



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

---

---

# THE QUEST FOR A PATTERN OF SUSTAINABLE DEVELOPMENT: THE GENESIS OF A FOREST POLICY IN THE COLONY OF TRINIDAD AND TOBAGO 1890-1950

RITA A. PEMBERTON

(Lecturer, Department of History, UWI, St. Augustine)

---

---

## INTRODUCTION

*"The present day development problems . . . often tend to be re-emphasized by the continued presence of some long standing, nineteenth century based deficiencies of the region's economic structure."* This observation by David Watts <sup>(1)</sup> underscores the need for a historical approach to those factors which are central to any attempt at development in the region. A recent study of the Caribbean region notes that stagnation in agriculture could inhibit industrial development continues to play an important role in regional economics, it recommends the fostering of a growing agricultural sector to assist the economic development of the member units <sup>(2)</sup>. Thus emphasis continues to be placed on agricultural development as the way to improve life of the majority of the population. Most recently, this thrust has incorporated very noble ideals, packaged under the title 'Sustainable Development'.

An important aspect of sustainable development, is the preservation or the minimal degradation of natural resources especially forests and wet-lands. This paper focuses on the earliest attempts to balance the competing quest for economic well being with the need for protection of the forest resources in Trinidad and Tobago. It is argued that these attempts at resource management were based on a misplaced emphasis on the so called negative

factors of peasant activity. At the same time, under the cover of what was perceived as development, the real culprits were not targets for the laws of control. This led to a continued assault on the natural environment of the colony, by the destruction of forest resources, especially in Trinidad.

The paper is divided into five sections. It begins with a brief historical outline of the colony during the period of the study 1890 to 1950, then it discusses the early concerns about the state of forest resources in the British West Indies, especially the colony of Trinidad and Tobago. This section also discusses the causes identified for the degradation of forest resources in the colony. The first policies on forestry during the period are the focus of the next section, then the following section discusses the impact of the development of the oil industry on forest resources in Trinidad. In conclusion, the paper argues that there were four main periods of the onslaught on the environment of the colony resulting in the depletion of the forestry resources. The real sources of the onslaught were ignored by official attempts to deal with the problem and blame was ascribed to the peasant sector.

## HISTORICAL BACKGROUND

The islands of Trinidad and Tobago have had quite distinct historical features. Trinidad was a Spanish colony which remained undeveloped for about three centuries, before it

received an infusion of French population and then became a British Colony,<sup>(3)</sup> Tobago, the smaller of the two islands changed hands frequently from one European power to the next<sup>(4)</sup>.

The sugar plantation system was introduced into both islands during the second half of the 18th century, but a mere 33 years had elapsed since their formal recognition as British colonies, when the slave system was brought to an end. During the post-Emancipation period, the islands shared the experience of the growth of a peasant sector which developed in conflict with the established plantation sector.

After emancipation, it was the belief of the planter class, that uncontrolled access to land by the newly freed population was untenable. It was strongly argued that Trinidad had a serious labour shortage<sup>(5)</sup> and the planters feared that the existence of an independent peasantry would challenge the plantation system. Little attempt was therefore made to accommodate the newly freed within the society as an independent sector. On the contrary, the planter class expected that they would remain as labourers available to service their needs. Planters and colonial officials were therefore unified in the belief that some controls over the colony's land resources were necessary. To this end, attempts were made to restrict legal access to land by ex-slaves, in a number of ways. For example, land was offered for sale by the state at extremely high prices and in lot sizes which were larger than the poor could afford. Because of these attempts to limit legal access to land, squatting became rampant, particularly in Trinidad.

Changing fortunes of the sugar industry in the colony after the 1870s led to increased attempts to promote agricultural diversification. The result was imperial support for the relaxation of the old controls on land to the peasants. Under Governors Arthur Gordon (1866-1870) and William Robinson (1885-1891), therefore, Crown Land was sold in small lots across the colony to peasants, to the chagrin of the sugar planters<sup>(6)</sup>. This land policy facilitated the growth of the cocoa industry which became the main export crop for Trinidad by 1900<sup>(7)</sup>.

In Tobago, the demise of the sugar industry after the financial crash of Gillespie and Company in 1884 released the controls on land. Failure to attract buyers abroad, led to the sale of

land in small parcels to peasant operators. Thus small holding became a feature of this island's agricultural sector from this time onwards<sup>(8)</sup>. The troubled Tobago economy posed a problem for the imperial government, who found it convenient to unite the island with Trinidad in 1889 and to further cement the relationship in 1899.

#### **EARLY CONCERNS FOR FOREST DEGRADATION IN TRINIDAD AND TOBAGO**

The pattern of permanent settlement in Tobago, established by the British, began in 1764 with a survey and division of the island into parishes and the reservation of a well defined area of Crown Land as a forest reserve. The remaining lands, some 57,000 acres, were sold by public auction in lots of varying sizes up to 500 acres<sup>(9)</sup>. This reserve made Tobago unique, for it is credited with having perhaps the oldest forest reserve in the New World<sup>(10)</sup>. Trinidad did not have the good fortune to have a forest reserve established by any of its early European occupants.

Since full emancipation in 1838 and the emergence of a free peasantry in the British West Indies, there had been criticisms of the destructive aspects of peasant activity on the environment. As squatters, peasants were blamed for illegal and wanton cleaning of the land, which it was claimed resulted in changes in the colony's climate.

The end of the 19<sup>th</sup> Century brought increasing distress for the sugar industry and clear indications that the peasant sector was here to stay. At this time there were increasing reports about the damaged environment that resulted from peasant activity and there emerged urgent calls to rectify the damage throughout the Caribbean. Governor Musgrave of Jamaica and the Curator of the Jamaica Botanic Gardens complained about the action of peasants in the environment there<sup>(11)</sup>. This cry, which was echoed throughout the Caribbean, sounded an alarm to which the Colonial Office responded promptly.

In 1887 forestry expert, Dr. Hooper, was sent to the Caribbean colonies<sup>(12)</sup>. Hooper reported that while the forest reserve remained largely intact, wanton clearing of the level valleys for the establishment of sugar estates and of slopes for the cultivation of food crops for the

slave population had occurred since the end of the 17<sup>th</sup> century. In the hey days of sugar:

"... the large estates penetrated far into the forest in their search for produce and for provision grounds..."<sup>(13)</sup>

The result was a marked depletion of Tobago's wooded area over two centuries. Thus it was the plantation system which inflicted the first severe blows to the island's physical environment.

These findings of Hooper countered the belief that peasants were a destructive force to the environment. He conceded that peasants did clear forests to plant provisions but noted that:

"... the damage to the forest is confined to the lower levels now that their numbers are comparatively small and they seldom go beyond the zone from which the hardwoods have already been cut to supply the wants of the estates..."<sup>(14)</sup>

He observed that there were new points of encroachment since emancipation for settlement and for cocoa cultivation, but these were counter balanced by regrowth on old abandoned provision grounds. The tendency of the free workers to spread themselves over the entire island, which was heavily criticized by the sugar planters, was credited by Hooper, with permitting the boundary of the forest to become:

"... more regular and ... a more compact area than was the case in the flourishing days of the large estates..."<sup>(15)</sup>

Turning to Trinidad, some of the earliest concerns about forest conservation in Trinidad were expressed by the Crown Surveyor, Sylvester Devenish, who noted in 1857, that the forests in Trinidad were steadily diminishing<sup>(16)</sup>. He identified three main causes. Firstly there was the wanton felling and burning of forests by 'a roving set of semi-civilised African squatters' who have ruthlessly destroyed whole tracts of rich forests. -

Secondly, the extension of sugarcane cultivation had resulted in the removal of all the woodland in the vicinity of the estates. The third factor he reported was the extension of the cocoa industry especially through the formation of smaller plantations and the grant of provision grounds to East Indian immigrants, in lieu of return passages to India.

Trinidad was not included in the itinerary of Hooper, through the popular mistaken belief that this island did not yet need special attention<sup>(17)</sup>. Ironically enough, complaints about water shortage and wind damage in the island increased, causing Governor William Robinson in 1890, to authorize John Hart the Superintendent of the Royal Botanic Gardens, Trinidad to report on the state of the island's forest. Governor Robinson noted:

"... the protection of the forests had been much neglected in Trinidad..."<sup>(18)</sup>

Hart noted specific problem areas: Savanna Grande, Chaguaramas, Santa Cruz, Maraval, Monsterrat and most conspicuously St. Ann's. All were said to be suffering from severe water shortage. In St. Anns, the once flowing river remained dry for most of the year<sup>(19)</sup>.

This report stimulated correspondence with the Secretary of State and the formation of a local committee to discuss the matter further. The end result was the appointment in 1899, of F.A. Lodge of the Indian Forest Department to visit the colony and report on Forest Conservation in Trinidad.<sup>(20)</sup>

Lodge's report indicated that the island possessed no forest reserves except for small blocks of land reserved for specific purposes such as fuel supplies, burning clay, roads, future village sites and for the protection of springs and rivers. Lodge noted too that there was more sensitivity to the need to protect river banks from erosion and crops from wind, therefore reserves were kept for these purposes<sup>(21)</sup>. He commented on the absence of any complete and accurate maps of the island's forest resources, as the existing ward maps showed only the alienated lands and contained numerous errors<sup>(22)</sup>.

Lodge made an important observation. He stated that the problem of Trinidad was

"... the reckless destruction of balata sleepers and cedar for export..."<sup>(23)</sup>

particularly in Central and South Trinidad. Licenses had been issued annually without regard for the annual yield and excesses were the norm. He observed signs of denudation in St. Anns and Maraval and that cultivation had proceeded too far north along the St. Joseph, Tacarigua, Arima, and Guanapo rivers<sup>(24)</sup>. It is to be noted that in identifying railway sleepers,

Lodge observed the second major factor which caused further attacks on the forest resources of Trinidad, which was the development of the railway.

He recommended the institution of a forest reserve for Trinidad and an extension of the Reserve in Tobago. Matters pertaining to forestry, especially the need to manage the resources, required the appointment of a Forest Officer, which he also recommended. In addition he provided guidelines for the process of demarcation and the management of forest <sup>(25)</sup>. It was confirmed that the colony needed to institute a policy on Forestry.

### THE IMPLEMENTATION OF A FORESTRY POLICY IN TRINIDAD AND TOBAGO

A formal attempt was made to institute a forestry policy after the Lodge Report. Though this report was not accepted in its entirety, a Department of Forestry was established in 1901 and a Forestry Officer was obtained from India <sup>(26)</sup>. The programme of demarcation of forests outlined by Lodge began in 1902 and by 1919, 494 miles had been demarcated <sup>(27)</sup>. The aims of this policy were the protection of the water supply, the preservation of the climate and the flora and fauna of the land and the promotion of economic forestry. Thus conservation was its most important thrust.

Once introduced, conservation raised the need for resource management since forest belts had to be preserved in a colony which until then had not been used to such restraints. On the other hand there was the popular feeling that Trinidad had much arable land outside the forest area which ought to be cultivated. Thus the growing support of the Colonial Office for a relaxed land policy to encourage local food production in the colony brought on a conflict between agricultural development and the protection of forests since an expansion of agriculture would ultimately lead to a reduction of the acreage under forests.

Consideration was therefore given to the agricultural needs of the colony for it was suggested by the Conservator of Forests that the forests should be located on inferior soils to

make allowance for land settlement schemes. On such poor quality lands

"... systematic management (of forests) along scientific lines..." <sup>(28)</sup>

was essential for good results. The need for management was further evidenced as the century wore on, for by 1920, the Conservator reported that:

"... the more accessible forests have been overwhelmed by the removal of the marketable species without proper provision having been made for their replacement..." <sup>(29)</sup>

To provide effective management, forest rangers and forest guards were employed.<sup>30</sup>

Since agricultural development had the potential for conflict with a programme of forest conservation and since there was a recognized need for resource management at that time, it is ironical that the Department of Forestry remained a separate entity from the Department of Agriculture, which was established in 1908. This can be seen as a major flaw in the attempt to conserve, for it left the two competitors to pursue their policies separately thus undermining the possibility of effective resource management. In fact, this separation enhanced the tendency of these two departments to be in conflict with each other.

### THE OIL INDUSTRY AND THE POLICY OF FOREST CONSERVATION

It was noted above that a policy of forest conservation was developed in Trinidad and Tobago after 1902. No sooner had this policy of conservation been introduced, a major challenger emerged, in the form of the fledgling oil industry of Trinidad. As observed by the Conservator of Forest, the ideas of petroleum exploration and forest conservation were in conflict. He described the position of Trinidad as "an anomalous one" <sup>(31)</sup> for extensive areas were reserved as forests, only for the greater part to be subsequently licensed or leased to the petroleum industry:

"... for the development of which extensive deforestation is necessary..." <sup>(32)</sup>

In fact, an oil refinery was established at Morne L'Enfer Forest Reserve by Trinidad Leaseholds

Ltd. in 1916<sup>(33)</sup>, seriously undermining the attempt at conservation.

There was general belief that oil could be found anywhere in the colony, therefore the policy of land sales to peasants were halted.

"Extensive oil exploration licences were in force covering ... most of the available area of the colony south of a line 10 degrees 26 minutes 36 seconds latitude"<sup>(34)</sup> in effect all of South and a part of Central Trinidad.

In the race for oil, rival companies indulged in ". . . feverish and frequently unproductive drilling . . ." <sup>(35)</sup> causing unnecessary loss of forests. By 1926, 994 acres of the Siparia Reserves were denuded<sup>(36)</sup>. Shortly thereafter, the entire primary forest cover of South Trinidad lay vanquished, creating a severe problem for the colony from which it really has not recovered.

Thus, the development of conservation was sacrificed to permit the unrestricted development of the oil industry. In the process, the island lost its southern forest resources and forest conservation activities were primarily applied to the non oil bearing areas of the North and East of the island as well as Tobago. While punitive measures were applied to squatters for their abuse of the forests, the oil industry continued to have the blessings of the authorities, for its actions went unpunished.

Since the actions of the oil companies made the need for regeneration of forest urgent, there was collaboration between these companies and the Forestry Department. This led to the formation of teak plantations across the colony. Trinidad Leaseholds Limited for example, established a teak plantation in the Forest Reserve of Fyzabad in areas that had been cleared but were not needed for wells<sup>(37)</sup>. This was an attempt to save some face but forest conservation had already been effectively undermined.

## CONCLUSION

Since 1900, some problems inherent in a policy of sustainable development were evident in the colony of Trinidad and Tobago. These were the problems involved in the competition between two opposing sectors forestry and agriculture, for limited resources. There was a

clear realization that both groups could not achieve unrestrained progress. Forest degradation had been noted since 1857 in Trinidad. The peasant sector was primarily blamed for the destruction of the forests. However, despite generally held notions that the peasants were mainly responsible, the most severe attacks on the environment of Trinidad and Tobago came in four main periods and from other sources as well. These attacks were made:

- (a) in the era of sugar plantation establishment and extension in both Trinidad and Tobago.
- (b) in the period of the development of a peasantry and the growth of the cocoa industry as well as the increase in rice cultivation in the colony.
- (c) in Trinidad in the era of railway development, and
- (d) more critically, in the period of the establishment and growth of the oil industry in Trinidad:

Undoubtedly the cumulative effect of these periods spelled disaster for the colony's environment. However, the most serious environmental blows were applied by the plantations and by the oil industry.

The general acceptance that the environment was damaged and this needed to be curbed led to the formulation of a policy of forestry protection with conservation as its main thrust. This policy seemed to be more directed towards the peasants than to the main culprits. In fact while the main perpetrators were allowed to go unchecked, conservation measures, especially the punitive actions were imposed on the peasants. At the same time, those policies that could have helped to improve life for peasants were shelved to permit unrestricted development of the offending groups.

Tobago's Forest Reserve was established as far back as 1764 and the colony of Trinidad and Tobago had a workable Forest policy and a Forestry Department by 1901. It is noteworthy that this Department preceded the Department of Agriculture which was set up in 1908. Yet problems of the choice between economic growth and natural resource conservation have plagued the history of the

forests in this country. This paper has tried to elucidate the genesis of policies which attempted to deal with conservation of forest resources in those years, when such resources seemed limitless. Perhaps by noting the areas of failure of the early policies, the study may yet help in the formulation of policies to deal with current problems of conflict between exploitation and degradation of forests on the one hand and conservation on the other. Such policies are need urgently, since our remaining forests are still perhaps our most valuable natural resource.

### ENDNOTES

1. David Watt, *The West Indies: Patterns of Development, Culture and Environmental Change since 1492*. Cambridge University Press, Cambridge, 1987. p.523
2. Caricom Community Secretarial, Review and Analysis of the Performance of the Agricultural Sector in CARICOM Member States (1988-1992), Georgetown, Guyana 1994, pp 20-24 and 141.
3. B. Brereton, *A History of Modern Trinidad 1783-1962*, London: Heinemann, 1981, p.1-2.
4. Eric Williams; *History of the People of Trinidad and Tobago*. London: Andre Deutsch, 1962, pp.51-64.
5. D.Wood, **Trinidad in Transition: The Years After Slavery**. London: Oxford University Press, 1968, pp.50- and 63.
6. Howard Johnson, "Crown Colony Government in Trinidad 1870-1897" D.Phil. Dissertation, University of Oxford, 1969.
7. Kathleen Phillips-Lewis "British Imperial Policy and Colonial Economic Development: The Cocoa Industry of Trinidad, 1838-1939" Ph.D Thesis, University of Manitoba, 1994, p.94
8. David Niddrie, *Land Use and Population in Tobago*, Cornwall, England: Geographical Publications Ltd., 1961, p.20.
9. E.D.M. Hooper, *Report on Forestry in Tobago, 1887*, in *Miscellaneous Reports 1887-1928* Vol.323 p.4 (Kew Gardens Archives)
10. "Fighting Hunger" *FAO World Day Bulletin*, 1991 pp.7 and 9.
11. ZHC1 1878 Accounts and Papers 16, Report on the Progress and Condition of the Royal Gardens at Kew during the Year 1877, p. 26.
12. J.H.Hart. Report on Forest Conservation in Trinidad, 1891
13. Hooper's Report on forestry in Tobago, p.7.
14. Ibid.
15. Ibid.
16. S.Devenish "Paper on Trinidad Timber in answer to Certain Questions by H.M.Commissioners on Woods and Forests" 20 November 1875 in J.Hart, Report on Forest Conservation in Trinidad 1891, p.7 in *Miscellaneous Reports Vol. 9* (Kew Gardens Archives).
17. C.O. 295/398 28398 10 August 1900, Knollys to Sec. of State Chamberlain, No. 297 Hart's Review of Lodge's Report on Conservation of Forests in Trinidad and Tobago, p. 43.
18. Director of Kew to Secretary of State Wingfield, 8 July 1891 re Conservation in Trinidad in *Miscellaneous Reports*, Trinidad, (Kew Gardens Archives).
19. Wardens' Responses to Question 10 in Hart's Report on Conservation in Trinidad, 1891, p.20
20. C.O. 295\398 28398, Hart's Review of the Lodge Report, p.43.
21. C.P. No. 620 of 1900, Report on Forest Conservation in Trinidad and Tobago by F.A.Lodge, pp.1-2.
22. Ibid.
23. Ibid. p.9.
24. Ibid.
25. Ibid.
26. C.O. 295\528 Governor to Secretary of State, 27 May 1920 No.258 Enclosure, Notes from the Imperial Forestry

- Conference.
27. Ibid.
  28. Ibid.
  29. C.O.295/528 XC 193188, Chancellor to Milner, 27 May 1920. No. 258 Enclosure, Report of the Conservator of Forests for 1920.
  30. C.O.295/522 56826 Gordon to Milner 10 Sept.1919 (Secret) Crown Lands Regulations.
  31. C.O. 295/543 49418 Wilson to Churchill 15 Sept 1922 (Confidential) No. 447 Enclosure, Memo by the Ag. Conservator of Forests.
  32. Ibid.
  33. C.O.295/507 4245 Chancellor to Walter Hume Long, 20 December 1916, No. 497.
  34. C.O. 295/554 Byatt to Amery, 22 March 1925, Enclosure in Despatch 132, C.P. No. 108 of 1925 Report on Forestry in Trinidad and Tobago by Captain R.C. Marshall.
  35. Ibid.
  36. C.O.295/562 36617 Governor Jackson to Sec. of State Amery, 15 July 1927, Enclosure 2 in Despatch 212, Memo of Conservator of Forests.
  37. C.O. 295/526 36617 Jackson to Amery 15 July 1927, Report of the Forestry Department for 1926.