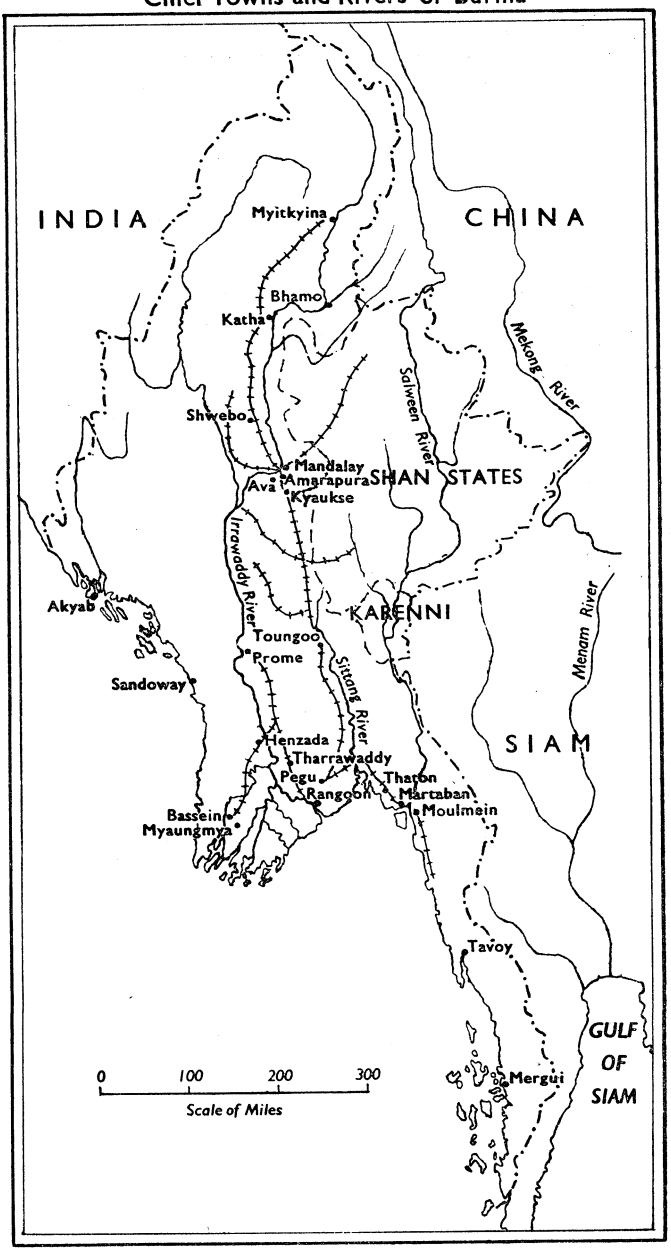
The Rice Industry of BURMA 1852-1940

MAP I

Chief Towns and Rivers of Burma



The Rice Industry of BURMA 1852-1940

CHENG SIOK-HWA

ISEAS
INSTITUTE OF SOUTHEAST ASIAN STUDIES
Singapore

First published in Kuala Lumpur in 1968 by
University of Malaya Press
Pantai Valley, 50603
Kuala Lumpur

First reprinted in Singapore in 2012 by
Institute of Southeast Asian Studies
30 Heng Mui Keng Terrace
Pasir Panjang
Singapore 119614

E-mail: publish@iseas.edu.sg
Website: http://bookshop.iseas.edu.sg

First Published 1968 University of Malaya Press
First Reprint 2012 Institute of Southeast Asian Studies, Singapore

The responsibility for facts and opinions in this publication rests exclusively with the author and her interpretations do not necessarily reflect the views or the policy of the publisher or its supporters.

ISEAS Library Cataloguing-in-Publication Data

Cheng Siok-Hwa.
The rice industry of Burma, 1852-1940.
1. Rice trade—Burma—History.
2. Rice—Burma—History.
I. Title
HD9066 B92C51 2012

ISBN 978-981-230-439-1 (soft cover)
ISBN 978-981-4414-10-4 (E-Book PDF)

Printed in Singapore by Markono Print Media Pte Ltd

TO

MY PARENTS

FOREWORD

THE basic importance of the rice industry in the economic development of British Burma is, of course, not a new discovery. Lower Burma in particular was uniquely adaptable to expanding rice cultivation by reason of soil, climate, and seasonal rainfall. Evidence related to this significant aspect of Burma's development can be found in the prolific reports prepared by highly literate officials of the Indian Civil Service. They contributed, especially after 1900, an enormous body of factual data bearing on the emerging situation. Annual reports of the departments directly involved with agriculture, labour, and trade were supplemented periodically by thoroughgoing reviews of important problems of agrarian development prepared by competent officials. The names of Baxter, Binns, Clayton, Couper, and Noel-Paton are representative of a score of such authors. Cheng Siok-Hwa has explored with meticulous care this enormous accumulation of information to produce a first rate account of the development of Burma's rice industry. Under the category of Official Reports and Publications, the author has cited in her bibliography no fewer than seventy-six distinct archival series and individual items, in addition to related secondary works. Much that she uncovers is not startlingly new, but her picture is more detailed and a number of novel interpretations emerge. The account is fully annotated and supported by a wealth of statistical data illustrating many aspects of the situation, including distribution of land acreage and ownership, availability of credit and labour, plus methods of cultivation, marketing, and processing.

Among her many contributions is the evidence that shifting methods of cultivation were generally practised by Burmese peoples in pre-British times, not only among hillside (*taungya*) cultivators but also among valley dwellers as well. She explains

the brokerage system which expedited the purchase of paddy from the farmers and its delivery to the mills and various factors relating to changes in the location, ownership, and size of the mills. Traders, moneylenders, and shopkeepers usually doubled as brokers, while landlords functioned normally as both borrowers and moneylenders in financing the annual crops. The author also describes the chicanery which accompanied the customary use of paddy baskets of varying size in the absence of official regulation of weights and measures. Collusive buying methods of the larger English millers in pursuit of a standard low price for paddy were apparently ineffective much of the time. An exception was the Bullinger Pool project of the 1920's.

In a larger world context, the influence on South Asian trade of the opening of the Suez Canal in 1869 must be re-evaluated in the light of Dr. Cheng's evidence. The effects of the operation of the canal on Burma's rice industry were not immediately significant. Prior to 1869 and for a decade thereafter sailing vessels continued to transport most of Burma's 'cargo' rice (mainly unhusked) to the mills of England and Germany for final processing. Unmilled rice could not withstand the dampness of ships' holds for the duration of the long haul around Africa. The change came around 1880, when steamer transportation to Europe replaced the sailing ships. The eventual practice of shipping milled rice by steamer via the Suez Canal operated to shift the processing industry back to Burma, so that rice milling developed into an expanding enterprise. Prior to its absorption by India in 1886, the Burma Kingdom suffered a serious loss of cultivator population to British Lower Burma. Migration was stimulated by guaranteed freedom of passage, a twelve-year exemption from land tax obligations, and a five-year exemption from payment of capitation taxes. When this population movement began to subside in the late 1880's, the expanding labour needs for Lower Burma were supplied almost entirely by voluntary migration from India, stimulated by free passage and wage incentives. Direct competition between Burmese and Indian labourers developed after World War I, reaching its peak during the depression years. Racial tensions played an increasing role in the rising nationalist movement of the inter-war years among Lower Burma's peasantry. The same period also witnessed a substantial fall in real wages of Burmese labour, who could not

compete with the *maistry*-operated Indian labour gangs, and also a sharp reduction after 1930 in the number of cultivator-owners of paddy land. Efficient Chettyar moneylender assistance to Burma's agricultural development was generously compensated, but it was far less predatory than competing indigenous and Chinese sources of credit. The generally recognized reasons for accumulating agricultural debt are here fully illustrated.

I first became interested in Dr. Cheng's research project in 1961 while both of us were working at the School of Oriental and African Studies of the University of London. The author submitted her findings as a Doctor's dissertation in 1963. Important among the research difficulties which now attend the study of post-war Burma is the absence of the wealth of source material data on which Dr. Cheng's study of the pre-war period draws so extensively. She has placed all students of Burma in her debt by this highly articulate and clarifying contribution to the country's economic history.

John F. Cady,

Department of History,
Ohio University.

September 1966.

CONTENTS

		Page
	FOREWORD	vii
	LIST OF TABLES	xiv
	LIST OF GRAPHS AND MAPS	xx
	LIST OF STATISTICAL APPENDICES	xxi
	PREFACE	xxiii
I	INTRODUCTION	1
II	PADDY PRODUCTION	16
	Requirements of the Paddy Plant	17
	Physical and Climatic Conditions in Burma	19
	Expansion of Paddy Acreage	24
	Yield Per Acre	28
	Size of Farms	30
	Methods of Cultivation	32
	Paddy Varieties	36
	The Agricultural Department	39
	Cattle	45
III	ASSEMBLING THE PADDY CROP	48
	Initial Disposal of the Crop	48
	Intermediaries	50
	The Measuring Basket	54
	System of Purchase in the Big Mills	57

Storage 60
Transport of Paddy 62
Combinations or Price Agreements 64
Finance 68
Prices 70
The 'Futures' Market 74

IV MILLS AND MILL PRODUCTS 77
Growth and Distribution of Mills 77
Changing Patterns of Ownership and Size of Mills 82
The Small Up-Country Mills 93
Improvements Made in the Milling Industry 95
Milling Processes 97
Rice Grades 103
The Uses of Rice and Its By-Products 107

V BURMESE AND INDIAN LABOUR 112
Internal Migration 113
Government-Assisted Indian Immigration 117
Unassisted Indian Immigration 120
Characteristics of Indian Immigration 124
Labour in Paddy Production 125
Labour in Rice Mills 131
Competition between Indian and Burmese Labour 134

VI LAND TENURE PROBLEMS 137
Land Tenure Systems under Burmese Rule 137
Land Tenure Systems under British Rule 138
Loss of Land by Agriculturists 142
Land Alienation Legislation 147
Tenancy Conditions 156
Tenancy Legislation 166

VII AGRICULTURAL CREDIT 171
The Need for Credit 171
Types of Loans 173
Causes of Indebtedness 177
Private Moneylenders 185
Government Loans 190
Co-operative Credit 193

VIII MARKETS FOR BURMA RICE 198
Internal Trade 199
The European Market 200
India and Ceylon 210
Countries in South-East Asia 213
China and Japan 217
Other Countries 219

IX CONCLUSION 220

STATISTICAL APPENDICES 237

BIBLIOGRAPHY 277

INDEX 285

TABLES

I.1 : Average Annual Number and Tonnage of Steam and Sailing Ships Cleared from Burma for Foreign Ports, 1876/7 to 1901/2 15

II.1 : Paddy Acreage and Total Cultivated Acreage in Each District of Arakan and Tenasserim Divisions, 1936/7 22

II.2 : Paddy Acreage and Total Cultivated Acreage in Each District of Pegu and Irrawaddy Divisions, 1936/7 23

II.3 : Paddy Acreage and Total Cultivated Acreage in Each District of the Dry Zone of Upper Burma, 1936/7 24

II.4 : Paddy Acreage and Total Cultivated Acreage in Each District of the Northern Wet Zone of Upper Burma, 1936/7 25

II.5 : Annual Average Acreage of Paddy Land in Lower and Upper Burma, 1830 to 1940 25

II.6 : Average Annual Increase of Paddy Land in Lower Burma, 1863 to 1940 26

II.7 : Annual Average Acreage of Paddy Land in Each Division of Lower Burma, 1867/8 to 1939/40 27

II.8 : Annual Average Yield Per Acre in the Main Rice-Producing and/or Exporting Countries of the World, 1909/10 to 1913/4 and 1928/9 to 1932/3 28

II.9 : Average Size of Farms in Selected Districts 31

II.10: Burma—Classification of Paddy into Five Types According to Size 38

III.1 : Monthly Arrivals of Paddy by Boat and Rail into Rangoon, 1934 to 1936 51

III.2 : Wholesale Prices Per Hundred Baskets of Paddy in Rangoon from 1845 to 1939 73

IV.1 : Annual Average Number of Mills in Burma, 1861 to 1939 78

IV.2 : Distribution of Mills in Lower Burma by Division, 1861 to 1940 80

IV.3 : Number of Mills in the Four Main Ports of Burma, 1861 to 1930 81

IV.4 : Distribution of Mills in Burma by Race of Owners, 1881 to 1936 83

IV.5 : Distribution of Mill Employees in Burma by Race of Mill Owners, 1898 to 1936 85

IV.6 : Distribution of Mills by Race of Owners and Division, 1936 86

IV.7 : Distribution of Mill Employees by Race of Mill Owners and by Division, 1936 87

IV.8 : Distribution of Mills and Mill Employees by Race of Mill Owners and by Selected Districts, 1898 and 1936 89

IV.9 : Percentage Distribution of Mills and Employees in Five Combined Districts by Race of Mill Owners in 1898 and 1936 90

IV.10: Percentage of Mills and Employees in Five Combined Districts to Total in Burma, by Race of Mill Owners in 1898 and 1936 91

IV.11: Distribution of Mills by Race of Owners and Number of Employees, 1898 and 1936 92

IV.12: Growth in the Number of Small Mills outside the Ports, 1900 to 1930 93

IV.13: Annual Average Amount and Percentage of Cargo Rice and White Rice Exported from Burma, 1881/2 to 1901/2 97

IV.14: Main Rice Grades Exported from Burma 105

IV.15: Annual Average Exports of Rice Bran from Burma to the United Kingdom, Malaya and Other Countries, 1882/3 to 1939/40 110

V.1 : Number of Persons Born in Upper Burma and Enumerated in Lower Burma in the Successive Census Years 117

V.2 : Table Showing the Effect of Changing Fare Prices on the Number of Immigrants 121

V.3 : Annual Average Number of Immigrants and Emigrants by Sea to and from the Ports of Burma, 1871 to 1938 122

V.4 : Distribution of Agriculturists by Race and by Main Occupation on 24 February 1931 131

V.5 : Distribution of Skilled and Unskilled Labourers in Rice Mills on 2 February 1939, by Race 132

V.6 : Percentage Distribution of Skilled and Unskilled Workers in Rice Mills in Selected Districts on 2 February 1939, by Race 132

V.7 : Distribution of Rice Mill Employees, Skilled and Unskilled, by Race and by Size of Mill on 2 February 1939 133

VI.1 : Distribution of Annual Average Acreage of Agricultural Land by Type of Owners in Burma from 1901/2 to 1938/9 143

VI.2 : Distribution of Annual Average Acreage of Agricultural Land by Type of Owners in Lower Burma from 1901/2 to 1938/9 144

VI.3 : Distribution of Annual Average Acreage of Agricultural Land by Type of Owners in the Thirteen Principal Rice-Growing Districts of Lower Burma 1901/2 to 1938/9 145

VI.4 : Distribution of Agricultural Land by Type of Owners in the Thirteen Principal Rice-Growing Districts of Lower Burma, 1930 to 1937 146

VI.5 : Annual Average Acreage of Areas Let at Full Fixed Rents in All Burma, Lower Burma and the Thirteen Districts from 1901/2 to 1938/9 157

VI.6 : Distribution of Annual Average Acreage of Rented Area by Type of Rent, 1923/4 to 1938/9 159

VI.7 : Rents and Paddy Prices in Lower Burma, 1889 to 1923 162

VI.8 : Percentage Distribution of Rented Area in Selected Assessment Tracts in Selected Districts Held by Tenants of Various Years' Standing, during 1936/7 163

VI.9 : Percentage Distribution of Rented Area Held by Tenants of Various Years' Standing 164

VII.1 : Amount of Loans Advanced under the Land Improvement Loans Act of 1884, from 1904/5 to 1938/9 190

VII.2 : Amount of Loans Advanced under the Agriculturists' Loans Act of 1884, from 1900/1 to 1936/7 192

VII.3 : Annual Average Number of Agricultural Co-operative Credit Societies and Their Numbers in Burma, 1905 to 1940 194

VIII.1 : Distribution of Annual Average Exports of Rice and Paddy from Burma by Market Group, 1865/6 to 1939/40 201

VIII.2 : Distribution of Annual Average Exports of Rice and Paddy from Burma to European Countries, 1871/2 to 1939/40 203

VIII.3 : Annual Average Exports of Rice from Siam, Indo-China and Burma to Europe, 1871 to 1936 209

VIII.4 : Distribution of Annual Average Exports of Rice and Paddy from Burma to India and Ceylon, 1865/6 to 1939/40 211

VIII.5 : Distribution of Annual Average Exports of Rice and Paddy from Burma to Countries in South-east Asia, 1870/5 to 1939/40 214

VIII.6 : Rates of Freight Per Ton Ruling from January to March 1930 on Rice Shipped 215

VIII.7 : Distribution of Annual Average Exports of Rice and Paddy from Burma to China and Japan, 1874/5 to 1939/40 217

IX.1 : Number of Persons Dependent Mainly on Agriculture, 1881 to 1931 220

IX.2 : Annual Average Acreage Under Paddy and Under All Crops, 1891 to 1940 221

IX.3 : Value of Rice and Total Exports from Burma, 1866/7 to 1936/7 221

IX.4 : Number of Persons Per Square Mile, 1881 to 1931 227

GRAPHS

I. Exports of Rice from Rangoon, Akyab, Bassein and Moulmein to All Countries, 1862/3 to 1901/2 11

II. Exports of Rice from Rangoon, Akyab, Bassein and Moulmein to Europe, 1865 to 1890 11

III. Seasonal Variation in Wholesale Prices for Ngasein Paddy in Rangoon, 1934 to 1939 72

IV. Seasonal Variation in Spot and Two-Months Future Prices for *Small Mills Specials in* Rangoon, 1934 to 1938 75

V. Seasonal Variation in Immigrants and Emigrants, 1921 to 1925 126

MAPS

I. Chief Towns and Rivers of Burma *frontispiece*

II. Divisions and Districts in Burma, 1931. xxvi

STATISTICAL APPENDICES

I.A Exports of Rice from Major Ports of Burma to All Countries 237

I.B Exports of Rice from Major Ports of Burma to Europe 239

I.C Number and Tonnage of Steam and Sailing Ships Cleared from Burma for Foreign Ports 240

II.A Paddy Acreage in Lower and Upper Burma, 1830 to 1940 241

II.B Paddy Acreage in Each Division of Lower Burma, 1867/8 to 1940/1 244

II.C Average Yield of Paddy Per Acre in Each District 247

III.A Monthly Prices for Ngasein Paddy in Rangoon from 1934 to 1939 248

III.B Monthly Spot and One Month, Two Months and Three Months Delivery Prices for *Small Mills Specials* in Rangoon, 1934 to 1938 249

IV.A Number of Rice Mills in Burma, 1861 to 1940 251

IV.B Distribution of Rice Mills in Burma by District and Division, 1892 to 1940 253

IV.C Exports of Cargo Rice and White Rice from Burma, 1881/2 to 1901/2 257

IV.D Exports of Rice Bran to the United Kingdom, Malaya and Other Countries, 1882/3 to 1939/40 258

V.A Distribution of Immigrants and Emigrants by Month 260

V.B The Number of Passengers by Sea, Landed at and Embarked from, the Ports in Burma 262

V.C Growth of the Indian Population in Burma 265

VI.A Distribution of Total Occupied Land in Burma by Type of Owners, 1901/2 to 1938/9 266

VI.B Distribution of Total Occupied Land in Lower Burma by Type of Owners, 1900/1 to 1938/9 268

VI.C Distribution of Total Occupied Land in the Thirteen Principal Rice-Growing Districts of Lower Burma by Type of Owners, 1901/2 to 1938/9 270

VI.D Areas Let at Full Fixed Rents in All Burma, Lower Burma and the Thirteen Principal Rice-Growing Districts of Lower Burma, 1901/2 to 1938/9 272

VII Number of Agricultural Co-operative Credit Societies and Their Members in Burma, 1906 to 1940 274

VIII Annual Exports of Rice and Paddy from Lower to Upper Burma, 1865 to 1896 275

PREFACE

THIS study of the rice industry of Burma deals only with the pre-war British period of occupation. The Japanese Occupation and the post-war years saw many changes, some far-reaching and cataclysmic, in the economy of Burma as a whole and in particular, in the rice industry which still is the most important industry both in terms of export earnings and proportion of total population working in the industry. Private enterprise during the pre-war period has given way to varying degrees of state control. Instead of large import-export firms buying rice through middlemen from the cultivators and milling and selling the rice to overseas buyers, the Government, starting with the British Military Administration and continued and expanded by the independent Burmese Government, buys paddy from the cultivators at fixed prices, assembles, stores, mills and sells rice to governments abroad, often on barter deals. Foreigners who played such important roles during the pre-war period in assembling, milling, marketing, moneylending and land-letting processes have mostly left the country. Instead, these functions are taken over by the Burmese, some in their private capacity, many as government servants and members of semi-autonomous bodies. Other changes are the nationalization of land, the greater role of co-operatives of every type and the improvement of tenants' position with regard to security of tenure and fair rents.

Many of these changes can be traced to the difficulties, problems and frustrations experienced by the Burmese during the pre-war period. Positive steps were taken to loosen the grip of the landlords, moneylenders and shopkeepers. Indian labourers are no longer found in large numbers due to strict immigration controls imposed by the Government and marked discriminatory treatment against them. The substantial profits of the rice trade

are no longer remitted overseas but now accrue to the Government and to the Burmese themselves. Other changes were brought about by the events of the Second World War and the subsequent civil war.

Yet despite drastic changes many features of the old structure still remain. Rice cultivation is carried on with basically the same centuries-old labour-intensive methods. It remains the most important export commodity and is the main source of livelihood for the bulk of the population, in spite of Government attempts at agricultural diversification and efforts at industrialization. Attempts to improve rice cultivation follow lines laid down in the pre-war period: the encouragement of the use of better seeds by means of experimental and multiplication farms and the widespread dissemination of information; the awarding of prizes for crops and working cattle at agricultural shows; and the constant improvement and extension of irrigration and drainage channels. The 1948 and the 1952 Land Nationalization Acts, in practice, did little more than confirm sitting tenants on their farms. Many areas were exempted from the Acts and of the rest many holdings of sitting tenants were merely re-adjusted and only a minute proportion of the land was redistributed to field labourers and villagers who were not agriculturists. In so far as present cultivators are concerned the new factors which influence them most are the fixing of paddy prices, which are far below world prices; the lack of easily available credit sources comparable with the services supplied by the Chettyars and other moneylenders of the pre-war era; the very few obligations in the way of rents and taxes since landlordism has been eliminated without entailing compensation on the part of cultivators (in fact no serious attempt was ever made by the Government to compensate the landlords); the very few kinds of taxes that are levied on cultivators; the difficulty of getting imported consumer goods which, together with the low paddy prices offered by the Government, act as disincentives; and last but not least, the generally unstable political climate which mitigates against rapid recovery and expansion.

For source materials the writer has depended heavily on government publications—annual reports of various Government Departments, Reports of Commissions of Enquiry and publications by Government servants. Unfortunately almost nothing can

be found from commercial sources. The big British import-export firms have either wound up or have diverted their attention to other countries. For example, Steel Brothers, one of the biggest British firms in pre-war days now have few dealings with Burma and their very thin file on the Burmese rice industry is not of much help. Almost all their records which might be of use have been destroyed. The newspapers and the Annual Reports of the Chamber of Commerce are the only important non-government sources available to the writer.

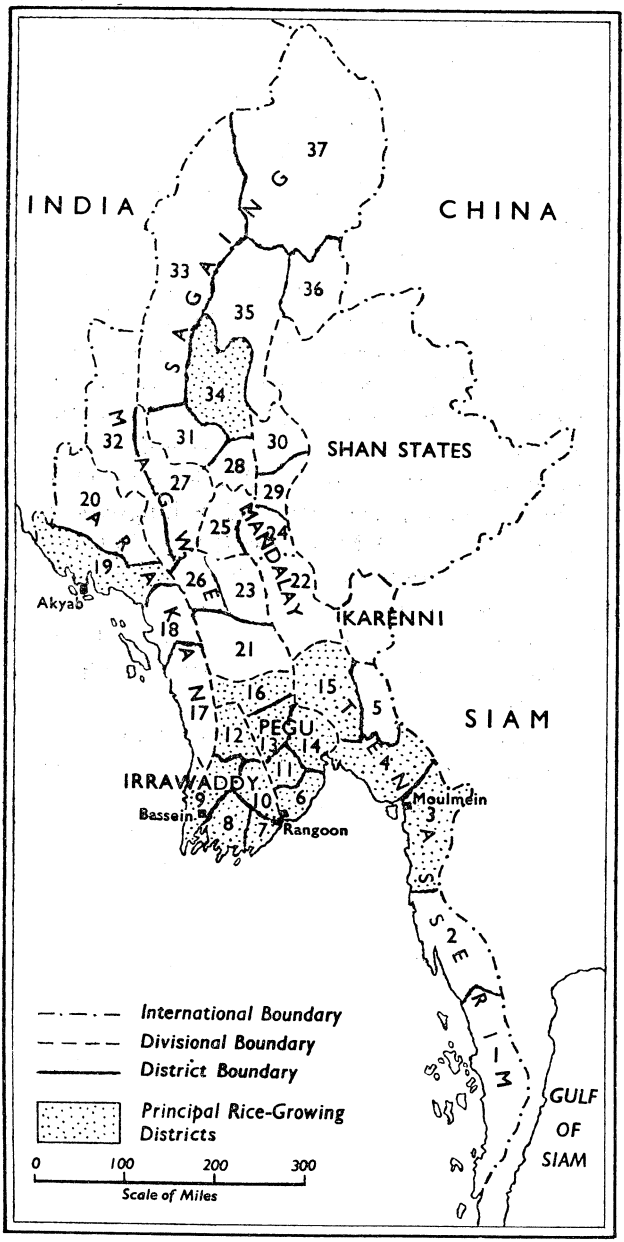
This book is an amended version of a thesis submitted for the degree of Ph.D. to the University of London in 1963. The sources listed in the bibliography are found in the India Office Library, the British Museum State Paper Room and Reading Room, the Library of the London School of Economics and Political Science, the Royal Commonwealth Society Library, the Library of the Indian High Commission and the School of Oriental and African Studies Library. I am much indebted to the officials and staff of these libraries for their unfailing courtesy and willingness to help. I should like to thank Dr. J.A.M. Caldwell and Professor Hugh Tinker for their advice and assistance, Professor Ungku Abdul Aziz for his interest in this project, Professor John F. Cady for useful advice and for writing the foreword to this book, and Professor C.D. Cowan for his valuable suggestions, helpful criticisms and general supervision. It remains for me to mention my husband, Dr. Saw Swee-Hock, without whose encouragement, assistance and forbearance this book could never have been written.

Cheng Siok-Hwa

Department of History
University of Malaya

February 1967

MAP II
Divisions and Districts in Burma, 1931



1. Mergui
2. Tavoy
3. Amherst
4. Thaton
5. Salween
6. Hanthawaddy
7. Pyapon
8. Myaungmya
9. Bassein
10. Maubin
11. Insein
12. Henzada
13. Tharrawaddy
14. Pegu
15. Toungoo
16. Prome
17. Sandoway
18. Kyaukpyu
19. Akyab
20. Arakan
21. Thayetmyo
22. Yamethin
23. Magwe
24. Meiktila
25. Myingyan
26. Minbu
27. Pakokku
28. Sagaing
29. Kyaukse
30. Mandalay
31. Lower Chindwin
32. Chin Hills
33. Upper Chindwin
34. Shwebo
35. Katha
36. Bhamo
37. Myitkyina