational infrastructure for long term agricultural development.

The manner in which the Department pursued her course of development indicated a reluctance to interfere too deeply in the agricultural process. The role was one of enablement not coercion, nor even much encouragement. The Department presented its findings to landlords and substantial cultivators but offered few incentives to encourage their adoption. Government on its part appeared to be more interested in the pursuit of politically influential elites through the District Agricultural Associations rather than in setting or meeting any technical or economic goals.

The commitment to agricultural development, measured in terms of funding and staff was minimal. At no time did the Government of Madras spend as much as one percent of her total budget on agriculture. (Table IV B) 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 41,000 rural families.\(^3\) Neither in terms of expenditure nor staffing did the Government evidence a strong commitment to encouraging agricultural development.

The modesty of this commitment was also evidenced in extension work which was confined to demonstration. Demonstration plots, an avenue which the Department saw as most promising, were the most prominent aspect of the Department's
work in the field. These plots, ideally ten acres, were to be farmed by agricultural demonstrators in an effort to convince cultivators of the feasibility of using departmental methods. The plots, however, were undertaken by the Department at the cultivators' risk. Until 1927 the Department refused to guarantee the cultivators against crop failure on the demonstration plot on his land. It was no wonder that cultivators were reluctant to submit their fields to demonstration, although this was theoretically the most persuasive technique the Department could offer.

The Government felt the most advantageous method of extension was through the development of agricultural associations. On Government urging the Department sought out the influential farmers to organize District Agricultural Associations for demonstration and distribution of improved seeds. But, the Government's designation of "influential" was often formed by political exigencies and not farming abilities. District Agricultural Associations generally were run by the more politically minded who often had little interest in agricultural improvement and consequently had little impact.

The sale of improved seeds and implements was also an area the Department approached hesitantly. Improved seeds and implements were sold by the Department at higher than market rates. This was to stimulate private enterprises to enter the market. Few were willing to do so. Parry and its subsidiary, the East India Distillery Co., was successful in
promoting sugarcane in South Arcot. This company, along with Ralli and Volkart, was also instrumental in increasing the acreage under groundnut. Primarily export firms, these companies were more than willing to aid the extension and quality of crops which were of immediate economic significance to themselves. They were not eager to enter less lucrative, but important, fields, such as improved agricultural implements, which, due to low demand, promised little profit.

In spite of the fact that Government extension efforts seem half-hearted and indirect, there were some measurable effects of the Department's work. There were slight shifts in the total acreage between 1905-1929. Total acreage under food cropping fell from 83 percent of total area to 77 percent (Table V A). A more pronounced trend can be seen within individual crop patterns. Using 1896/97 - 1900/01 as an average base period, major food grains, with the exception of rice, declined in acreage, by 1931-36, from 13 percent in the case of cholam to 17 percent in the case of ragi and cumbu. (Table V B) At the same time groundnut acreage more than doubled and cotton rose by 44 percent. The significance of these trends is two fold. Commercial crops brought in capital and, in the case of cotton also fed the growing mill industry. On the other hand, the rise in rice acreage vis a vis the less desirable food grains (millets) meant that less acreage was devoted to food crops consumed by the poor. Rice was notably a wealthy man's food. Its
### TABLE V A

**CROP ACREAGE AS PERCENTAGE OF TOTAL CULTIVATED ACREAGE IN MADRAS, 1904-1930**

<table>
<thead>
<tr>
<th>Food Crops</th>
<th>1904/05</th>
<th>1909/10</th>
<th>1914/15</th>
<th>1919/20</th>
<th>1924/25</th>
<th>1929/30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>25</td>
<td>28</td>
<td>28</td>
<td>30</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Cholam</td>
<td>17</td>
<td>14</td>
<td>13</td>
<td>14</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Cumbu</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Ragi</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Others (including pulses)</td>
<td>21</td>
<td>19</td>
<td>22</td>
<td>18</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>78</strong></td>
<td><strong>78</strong></td>
<td><strong>22</strong></td>
<td><strong>18</strong></td>
<td><strong>19</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td>Condiments/Spices</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Orchards</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Sugar</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
</tr>
<tr>
<td><strong>Total Food</strong></td>
<td><strong>83</strong></td>
<td><strong>83</strong></td>
<td><strong>83</strong></td>
<td><strong>82</strong></td>
<td><strong>79</strong></td>
<td><strong>77</strong></td>
</tr>
<tr>
<td><strong>Non Food</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil Seeds:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Til &amp; Gingelly</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Groundnut</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>7</strong></td>
<td><strong>7</strong></td>
<td><strong>9</strong></td>
<td><strong>7</strong></td>
<td><strong>10</strong></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td>Cotton</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Drugs/Narcotics</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fodder</td>
<td>-*</td>
<td>-*</td>
<td>-*</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>-*</td>
<td>1</td>
<td>-*</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Non Food</strong></td>
<td><strong>15</strong></td>
<td><strong>14</strong></td>
<td><strong>14</strong></td>
<td><strong>15</strong></td>
<td><strong>20</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

*Source: Madras, Season and Crop Reports, 1904/05-1930/31.*

* (-) indicates a percentage less than .51 percent.*
### TABLE V B

**INDEX OF FIVE YEAR AVERAGE TOTAL ACREAGE OF SELECTED CROPS IN MADRAS, 1901/02-1905/06 to 1931/32-1935/36.**

<table>
<thead>
<tr>
<th>Period</th>
<th>Acreage</th>
<th>Acreage</th>
<th>Acreage</th>
<th>Acreage</th>
<th>Acreage</th>
<th>Acreage</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901/02-1905/06</td>
<td>104</td>
<td>101</td>
<td>111</td>
<td>105</td>
<td>272</td>
<td>89</td>
<td>114</td>
</tr>
<tr>
<td>1906/07-1910/11</td>
<td>110</td>
<td>95</td>
<td>114</td>
<td>102</td>
<td>462</td>
<td>83</td>
<td>123</td>
</tr>
<tr>
<td>1911/12-1915/16</td>
<td>114</td>
<td>97</td>
<td>106</td>
<td>99</td>
<td>813</td>
<td>82</td>
<td>137</td>
</tr>
<tr>
<td>1916/17-1920/21</td>
<td>119</td>
<td>92</td>
<td>97</td>
<td>97</td>
<td>893</td>
<td>100</td>
<td>144</td>
</tr>
<tr>
<td>1921/22-1925/26</td>
<td>117</td>
<td>90</td>
<td>97</td>
<td>98</td>
<td>1222</td>
<td>107</td>
<td>144</td>
</tr>
<tr>
<td>1926/27-1930/31</td>
<td>118</td>
<td>87</td>
<td>92</td>
<td>89</td>
<td>2115</td>
<td>93</td>
<td>130</td>
</tr>
<tr>
<td>1931/32-1935/36</td>
<td>121</td>
<td>87</td>
<td>83</td>
<td>83</td>
<td>1900</td>
<td>110</td>
<td>130</td>
</tr>
</tbody>
</table>


*1896/97-1900/01 = 100*
price in normal years was double that of cholam, cumbu and ragi. The net result was that those who could afford to grow commercial crops, could afford to buy rice. Also, the growing cotton industry increased the demand for rice since it spawned urban factory workers whose salaries enabled them to buy the superior food grain.  

In addition to acreage, the records of yield reveal some important information. George Blyn, who has carried out extensive analysis of yield patterns, discovered that Madras had an annual average rate of yield increase of .35 percent for food grains and 1.25 percent for non-food grains, between the years 1901 - 1941. Rice set the upward trend for food grain yield increase until 1911 when the trend leveled due to a decreasing yield per acre in cholam and cumbu. Cotton maintained its increase which gave the total crop yield per acre a positive tone until 1931.

The slight upward trend in rice and cotton yields was partially the product of improved seeds and cultivation techniques introduced by the Department. In cotton, the influence of improved varieties is noticeable. In 1921/22, 385,000 acres, or 22 percent of total acreage was under improved varieties. (Table V C) In 1930/31 only 292,478 acres, or 2.5 percent of total Madras paddy was under improved seeds. There is a difficulty, however, in working from the data of the 1920's and 1930's. The reported area under improved variety appears to deal only with varieties developed by the Department, such as Company Cottons, Hagari
<table>
<thead>
<tr>
<th>Year</th>
<th>Paddy</th>
<th>Cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) Total acreage</td>
<td>(b) Improved variety</td>
</tr>
<tr>
<td>1920/21</td>
<td>11,096,000</td>
<td>6,000</td>
</tr>
<tr>
<td>1921/22</td>
<td>11,280,000</td>
<td>29,000</td>
</tr>
<tr>
<td>1922/23</td>
<td>11,286,000</td>
<td>178,172</td>
</tr>
<tr>
<td>1923/24</td>
<td>10,518,000</td>
<td>166,169</td>
</tr>
<tr>
<td>1924/25</td>
<td>10,870,000</td>
<td>105,143</td>
</tr>
<tr>
<td>1925/26</td>
<td>11,323,000</td>
<td>122,182</td>
</tr>
<tr>
<td>1926/27</td>
<td>10,842,000</td>
<td>145,787</td>
</tr>
<tr>
<td>1927/28</td>
<td>10,930,000</td>
<td>102,457</td>
</tr>
<tr>
<td>1928/29</td>
<td>11,019,000</td>
<td>215,931</td>
</tr>
<tr>
<td>1929/30</td>
<td>11,262,000</td>
<td>245,326</td>
</tr>
<tr>
<td>1930/31</td>
<td>11,678,000</td>
<td>292,478</td>
</tr>
</tbody>
</table>

and Nandyal varieties, and the rice varieties of Company I, II, III and G.E.B. 24. The available data do not refer to the Cambodia cotton introduced in 1905 (which covered 14 percent of total cotton acreage) nor to the pure strains of both paddy and cotton which the Department isolated prior to World War I. Neither do the figures refer to the groundnut variety brought in by the Department in the 1890's. That variety, the Mauritian, spread throughout the Presidency and commanded the bulk of groundnut acreage. 9

In regard to the effect of improved cultivation techniques upon yield, the evidence is weak, but what does exist points to the effect being strongest on the cultivation of paddy. The single transplant method, or economic transplantation, was advocated only for those areas with a secure supply of water. By the Department's measure, 19 percent of area possible for economic transplantation was under that method in 1922. By 1933/34 the districts of North and South Arcot, Chingleput and Chittor had a combined total of 34 percent of total paddy acreage under the transplant method, as compared to 20 percent in 1922. 10 In Tinnevelly, where the seed drill was encouraged for cotton, only 7 percent of the total acreage in 1919 was cultivated by the method. 11 Thus, it would appear that for rice the efforts of the Department in spreading improved cultivation techniques were relatively successful.

With the exception of rice the crops to which the Department devoted its attention were commercial crops:
groundnuts, cotton and sugarcane. The area under these crops did indeed increase in this period as we have seen. With the exception of sugarcane, an import substitute for domestic consumption, the other commercial crops were export crops. Their high cash value was one of the reasons which the Department had concentrated on them first, as they were seen to aid in gaining the confidence of the cultivators. The trade in these crops, although dominated by British export firms, was not directed to the British Empire. The trade in groundnuts was dominated by France while the export of raw cotton went primarily to Japan. (Table V D) Raw cotton was also feeding the indigenous cotton industry. India's production of sugarcane was not able to offset cheaper Javanese imports until the Government imposed a protective tariff in 1931.

The increased acreage in rice and cotton did have a significant impact on indigenous industry of Madras. The most striking result was the growth of the cotton industry. Cotton factories for spinning and weaving grew from 19 in 1921 to 29 in 1931. Cotton gins grew from 155 to 414 during the same period. Rice mills more than doubled, from 150 to 320.12 This growth of industry did not mean, however, a substantial amount of labor being diverted from agricultural pursuits to industrial. In 1931 the cotton industry in Madras employed only some 38,000 workers.13 In relation to the growth of population the diversion was minimal.

The effect of this slight rise in productivity and
# TABLE V D

COUNTRIES OF DESTINATION AS PERCENTAGE OF TOTAL EXPORTS OF GROUNDNUTS AND RAW COTTON
ALL-INDIA 1912/13-1927/28

<table>
<thead>
<tr>
<th>Groundnuts</th>
<th>1912/13</th>
<th>1917/18</th>
<th>1922/23</th>
<th>1927/28</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>81</td>
<td>66</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>Belgium</td>
<td>7</td>
<td>17</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Italy</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Straits Settlements</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>41</td>
<td>4</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>10</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raw Cotton</th>
<th>1912/13</th>
<th>1917/18</th>
<th>1922/23</th>
<th>1927/28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>51</td>
<td>72</td>
<td>49</td>
<td>46</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4</td>
<td>14</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Germany</td>
<td>12</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>11</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Others</td>
<td>14</td>
<td>6</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

extension of improved cropping hit the rural population unevenly. With the exception of the Gounder community whose dominance on red soils led to their preeminence in Cambodia, cotton production and later the textile industry, there are few instances of spectacular growth in wealth of communities. It is difficult to assess the distribution of benefits in the cultivating community. However, the structure of the Department's extension service suggests that the gains to be made were concentrated on a certain class of farmer. This, it is suggested, was the "middle farmer". The cultivator who owned an "economic holding", yet still cultivated all or part of it. He had to be fairly well off, for the improved seeds and techniques advocated by the Department entailed slightly higher cultivation costs. In addition, crops such as groundnut and sugarcane were a sign of "easy circumstance".

The benefits do not appear to have filtered down to the laboring classes at all. The Governor of Madras, Goschen, claimed that the bulk of the rural population lived "in the narrow margin between bare necessity and mere existence." Sir Chatterton, the Director of Industries, believed that while half the population had seen substantial material progress, "the lower half had seen no difference in their level of living." Detailed and consistent information on wages of agricultural labor is difficult to compile but K.K. Ghose, who has studied the condition of agricultural labor in India found that the real wage of the Madras laborer was
fairly stagnant during the period 1916 to 1929.\textsuperscript{19}

<table>
<thead>
<tr>
<th>Year</th>
<th>1916</th>
<th>1919</th>
<th>1921</th>
<th>1924</th>
<th>1926</th>
<th>1929</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real wage index in Madras</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1916</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1919</td>
<td>83.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1924</td>
<td>78.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1926</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1929</td>
<td>98.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thus it must be assumed that the Governor of Madras and the Director of Industries accurately represented the situation of the laborer. Labor which went to the cities to work in industry found their wages slightly higher and consequently the move to the city was seen by some to be a move up the ladder of well being.

The Department's commitment to the development of an institutional infrastructure was best exemplified by the Coimbatore Agricultural College and Research Station and the network of experimental stations spread over the Presidencies. The College supplied all the officers of the Department, although it did not seem to be able to attract many students who wished simply to become better cultivators. The Research Station and the allied experimental farms were producing, by the 1920's superior seed strains developed for agricultural conditions found in the Southern Presidency.\textsuperscript{20} The technical aspect of the Department's work was the most outstanding achievement of the Department.

Summary

The Department of Agriculture did not have dramatic success in developing Madras agriculture. The policies
which were designed to encourage private enterprise and rural associations guaranteed however that the modest gains would be made by only a small group of cultivators. Significantly, since the adoption of an agricultural development policy was in large measure a response to poverty, the activities of the Department had no measurable impact on the "really poor", the agricultural laborers.

The two subsidiary goals of Government, the encouragement of agriculture based industry and the development of an institutional infrastructure, seem to have been partially fulfilled. The cotton industry of Southern India was based on the extensive cotton acreage in that area. Madras, indeed all of India, was well prepared to continue scientific agricultural development without becoming dependent on the resources of the Mother Country provided Government directed ample funds to allow the infrastructure, experimental farms, research extension and education programs, to function.
NOTES


2The Times (London) 21 July 1904. Curzon's speech at Guildford.

3This figure is based on the 7,408,000 rural families tabulated by the 1921 Census of India, and used by the Royal Commission on Agriculture. p. 447.

4MRA Annual (1927/28).

5W. Francis South Arcot District Gazetteer (1906) pp. 118-119.

6Ibid., With the exception of rice growing districts, notably Kistna, Godavari, and Tanjore, Rice was consumed primarily by Brahmans and the wealthy.

7Great Britain. Royal Commission of Indian Labour. Report. (1931) The factory worker's salary was 7 to 11 annas a day, compared to approximately 4 annas per day for an agricultural laborer. The urban demand for rice during World War I is another indication of the growing consumption of that commodity. See Madras. Administration Reports of the Inspector-General of Police. Annual. for the years 1918-1920 during which time Madras experienced numerous grain riots in urban areas. The importation of rice to these areas mitigated the unrest.


9Watt P. 73

10Madras. A Popular Account of the Agricultural Department (Madras: 1922) pp. 80-111. Averages are calculated from the reports of circles and districts. for 1933/34, see MRA Annual. 1933/34.


12India. Statistical Abstract for British India (1911-1931).

13Ibid., 1931/32.

14David Arnold. "The Gounders and the Congress: Political Recruitment in South India, 1920-1937", South Asia,
15 The definition of the "middle farmer" differs from the conventional which I find unworkable in view of its emphasis on the middle farmer consuming most of his own production and employing family labor almost exclusively. (see Eric Stokes "The Return of the Peasant" in South Asia (December, 1976) pp. 96-111.) Investigations on farming practices indicate rather, that the middle farmer sowed at least half his acreage with commercial crops. (Madras Provincial Banking Inquiry Committee. Report of the Investigators.) Also, given the amount of landless labor, and the very small proportion of rich farmers (over 20 acres) it is illogical to assume the middle farmer hired no labor, although it is doubtful that he maintained permanent labor. My definition is then of a farmer who owns or controls 5-20 acres, an economic holding depending on the ecologic region. His holding enabled him to supply his own needs and to participate in the market. Neither he nor his family would hire out as day labor, rather he would hire labor for the sowing and harvest seasons. He was, more likely than not, a member of rural associations, credit co-operatives. It is doubtful that many middle farmers controlled rural associations which were usually controlled by the rich farmers, and in some cases by non-cultivating rural leaders. (Madras Provincial Banking. Reports. pp. 135, 212, 247.) This was the farmer to whom the Department addressed their activities.

16 Watt. quoting Morrison, Director of Agriculture, Bombay. p. 77.


19 Kamal Kumar Ghose. Agricultural Labourers in India (Calcutta: Indian Publications. 1969.) pp. 202-203. The calculation of "real" wages is a difficult matter in the Indian context. The manner in which Ghose seems to have calculated it is simply in terms of the purchasing power of the monetary wage. This necessarily leaves out items such as gifts of clothing or food which may or may not have been given to the laborers. See Dharma Kumar, Land and Caste, for a discussion of means of calculating "real" wages.

20 I.R.A. Report on Introduction. see the annual reports on the discoveries of the various research stations. By 1927 Madras had 18 experimental stations throughout the Presidency, by 1937 there were close to 30.
VI. THE DEPARTMENT UNDER DYARCHY

In 1919 the Montagu-Chelmsford Reforms introduced a change in colonial administration. While the British administrative officials continued to control the military and justice functions, some public works and all public institutions became the responsibility of Indian elected officials. The subjects transferred to Indian responsibility included, among others, agriculture. With this transfer, one might have expected Indian ministers to be more concerned with problems of economic development and to devote more attention, particularly financial, to this area. Significantly, this does not happen to the Department of Agriculture. The older constraints of the colonial structure were now confounded by new constraints imposed by the political aspects of dyarchy. A change in agricultural policy would have provided few political benefits for Indian ministers, but could incur many liabilities. Hence there was no change in agricultural policy.

Political Reform and Agricultural Policy

The Montagu-Chelmsford Reforms of 1919 meant that elected Indian officials were to be charged with governmental functions, particularly those of "nation-building" significance. These subjects, called transferred subjects, were agriculture, industries, local self-government, education and co-operatives. A limited electorate of revenue and
income tax payers (amounting to 3 percent of the population) was to elect a Legislative Council, from which the Governor would form a ministry. Although finances were still largely under the control of the Governor, Indians were to have a greater voice in the economic development of the Provinces.

At this time Indian opinion had shifted away from economic concerns (never very strong) to political concerns. In Madras this took the form of increasing party advantage and individual power rather than policy formation. The Justice Party, which held the Madras Ministry almost exclusively from 1920-1936 was based upon the efforts of the non-Brahman community to offset the dominance of Brahmans in administration and education. Justicites were a conglomeration of big-estate owners, landlords, businessmen and lawyers interested less in the broad aims or the fine points of economic development than they were in furthering their political ambitions. To the extent that they took an interest in agriculture it was to preserve the existing system of benefits.

When the Legislative Council did discuss agriculture, during the budget debates, they demanded reduced expenditure. In an ironic switch of position, The Minister for Development (which included agriculture) often debated with other ministers of his own party over the need for increased expenditure. K.V. Reddi Naidu, the Minister of Development, was frequently in the position of encouraging both his Party
members and the rest of the Legislative Council to spend more money on agriculture. According to K.V. Reddi Naidu, the U.S.A. spent the equivalent of Rs. 1,681 per 1,000 people, Japan, Rs. 216, India, Rs. 33; while Madras spent only Rs. 24. Members of the Legislative Council did not want money "to go for mere experimentation."³ The Minister for Education complained that "too much money was spent on agriculture, especially on farms in the Tamil Districs."⁴ Other members moved, and occasionally sustained, budget cuts disallowing staff increases, and bitterly complained about the hiring of scientific experts. The position of the Government encouraging increased expenditure in the face of popular opposition was an ironic switch from the political conditions at the turn of the century. Considering that Madras spent less than 1 percent of its total budget on agriculture, the primary industry of the Presidency, the agitation to reduce expenditure demonstrated a curious antipathy to the Department on the part of members of the Legislative Council. This antipathy was the product of the new political constraints introduced with dyarchy and the elective procedure.

The Madras Presidency, coming into the period of dyarchy, was, as usual, under severe financial pressure. The Governor of Madras, Lord Willingdon, (1919-1924), had "so many things on the books...harbours, industries, forests, agriculture, everything screaming for development,"⁵ that he felt he could easily create a situation of bankruptcy in the
Presidency. This was partly a result of the financial settlement of the Montagu-Chelmsford Reforms, Madras had to give to the Government of India 348 lakh rupees immediately and thereafter to fund 17 percent of the Government of India's annual deficit. Willingdon's successor, Lord Goschen (1924-1929), found his "Government [had] little money to spend, and the Ministers [were] unable, owing to this financial stringency to develop a forward policy." 

The financial condition of the Madras Presidency undoubtedly hampered some efforts of the Justice Party but cannot provide the total explanation for their inaction. Legislation pertaining to increased expenditure on salaries for village officers, the creation of Andhra University, and more medical schools and colleges did pass the Council and receive the sanction of the Governor. These actions, the Governor reported, especially that of village officers pay increase, would not "have been made under a bureaucratic Government" for "steady pressure for the increase of the pay [of village officers] had been resisted for years prior to the Reforms." The Council did find ways to pass measures they felt necessary, however impossible to implement.

The Legislative Council was empowered to find new avenues of Government funding and to enhance some of those which already existed. But, the Council rejected two measures, the Ryotwari and Proprietary Estates Villages Services Acts, which would have provided additional revenues
to pay the village officers salaries. The increase in pay was later rescinded because the Council could find no politically feasible way of keeping their promise. But, while the Council rejected the authorization of village cesses, "they were prepared to pass...other financial measures, such as those meant to enhance certain fees and stamp duties." Overall, however, there was an "unwillingness ...to face the unpopularity of imposing new taxes." The Council was willing to pass indirect taxes and fees but unwilling to tax directly, they had quickly perceived the political dangers of demanding additional revenues. Willingdon's fear that the Council would not take the necessary steps to act on "important issues such as...agriculture, for fear of being pushed out [of office]" was fulfilled.

A common complaint heard by the Royal Commission of Agriculture was that agriculture was neglected by the Indian Ministries. One witness observed that agriculture was ignored because "the tendency is to look at party prospects rather than the intrinsic needs of a particular line." The witness believed money "was allocated to things which appeal to the public imagination." rather than the good of a more general public. Indeed another arts college and more medical schools in a Presidency which did not have schools in every village was definite evidence of the priority of the middle class or urban interests, over those of the rural poor. Linlithgow, the chairman of the Royal Commission
distrusted the evidence given him by many Indian officials because the "committees of various legislatures...are mostly townsmen and their interests are purely parliamentary."^{13}

It was true that the Council in Madras was, by and large, not representative of rural cultivating interests. The franchise was restricted to 3 percent of the total population and, in rural areas, was based on the payment of over Rs. 10 in land revenue. The professional breakdown of the first three Councils is illuminating.

<table>
<thead>
<tr>
<th>Members of the Madras Legislative Council</th>
<th>1920</th>
<th>1923</th>
<th>1926</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawyers</td>
<td>48</td>
<td>43</td>
<td>36</td>
</tr>
<tr>
<td>Landlords</td>
<td>28</td>
<td>27</td>
<td>38</td>
</tr>
<tr>
<td>Businessmen</td>
<td>26</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>Other Professions</td>
<td>10</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Officials</td>
<td>17</td>
<td>19</td>
<td>15</td>
</tr>
</tbody>
</table>

The Justice Party is usually credited with attracting mainly those of the wealthy cultivating and landowning castes: Vellalas, Reddis, Kammars and Nairs. While these "landlords" were of the cultivating castes, they were not often cultivators. By and large they were large landholders paying high land revenues, more akin to Zamindars and rajahs than to farmer proprietors. One Justice Party member of "modest" background came from a tenant family on a zamindari estate. He was, however, of the rich tenant class, a moneylender with capital of Rs. 20,000.^{15} Most the men listed as landlords were similar to K.V. Reddi Naidu and P. Subbaroyan who, although large landholders "had never touched a plough" nor taken any direct interest in agriculture. Subbaroyan was
so far removed from farm management as not to know how, or if, food produced on his estate was sold in the market.\textsuperscript{16} These were not men of the cultivating class. The strength of the very large landholder (zamindars and rajahs who were elected by special constituencies under the 1919 Reform) was so great that they controlled "four times as many seats as were specially reserved for them" throughout India, and up to six times the reserved number in Madras.\textsuperscript{17}

The interest and knowledge of agriculture among these men was minimal; a matter with which the Department of Agriculture grappled with slight success. Selected members of the Council were encouraged by the Department to visit Coimbatore in order to familiarize them with the work of the Agricultural Department in the College and Research Institute. Of eighteen such honorary visitors, only one visited the College per year and he "never came for inspection but for College Day Festivities."\textsuperscript{18} Even the Minister for Development admitted that prior to his assumption of office he made only one "flying visit" to the College and Research Station" as a sightseer."\textsuperscript{19} In order to dispel ignorance of or indifference to the Department, Government ordered the publication of \textit{A Popular Account of the Department of Agriculture}. In addition, they ordered "a very wide publicity propaganda with a view to bring it's [the Department's] work prominently to the notice of a wider public"\textsuperscript{20} The hope was that the "leading publicists and others would evince a little
more sympathy with the duties and difficulties of the Department. The publicity may have had some effect for, after 1925/26, criticism of the agricultural department no longer figured significantly in the Legislative Council budget debates.

It could be argued that the Legislative Council was merely being pragmatic in not voting increased expenditure. That explanation would ignore the basic fact that the Council had no cohesive policy on the development of agriculture. Membership on the Council carried with it wide opportunities to agitate and be heard. This was the position which Gokhale had taken at the turn of the century in the Imperial Legislative Council. A party, or individual, who had strong views on policy could make the Government's situation uncomfortable and provoke her to action.

Indeed various aspects of the work of the Department lent themselves to criticism. Policies on payment of improved seeds and soil analysis hindered cultivator's access to the department's improvements and insured the poor would not benefit. The extreme shortage of staff, particularly in the demonstration section, meant that vast areas of the Presidency went untouched. This contributed, in part, to the very modest successes noted in the previous chapter. However, members of the Legislative Council did not criticise these aspects of the Department. Rather, they criticised the Department's perceived lack of Indian staff, when, in fact, the entire Provincial staff and half the
Imperial staff were Indian. There were, however, still more substantial aspects of agricultural policy which should have commanded the attention of the Legislative Council but did not.

While agricultural development during dyarchy stagnated, population did not. The period from 1921 to 1931 witnessed a tremendous growth of population throughout India. The population of the Madras Presidency grew from 42,318,985 in 1921 to 46,740,107 in 1931, an increase of 10.4 percent. The urban growth was more spectacular, rising from 5,278,705 to 6,337,256 or 20 percent in the same period. Per capita food grain output was declining at a rate of over 1.4 percent a year. Madras was increasingly unable to feed her population without resorting to importation. This had been noticed by the Department of Agriculture, but was ignored by the Legislative Council.

One possible explanation for the indifference of the Legislative Council to Madras' growing food problem was that Madras was spared the full effects of her decreasing food production until the late 1930's. In the years following World War I, Madras became a major consumer of Burmese rice. While she had always imported some rice from Burma, the War time prices necessitated the buying of Burmese broken grains (low quality and relatively cheap rice) which had been previously scorned by Madras consumers. India proper (excluding Burma) in the post war years, bought 50 percent of Burmese rice, with the bulk of it going to Madras.
By the 1930's, India imported an average of over 1,500,000 tons of Burma rice annually as compared to 797,000 tons annual average from 1911-1920.26 (Table VI A) Madras was taking approximately one-third to one-half of the total imports from Burma, 541,298 tons in 1933/34 and 860,211 tons in 1935/36.27 Such imported food grains offset the lagging food production during this period. But the Burma rice trade also had another dimension.

The rice trade from Burma to Madras profited not Burmese but Indian merchants. Particularly this trade profited the Chettiyars, a moneylending and business caste of Ramnad District, Madras who not only controlled much of Burma's paddy land but also controlled the Indo-Burma rice trade.28 It would not be in their interests for Madras grain production to be encouraged at the expense of the Burma trade. Such interests were well represented in Madras politics--the Chettiyars were one of the Justice Party's largest financial backers.29

Another possible explanation for the Council's "curious antipathy" to the Department was that the Department offered no real opportunities for political patronage. Christopher Baker, in his analysis of the Justice Party in power, suggests that, as a result of the Ministry's financial constraints, politicians enmeshed themselves in political intrigue and manipulation through the transferred subjects under their control.30 Another study on the Madras rural credit co-operative movement during this period, demonstrated
TABLE VI A

FIVE YEAR AVERAGES OF ALL INDIA IMPORTS AND EXPORTS OF RICE, 1911-1935
(in terms of cleaned rice, metric tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports</th>
<th>Exports*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>From Burma</td>
</tr>
<tr>
<td>1911-15</td>
<td>854,000</td>
<td>703,000</td>
</tr>
<tr>
<td>1916-20</td>
<td>1,180,000</td>
<td>1,044,000</td>
</tr>
<tr>
<td>1921-25</td>
<td>879,000</td>
<td>740,000</td>
</tr>
<tr>
<td>1926-30</td>
<td>1,088,000</td>
<td>975,000</td>
</tr>
<tr>
<td>1931-35</td>
<td>1,638,000</td>
<td>1,569,000</td>
</tr>
</tbody>
</table>


*Exports do not include Burma
how this political and financial manipulation was in fact exercised.\textsuperscript{31}

The Co-operative Credit movement in Madras was highly successful in creating political linkages and a system of patronage. Although it controlled only 7 percent of the rural credit market, credit societies enjoyed lavish praise and attention from Government. The societies were avenues through which the Government and the Justice Party, especially during the period of dyarchy, could find loyal collaborators in the mofussil. Hence the Co-operative Department received adequate funding.\textsuperscript{32} The Department of Agriculture offered no similar political advantages.

There were attempts to foster political networks through the extension arm of the Department of Agriculture. The Government, before and during dyarchy, consistently pressured the Department to create agricultural associations incorporating "influential landlords."\textsuperscript{33} Government's insistence upon the forging of linkages with these landlords, in the face of protest from the Department, clearly indicated political rather than economic motivation. The men who ran the few agricultural associations were lawyers, journalists, rajahs and zamindars. The Department found that although these men actively pursued prizes in cattle shows, it was difficult to get the agricultural associations to do any agricultural demonstration work at these affairs, let alone outside.\textsuperscript{34} By 1911 the District Agricultural Associations were moribund.
When it became apparent that "official pressure can never make them [agricultural associations] a living reality," the Government changed its tactic. The Co-operative Societies Act of 1904 which provided for Credit Societies, was amended in 1912 to provide for non-credit, agricultural co-operative societies. These societies were concerned with purchase and sale. Unlike the District Agricultural Associations, the non-credit co-operatives were run by the Co-operative Department which meant that they were funded and part of the larger organization. By 1928 these associations in Madras could count 28,000 members.

The Madras Government's lack of success in fostering District Agricultural Associations was due to two causes: the antipathy of the Department to that line of work and the Associations offered few tangible political benefits to the organizers. The Department was manned with agricultural experts, not civil Servants who wished to rise in the bureaucratic hierarchy. Their interest was primarily in technical agriculture, rather than in administrative or inter-departmental activities. During the 1920's the contrast between the Agricultural Department and other more malleable Departments was marked. The Co-operative Department, which was so politically useful, was well tended while the Department of Agriculture suffered from indifference.

The Agricultural Department's dislike of the Co-operative Department was plain in that they felt it catered to
rural leaders whose interests were politics rather than cultivation. Thus, in the 1920's when the Department of Agriculture was once again instructed to seek to promote pro-Government sentiment among influential landlords through participation in agricultural association and inter-departmental activities with the Co-operative Department, they rebuffed the directive. The Director of Agriculture informed Government that "such associations are of no benefit to the real farmers, but merely run by those who wish to come into local prominence and who have no inclination to carry out actual farming operations themselves." As for the Co-operative Department, the Government was firmly reminded "that officers of the Agricultural Department have a lot of other things to do and they are also concerned with non-members of the Co-operative Societies."

The Department of Agriculture, then, offered no advantage for the politician. He could not use it as a source of linkages among the rural influential. Appointments within the agricultural service were based on training in the agricultural colleges, they could not simply be traded on the patronage market. The scientific investigations of the Department yielded no "miracle" cures for agriculture; thus there were no short term advantages to be gained by supporting research. For the rural elite there were few benefits to be gained by joining agricultural associations or even working closely with the Department. The Department gave no financial support to associations or to individuals.
Only in one particular instance, when the Raja of Panagal gave some of his land for a demonstration farm and agricultural middle school, did the Department become a source of prestige. Panagal's efforts, however, were shortlived when he could not fill the school with students and it was abandoned. It would seem that the members of the Legislative Council, seeing no direct political advantage in the agricultural department, became disinterested and occasionally hostile to the entire subject.

The Royal Commission on Agriculture in India

The apparent ineffectiveness of the Provincial agricultural departments was of some concern to the Government of India. One of the features of the Montagu-Chelmsford Reforms was that the Provincial Departments were separated from the Center. As a result, there was no coordination of activities, a matter the Government of India felt needed investigation. Since the appointment of a Central Board of Agriculture "would not command sufficient authority and weight to effect the required improvements, or to be sufficiently detached," the Viceroy requested the appointment of a Royal Commission. The Commission would "examine and report on the present condition of agriculture and rural economy in British India and make recommendations for improvement of agriculture and promote the welfare and prosperity of the rural population." The Commissioners were to do a general stock-taking of India's agricultural industry.
The Commission was duly appointed in 1926 under the chairmanship of Lord Linlithgow. Linlithgow's qualifications for directing the Commission were his interest in agriculture generally and his previous membership on a Commission to study British agriculture. He considered himself qualified as he thought he had "no future of my own in the East to worry about, and I am more able, without fear or favour to do His Majesty's bidding as it should be done, and to say things which will be unpopular where it is in the public interest that they should be uttered." Linlithgow was to return to India as Viceroy, 1936-1943, during which time he was to oversee the 1935 Reforms which transferred all power in the Legislature to Indians.

The Commission investigated Indian agriculture for two years. In 1928 they presented their massive Report with twelve volumes of evidence. The Indian public was not impressed. The New Empire claimed "we knew all this before the Commission ever met." Forward rightly observed "nothing is done to solve India's greatest economic problem." The Madras Mail, generally conservative, warned that the 1.4 million rupees spent on the Commission would be lost if no action was taken on the recommendations. "The Report is the British Administration's present to India..." The Mail said, "and should not be taken as an imposition." But, it was difficult to see what the Department could do with the Report. The Director of Agriculture was surprised at "the large number of recommendations carried out already in
Madras. Even the Government of India was not overwhelmed, but expressed hope the Report would, at minimum, "deflect attention from the boycott of the Simon Commission." The Report was indeed a massive digest of everything that had been known before.

The Commission advocated no real change in policy. Those who requested a ban on the export of fertilizers, the Commission considered to have "failed to realize the economic implications" and the request was disallowed. Again the failed District Agricultural Associations were advocated. The Commission did recognize the dependency of agriculture and marketing and transport facilities and thus recommended the development of improved communications and regulated markets, a suggestion lacking in previous studies. But, in terms of the extension programs the Commission directives were relatively innocuous or a rehashing of old programs. Demonstrations, the Commission considered, should be carried out on the cultivator's plots. This was a policy which the Department in Madras had pursued for at least fifteen years. But, the Commission continued, "the policy of guaranteeing the cultivator against the loss arising out of demonstration work...is one of doubtful expediency." The latter, insuring the cultivator against loss arising out of demonstration work, was a policy adopted by the Department the previous year as a means of gaining the confidence of the cultivator. The recommendations of the Commission numbered six hundred and eighty-seven guaranteeing that action to be taken upon
them would entail years of work. The World Depression which commenced in 1929 and the financial retrenchment it caused insured that the recommendations would receive scant attention.

**Summary**

The program of agricultural improvement in Madras did not change when, in the 1920's, it became a "transferred" subject; the responsibility of elected Indian officials. Although we might expect the elected officials to assume a more active and supportive role toward agriculture, the basic industry of the Presidency, this did not happen for a variety of, primarily political, reasons.

The financial condition of the Madras Presidency during the period of dyarchy was strained. This in itself had always been the reason agriculture did not receive adequate funding. But, the elected Ministries of the 1920's had the power to allocate revenues and to raise new revenues if needed. For fear of jeopardizing their political positions they did not create new sources of revenue or substantially increase the old. Additionally, agriculture was neglected because the Department and its activities did not lend themselves to political usage. Unlike the Co-operative Department which was a fertile ground for political patronage, the Department of Agriculture considered itself a technical department and refused to participate in the political system. Thus in the decade preceding the World Depression
Agriculture was as neglected as it had ever been.
NOTES

4. Ibid.
6. India Year Book 1924. p. 38.
7. Goschen to Reading. August 1924.
9. Ibid., p. 32-33.
10. Ibid., p. 31.
13. Linlithgow to Irwin. 4 February 1928. Linlithgow's distrust of Indian officials came from information given him by the Raja of Parlakemedi regarding the corruption on Madras Local Boards.
15. Ibid., p. 329 The man, Muniswami Naidu, also had groundnut and rice mills, He was Chief Minister, 1930-32.
17. India. Statutory Committee. 1929-30. v. II. p. 77. These figures led the Government to deny any special constituency for landlords in the 1935 reforms.
18. G.O. No. 1570 Revenue (Special) 19 August 1919.
19 Royal Commission on Agriculture. v. 3. p. 372.
20 G.O. No. 1210. Development. 11 September 1922.
21 Ibid.
23 Statistical Abstract for British India. 1931-32.
24 Blyn. p. 104.
27 Season and Crop Reports. 1933/34. Burma. Returns of Seaborne Trade. 1936/37. pp. 405-411. Madras was also importing approximately 77,665 tons of rice from Siam and Indo-China.
29 Arnold. p. 157.
30 Baker, pp. 42-43.
31 Robert.
32 Ibid.
33 This term and the term "leading men" re-occur throughout Government directives and Departmental reports.
40 Birkenhead Collection. Telegram. Viceroy to Secretary of State. 13 November 1925.
41 Ibid.

Linlithgow to Irwin. 19 October 1927.


Madras Mail 20 October 1928.

Ibid., 24 July 1928.

Irwin to Birkenhead 24 May 1928.

VII. CONCLUSION

The British Government in India, as its administration officials viewed it, was supported by two foundations, physical power and just administration. India also played a larger role in the sphere of empire as, not only the "jewel in the crown", but the cornerstone of the Eastern Empire. These two foundations of colonial rule consumed virtually all the administrative energy and revenue of the Government of India and inhibited the assumption and fulfillment of wider responsibilities of governance.

In the last quarter of the nineteenth century the recurrence of famine forced the Government of India to consider the assumption of much wider responsibilities. High famine mortality and extreme economic dislocation prompted a questioning of strict adherence to the principles of laissez-faire. Government had difficulty coping with the political and economic repercussions of famine which threatened the stability of her rule. The programs devised by nineteenth century administrators to ameliorate the effects of famine included agricultural improvement. Significantly, Government programs were aimed more at increasing revenue than improving agriculture or preventing famine.

By the turn of the century the traditional problems of famine (dearth of food) had been replaced by the perception of the larger problem of rural poverty. Government success in providing grain to famine areas served to
demonstrate that famine was caused by the dire poverty of a large section of the agricultural population who could not buy food. The political repercussions of this realization, while they caused Government to adopt a more interventionist posture, did not overcome the basic constraints of colonial rule.

Although the Government of India spoke in terms of improvement, Government aid and guidance to development, she was unable to provide more than the bare framework of a program. To seek more remained contradictory to the governing philosophy of liberalism. The Department of Agriculture was one of many "development" departments. Forests, commerce, industry, education, co-operatives and health, to mention a few, all competed with agriculture for a slice of a very small financial pie which remained after military and administrative costs were met. Military and civil administration costs (police, courts and general administration) consumed an average of eighty percent of the budget, leaving twenty percent to be divided among the various departments concerned with economic development and welfare of the population. That agriculture in Madras never received as much as one percent of this must be underscored.

Limited funding caused the Department of Agriculture in Madras to be understaffed at all times. In the 1920's, at the height of her staffing the Department had one member for every 40,000 rural families. It was impossible for her
to successfully penetrate the mofussil. The Departmental extension and demonstration activities were also constrained by finance. Risks of demonstration had to be assumed by the cultivator; thereby reducing his willingness to adopt or demonstrate new crops or techniques. Thus the Department was never able to address the desperate needs of the smaller cultivators and thus would never seriously deal with the problem of rural poverty.

The work of the Department was also hampered by the insistence of Government that some principles of laissez-faire be followed. Government did not want the Departments to enter the business of agricultural improvement. Consequently, many departmental services were offered at a high price to the cultivator. This, Government reasoned, would allow and encourage private enterprise to supply the needs of the cultivator. Private enterprise did not respond as the Government anticipated. Thus cultivators who sought to adopt improvements or make use of scientific advice had to pay a high price. This insured Departmental benefits would reach only a small strata of the agricultural population. Also, the Government of India's unwillingness to interfere in matters such as the regulation of markets or the prohibition of fertilizer export further reduced the economic impact of the department.

The inability or unwillingness of the cultivator to adopt new techniques or seeds was rarely ascribed, by the Departmental staff, to conservatism. Department staff
reasoned, and found in their experience, that the cultivator would adopt anything proved to yield him a substantially higher financial benefit. The state of knowledge regarding scientific improvement of cropping meant that most improvement in seed strains concentrated on quality and disease resistance rather than substantially higher yields. The marketing system, in which the smaller cultivator received payment for quantity rather than quality, did not provide adequate incentive for adoption. Given these constraints under which the cultivators functioned, their limited adoption of improved seeds was understandable.

Agricultural improvement was not encouraged by the transference of the subject under dyarchy. The concerns of politicians during the 1920's were political rather than economic. Justice Party Ministers who directed the transferred subjects were concerned principally with shoring up their political positions. This was best accomplished through the corridors of patronage offered by the administrative machinery. Allocation of funds to various departments was determined by these political considerations rather than by economic goals or policies. The Department of Agriculture consistently resisted attempts to be used as a mechanism through which Government could secure supportive linkages with the rural elite. During the 1920's when establishing and securing of political networks was of paramount importance to the Justicite Ministers, the Department's intransigence did not endear it to the politicians. The
Department of Agriculture, being largely apolitical, was ignored and kept to a bare minimum.

The failure of Government to effect agricultural improvement or to substantially ameliorate the conditions of rural poverty was the result of the structure of colonial rule. Military force, civil and judicial administration were the pillars of the colonial structure in India but they were also the product of a larger concern. The control of India through these mechanisms served to buttress the position of Britain in the world. A quiescent India provided the Empire with a large military force with which to protect and maintain the larger empire. The surpassing importance of this concern to Britain and the attention and financial support required by it minimized any attempts to promote the improvement of agriculture which was seen as but a small element of the whole.
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  Government of India
  Government of Madras
  Annual Reports
Archival Collections
Private Papers
Newspapers
Unpublished Thesis and Dissertations
Published Books and Articles

GOVERNMENT RECORDS

The majority of Government Records cited in this study were used at the India Office Library and Records, London, England. In the effort to trace the administrative history of the Department of Agriculture on both the Imperial and Presidency level I relied heavily upon documents directly concerned with the organization of the departments and with the functioning of the Departments.

From 1872-1879 the records pertaining to the organization of the Department of Revenue, Agriculture and Commerce are found in the proceedings to that Department as well as in the Proceedings to the Home (Public) and in Collections to Revenue Despatches.

After the re-institution of the Department of Revenue and Agriculture in 1882 the Imperial records became part of the Imperial Department of Revenue and Agriculture. In Madras these records became part of the Madras Department of
Revenue (Revenue Settlement, Land Records and Agriculture). and Madras. Revenue and Agriculture.

After Curzon's reforms of 1905 the documents became concentrated in the Departments of Revenue and Agriculture, the Finance Proceedings and Proceedings of the Board of Revenue, on both the Imperial and Presidency level.

With the transferrence of agriculture to Indian responsibility in 1919 a major change in record keeping took place. In Madras all records pertaining to agriculture and the agricultural department became part of the larger Development Department. For the most part these records, particularly those pertaining to agriculture, remained in India and were not duplicated in the India Office. Those records of the Development Department which are duplicated in India Office files were those specially requested by the India Office and generally pertain to the Co-operative Movement. During the first decade of dyarchy some records pertaining to agriculture were included in Revenue Proceedings and Finance Proceedings. On the Imperial level some documents made their way to the files of Education, Health, and Lands (Agriculture).

To facilitate the tracing of my sources I have, in the notes to the chapters, referred to the documents by Government Order Number, Department and Date when applicable, or to the Proceedings file and Number and date. Following is a list of Proceedings used in the study.
Government of India

- Education, Health, Lands (Agriculture)
- Finance and Commerce
- General
- Home (Public)
- Revenue
- Revenue and Agriculture
- Revenue, Agriculture and Commerce
- Revenue and Statistics

Government of Madras

- Development
- Finance
- Public (Confidential)
- Revenue
- Revenue and Agriculture
- Revenue (Revenue Settlement, Land Records and Agriculture)

OFFICIAL PUBLICATIONS

Parliamentary Papers


Papers Regarding the Land Revenue System in British India. 1902. Cmd. 1089.


Report from the Select Committee on East India (Public Works) together with the Proceedings of the Committee, Minutes of Evidence, Appendix. 1878.


Government of India


Note on the Principal Measures of Administration under consideration in the Revenue and Agriculture Department during the Viceroyalty of the Marquis of Ripon. 1884.

Proceedings of the Agricultural Conference held in the Revenue and Agriculture Department at Simla. 6-13 October 1890. 1890.

Summary of the Administration of Lord Curzon of Kedleston, Viceroy and Governor-General of India in the Department of Revenue and Agriculture. 1905.

Summary of the Principal Measures of the Viceroyalty of the Earl of Elgin and Kincardine in the Department of Revenue and Agriculture, January 1894-December 1898. 1898.

Government of Madras

Department of Agriculture Manual. 3rd ed. 1929.


Memorandum on the Madras Famine. by Dalyell. Madras, 1866.

Notes on the Administration of His Excellency, the Honourable Sir Aruthur Lawley, Governor of Madras, 1906-1911. Madras, 1912.


Village Calendar. Madras, 1922.


ANNUAL REPORTS

Government of India

Agricultural Statistics of British India.

Civil Estimates of British India.

Proceedings of the Board of Agriculture.
Report on the Introduction of Improvements into Indian Agriculture by the Work of the Agricultural Departments.

Statement Exhibiting the Moral and Material Progress and Condition of India.

Statistical Abstract for British India and the Indian States.

Government of Madras


Annual Report of the Department of Agriculture.


Government of Burma

Returns of Seaborne Trade.

ARCHIVAL COLLECTIONS

India Office Records: Manuscripts

Private Office Papers, Agriculture. 1928-34.
Private Office Papers, Royal Commission on Agriculture. 1926-28.
Economic and Overseas. Collection No. I, Agriculture.

India Office Records: Private Papers

Birkenhead Collection
Curzon Collection Eur.
Halifax Collection Eur. C. 152.
Lytton Collection
Templewood Collection Eur. E. 240.
Willingdon Collection Eur. F 93.
British Library

Ripon Collection

NEWSPAPERS

The Times  London 1876-1929.
The Economist  London 1897-1905.
The Hindu

The Madras Mail  Madras 1919-1929.

Reports on English Papers owned by Natives examined by the Criminal Investigations Department Madras and on Vernacular Papers Examined by the Translators to the Government of Madras.

UNPUBLISHED THESIS AND DISSERTATIONS


PUBLISHED BOOKS AND ARTICLES


Fraser, Lovat. India under Curzon and After. (1911) reprint. New Delhi, 1968.

Gadgil, D.R. Industrial Evolution of India in Recent Times.


Hamilton, George. Parliamentary Remin


