

# From Head-loading to the Iron Horse

Railway building in colonial Ghana and the origins of tropical development

## Komla Tsey



#### Publisher:

Langaa RPCIG
Langaa Research & Publishing Common Initiative Group
P.O. Box 902 Mankon
Bamenda
North West Region
Cameroon
Langaagth@gmail.com

Langaagrp@gmail.com www.langaa-rpcig.net

Distributed in and outside N. America by African Books Collective orders@africanbookscollective.com

www.africanbookcollective.com

ISBN: 9956-728-99-3

© Komla Tsey 2013

#### DISCLAIMER

All views expressed in this publication are those of the author and do not necessarily reflect the views of Langaa RPCIG.

### Acknowledgements

I would like to express profound gratitude and appreciation to my family, friends and colleagues, too many to identify individually by name, for their moral, intellectual and practical support while I was undertaking research and preparing this book for publication. I thank my sister Afua and Kwame my son for their sacrifice during field research. My thanks particularly go to: Forbes Munro, Stephanie Short, Janya McCalman, Elena Rhind, Katrina Keith, Danielle Hickey, Tara Walker, Reinhold Muller, Barbara Stubbs (Al Rinn Admin Specialists), Ruth Willats, Caroline Brooke Johnson, Dora Agbenu, Sena, Kafui, Amenyo and Novi. Annie, my partner, I thank you for your love and support and for having an eye for detail in reading this manuscript. Funding for this research came from a variety of sources over the years, including the University of Ghana staff development program, University of Glasgow, the Mountbatten Fund, Africa Centre and the James Cook University. The photos and images used for the book are taken from the British National Archives' Africa through a lens collection and FA Talbot (1914) The Railway Invasion of the Gold Coast, both available through the internet.

#### About the Author

Professor Komla Tsey comes from Ghana, where he attended primary and middle schools at Botoku before going to secondary school at Awudome Tsito and later Okwapeman at Akropong. He studied at the University of Ghana and the University of Glasgow in Scotland. Komla lives in Australia, researching and learning about Aboriginal development, health, education and wellbeing. He continues to undertake long-term development research in rural Ghana. Komla is currently Tropical Leader/Research Professor of Education for Social Sustainability at The Cairns Institute, James Cook University, Australia. Komla has published widely on a range of development related topics. He is the author of Re-thinking Development in Africa: An Oral History Approach from Botoku, Rural Ghana (Mankon-Bamenda, Cameroon: Langaa Publishing, 2011).

## **Table of Contents**

List of T	Гables					vii
		•				
Part I			•••••	•••••	• • • • • • • • • • • • • • • • • • • •	1
Chapte	r 1: A Slow I	Beginning,	1879-189	95		3
Chapter	r 2: The De	velopment	of the We	estern Line	e, 1895–1912	13
Governor	Maxwell and	the Malayan	Paradigm o	f Tropical D	evelopment	14
		_		-		
The Tark	wa–Kumasi I	Extension				18
The Kum	asi Railway an	nd Ashanti P	olitics			21
The Mini	ing Companies	and Constru	ction of Bra	nch Lines		22
Ports, 19 Sir John The Cons The Man The Mou	904–1918 Rodger and the truction of the goase–Koforid nt Ejuamena l		on of the Tro goase Line. tensions sits and the	pical Malayo Proposed Ta		33 33 34 36
		_			Developments	
					Developmenis 	ın 39
Comexi	••••••		• • • • • • • • • • • • • • • • • • • •	••••••	••••••	))
<b>(1920–1</b> 9 Post-War	9 <b>30)</b> Reconstruction	 n in Britain a	nd the Noti	on of Coloni	ar Developmen	47
	Guggisberg: T					
					• • • • • • • • • • • • • • • • • • • •	
Kailways	and Roads					54

-	Recruitment of Construction Workers and Colonia 65
Recruitment for the Sek	kondi–Kumasi Line, 1898–1903
Recruitment for Railwa	rys and Lighterage Ports, 1905–1918 70
The Post-War Labour	Problems71
Chapter 6: The Ac	quisition of Railway and Harbour Land and Colonia
Land Policy	77
General Problems of L	and Acquisition in Railway Construction
The Gold Coast Land	Act 1876 and the Railways
The 1876 Land Act a	and Commercial Developments81
The Problems of Land	Acquisition at Takoradi83
Total Land Owned by	the Railway and Harbours
Chapter 7: Railway	y Investment and Colonial Financial Policy91
Chapter 8: The Ma	anagement System, Personnel and Labour
Relations	99
Labour: Managerial, I	Technical and Unskilled102
Workers' Grievances a	nd Labour Relations
Chapter 9: Operati	ional Problems and Issues121
Safety and Maintenand	re
Tariff Policy	
-	s
Efficiency	
50 5	
Part III	
Chapter 10: The E	conomic and Social Impact of the Railways143
The Scale of Railway I	nnovation14
	A Stimulus for the Gold Coast Economy or Markets for th
Backward Linkages:	
Backward Linkages: Metropolitan Industrie	s?
Backward Linkages: Metropolitan Industrie Forward Linkages: Pr	

Health	
Commerce and Crafts	177
Urbanisation and Public Health	
Chapter 12: Railways and Economic Developme	ent: The Gold Coas
Chapter 12: Railways and Economic Developme	ent: The Gold Coas
	ent: The Gold Coas

## List of Tables

Table 5.1 Takoradi Harbour Works, Labour Returns, March 192374
Table 7.1 Statement of Public Debts, 1900–30
Table 7.2 Government Expenditure on Law and Order, Welfare, and
Agriculture and Forestry Protection (five-year averages, £000s)96
Table 7.3 Indirect and Direct Taxes (£000s)
Table 8.1 Railway Workers, 1916–30
Table 8.2 Distribution of Railway Operation Wage Income
Table 8.3 Comparison of Accounts and Clerical Staff and Artisan and
Technical Staff Wages
Table 8.4 Commodity Prices at Sekondi
Table 9.1 The Major Causes of Accidents and the Numbers of Fatalities or
the Railways
Table 9.2 The Schedule of Rates Introduced in 1905
Table 9.3 Rates of Cocoa Traffic on the Railways, Average per Ton Mile
(pence, selected years)**
Table 9.4a Percentage of Freight on Capacity Hauled, Average per Vehicle
Mile for Coaching Traffic134
Table 9.4b Goods Traffic: Average Carrying Capacity of Vehicles and Ratio
of Freight to Carrying Capacity135
Table 9.5 Railway Earnings
Table 9.6 Principal Goods Traffic (1926) and Relative Contributions to
Gross Goods Receipts
Table 9.7 Average Receipts per Vehicle Mile (pence)
Table 9.8 Gross Earnings, Expenses and Interest Charges
Table 10.1 Value of Materials and Equipment Purchased for Railway and
Harbour Construction and Maintenance, 1906-1929/30 (£)
Table 10.2 Comparative Transport Costs, 1903 and 1922-23
Table 10.3 Internal and External Trade Goods Carried on the Gold Coast
Railways, 1905–1929/30
Table 10.4 Principal Commodities carried on the Gold Coast Railways
(selected years)

## List of Maps and Figures

Map 1 The Development of the Gold Coast Railway System,  1893–1929
Map 2 Gold Coast Railways and Proposed Northern Route, 1922 46
Figure 7.1 Government Surplus and Loss (per cent of revenue)95
Figure 8.1 Hierarchical Administrative Arrangements
Figure 8.2: Percentage Change in Overall Workforce Composition over the Study Period
Figure 9.1 Coaching Capacity, 1915–29
Figure 9.2 Time Trend of Ratio of Freight to Carrying Capacity 130
Figure 9.3 Percentage Return on Capital Outlay, 1904–29 140
Figure 10.1 Sphere of Economic Activity
Figure 10.2 Gold Output and Coal and Firewood Traffic, 1903–1929/3015
Figure 10.3 Annual Cocoa Exports and Cocoa Traffic, 1910–1929/30162
Figure 10.4 Movement of Imported and Indigenous Food Staples on the

From Head-loading to the Iron Horse tells the story of railway building in British colonial Gold Coast (modern Ghana) and its social and economic consequences. Two factors motivated me to write. First, I believe that there is a need for international development, as a relatively new intellectual and practice discipline, to engage more deeply with history. Although there are excellent history texts on most countries and regions in Asia, Africa and South America, this wealth of knowledge is largely confined to history students and professional historians. In my experience, international development courses have very little historical content. A typical course will cover who the colonial power was, when the country became independent, and the extent to which it has become politically and economically stable. Yet, international development, which mobilises financial or human resources mainly from the industrialised world for the apparent benefit of people in poorer countries, has its origins in the late nineteenth- and early twentieth-century political economies of colonialism. A sound grounding in history, including political economy is essential if international development workers are to better understand the complex social, economic and cultural contexts in which they work.

My second motivation is the resurgence of academic and development interest in the tropical zones and the role that research and innovation can play in building healthier and sustainable livelihoods there. At James Cook University in Australia's far north Queensland where I work, the university's mission has been to improve life for the peoples of the tropics through research, teaching and innovation. To demonstrate their commitment the university has set up new research institutes, among them the Cairns Institute, and appointed several research professors, designated as Tropical Leaders, of which I am one. The aim is to undertake strategic research and development responsive to the opportunities and challenges facing the tropics. The university is also leading a consortium of academic institutions which will produce a *State of the Tropics Report* series to draw attention to the significance of the tropics as an 'expanding geo-political region' (in the words of the Vice-Chancellor), deserving global recognition.<sup>ii</sup>

While the climatic and ecological aspects of the tropics are reasonably straightforward to conceptualise and work with in research and innovation, the same cannot be said of the social dimensions. What makes social

relationships tropical? Is the term 'tropics' synonymous with climatic conditions, or are there other, unique ways of understanding them? For most people living there, the idea of studying the tropics is a somewhat artificial, European construct originating with Aristotle, who classified the world into three climatic zones - the Frigid, the Temperate and the Torrid. He believed that only the Temperate zone could support civilisation, as the Torrid (tropical) was too hot and the Frigid (arctic) was too cold. For the inhabitants, the tropics are part of who they are and are the norm, not something exceptional. The knowledge and experiences of the inhabitants ought to form the core of any attempt to understand the tropics through research and innovation. Equally important, however, is that when studying the tropics with fresh eyes, iv we do not ignore the views of those who originally formulated the concept, as they can assist us to determine whether, and if so how best, to achieve economic and social development in Africa, Asia and South America through international development. Focusing on tropical development over time will help international development practitioners to evaluate the values and motivations of the late nineteenthand early twentieth-century advocates of tropical development against those of the early twenty-first century. If for no other reason, it cautions against uncritically occupying the high moral ground since the links between the past and the present may be stronger than we like to believe.

The story of British railway building in the Gold Coast in the late nineteenth and early twentieth centuries enables us to revisit the origins of international tropical development and the opportunities and pitfalls that this presented. Railway innovation provides the focus for this book, as it was the single most significant means of colonial penetration in tropical Africa during the first quarter of the twentieth century. In this period, road transport was still in its infancy. The Gold Coast subsistence society, which had always relied on head-loading (head carriage) as its principal form of transport, was propelled into the twentieth century on the back of the iron horse. The Gold Coast may give us a more positive picture of the social and economic consequences of railway building than could be expected from other tropical African colonies at this time, given its relative wealth and status as a model colony in which more pounds per capita were expended than anywhere else in West Africa.\*

Based on primary research from Colonial Office correspondence, Railway Departmental Annual Reports, *Blue Books*, *Government Gazettes* and other official publications held at the Public Records Office in London and at the National Archives of Ghana, this book tells the story of the introduction and expansion of railways on the Gold Coast and the social and economic implications for modern Ghana. The term 'Gold Coast' is used flexibly to refer to the geographical area that has become present-day Ghana, because the colonial railways there were designated as 'Gold Coast Railways'. The Gold Coast and other colonial railway experience are compared with those of their European and North American progenitors in order to emphasise the unique features of the tropical experience.

The book is divided into three parts, each of which focuses on different aspects of railway development and operation. Part I examines the policy decisions that determined railway construction on the Gold Coast and the effect of those decisions on the configuration of railway lines and associated ports and harbours. This is approached chronologically, so that each step can be unpacked, evaluated and understood. It also enables us to establish the intentions behind railway innovation in Africa as distinct from the effects.

Part II considers the railways as a business and commercial enterprise, looking at how the railways were organised and how the resources and skills needed for construction and operation were mobilised. In this, I follow Alfred Chandler, who demonstrated that as they were the first large-scale commercial enterprises to be undertaken, railways faced novel problems in engineering, recruitment, training and organisation, mobilisation of massive investment capital as well as large-scale appropriation of land. vi Solving these problems marked a significant step forward in managerial knowledge, training and organisation for large-scale industry generally. This part also assesses the 'spill-over' effects of a technology developed and perfected in one part of the world and transplanted in another. 'Technology transfer' is on trial here. Moreover, in British West Africa, where railways were owned and operated by the colonial governments, they occupied a central point in the formation of colonial policy. So, this part also sheds light on the British Government's attitude to public finance, labour and land tenure in the colonies

Part III examines the effect of railway development on the economy of the Gold Coast and the impact of new modes of transport on urbanisation and public health. The period covered begins in 1879, when the first proposals for railway construction were made, and ends in 1929, by which time the basic railway network and associated ports and harbours had been completed. 1929 also marked the onset of the Great Depression, which ushered in a new phase in the colonial economy. Since that time, no new

railways have been built in Ghana, though the basic network has been modified and upgraded.

Before delving into railway development and operation, a historical overview of the peoples and regions that we now call Ghana is called for. This will help provide context for the railway story. Among the ethnic groups of Ghana, the Guans are believed to be first to have established permanent settlements. They extended their range mainly along the River Volta. The Guans were followed by the Akans, whose earliest known settlements date back to at least 1000 AD. They mainly inhabited the forest regions. The Ga, Adangbe and Ewe came in waves between the fifteenth and eighteenth centuries from present-day Benin and Nigeria and settled mainly in the coastal grassland regions in south-eastern Ghana. At about the same time, other migrants were entering the country from the dry savannah north. These groups assimilated and integrated with earlier settlers and became the present-day Mole-Dagbani people, and occupied the areas in present-day northern and upper Ghana. Initially, these groups lived in isolated settlements under family heads. State formations and centralised political authority developed much later, partly in response to increased trade and commerce.vii

From the start, production and exchange were influenced by ecological and resource endowments. The coastal people, who caught fish and produced salt, traded these for palm oil and other foodstuffs cultivated in the forest regions. Similarly, kola nuts, produced in the Akan forest, were exported to the savannah regions in exchange for livestock. The people also engaged in long-distance trade. Gold, slaves and kola nuts were traded on the trans-Saharan route from a very early period and for several centuries, external commerce gravitated towards North Africa and southern Europe.

The desire to locate and control the sources of trans-Saharan gold brought the first Europeans, the Portuguese, to the coastal town of Elmina in 1471. Other European nationals soon followed and the direction of Ghana's external commerce increasingly shifted from the Saharan north to the Atlantic seaboard in the south. By the seventeenth century, the demand for gold and other tropical produce had been overtaken by a demand for cheap labour to work on sugar, cotton and tobacco plantations in the Americas and the Caribbean. For the next two centuries, millions of Africans were seized by more powerful groups and exported as slaves. viii

By the early nineteenth century, it had become clear that the slave trade was neither profitable nor morally defensible. Britain, the leading nation in

the trade, was the first to ban it in 1807. Other European nations followed and by the 1830s, the slave trade had become universally illegal. Now, instead of exporting humans to produce raw materials in the New World for the benefit of European industry and commerce, Africans were expected to produce the raw materials within Africa itself. A 'legitimate' trade, involving the export of palm oil and kernels, groundnuts, cotton and rubber, was established in West Africa by the mid-nineteenth century. This led to renewed European interest in the region, spurred on by keen competition for the control of raw materials. In 1884, this culminated in the Berlin Conference, where the major European powers carved out and shared the entire African continent among themselves; colonialism was fully underway.

The Gold Coast Colony, the southern coastal parts of present-day Ghana, was the first to come under British rule in 1874 through the so-called 'treaties of protection'. Ashanti was annexed to the Gold Coast Colony two decades later, in 1896. British rule expanded to encompass the Northern Territories by the turn of the century, mainly through a series of treaties which Ferguson, a Fante civil servant, concluded with the chiefs of the area on behalf of the British Government. Togoland (the present-day Volta region of Ghana) came under British rule after the First World War, when Germany's African possessions were given to the Allied powers as mandated territories. ix

The administration practised by the British was known as the Crown Colony system. At its apex was the Secretary of State for the Colonies, a cabinet minister based in London. He made policy decisions regarding the general administration of the Crown Colonies. The day-to-day running of the colony was entrusted to the Governor, who was resident there. The Governor was assisted by the Executive Council, which was made up of senior civil servants. There was also a legislative council, comprising both officially and unofficially nominated (later elected) members, which legislated for the colony. All laws were, however, subject to the approval of the Secretary of State for the Colonies.

The office of the Secretary of State for the Colonies has now been designated the Minister for Overseas Development. Clearly, the colonial origins of what is now called international development — tropical development included — cannot be overstated.

#### Introduction

```
i K. Tsey, Rethinking Development in Africa (Mankon, 2011).
```

ii S. Harding, The Tropical Agenda, Journal of Tropical Psychology, 1(1), 2-5.

iii Ibid

iv Ibid

v K. Tsey and S.D. Short, From Head-loading to the Iron Horse: The Unequal Health Consequences of Railway Construction and Expansion in the Gold Coast (Ghana). *Social Science and Medicine*, 40(5), 613–21.

vi A D Chandler Jr., The Railroads, The Nation's First Big Business, Sources and Readings (New York, 1965).

vii A Boahen, Ghana: Evolution and Change in the Nineteenth and Twentieth Centuries (London 1975).

viii Ibid.

ix Ibid.