

COMPREHENSIVE REPORT

•

ECONOMIC AND ENGINEERING
DEVELOPMENT OF BURMA

•

PREPARED FOR THE
GOVERNMENT OF THE UNION OF BURMA

VOLUME I

AUGUST 1953

KNAPPEN TIPPETTS ABBETT McCARTHY
ENGINEERS

IN ASSOCIATION WITH
PIERCE MANAGEMENT, INC.

AND
ROBERT R. NATHAN ASSOCIATES, INC.

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VOLUME I

INTRODUCTION
ECONOMICS AND ADMINISTRATION
AGRICULTURE AND IRRIGATION
TRANSPORTATION

AUGUST 1953

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KNAPPEN - TIPPETTS - ABBETT - MCCARTHY
ENGINEERS

(KNAPPEN TIPPETTS ABBETT ENGINEERING CO.)

62 WEST 47TH STREET

NEW YORK 36, N.Y.

PLAZA 7-8001

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SOUTH EAST ASIA OFFICE
P.O. Box 1484
PROME COURT
RANGOON, BURMA
SOUTH 556 & 572
CABLE ADDRESS:
"KNAPENG RANGOON"

August 7th, 1953

THE HONORABLE U WIN,
Minister for National Planning and Religious Affairs,
Prome Court, Prome Road,
RANGOON, BURMA.

DEAR SIR,

The Consultants take pleasure in transmitting to you the accompanying "Comprehensive Report on the Economic and Engineering Development of Burma."

It is the earnest hope of all who have contributed to the preparation of the Report that it will be a trustworthy guide to social and industrial progress that will endure and strengthen through the years to come.

The Consultants desire to express their thanks and appreciation for the honor and opportunity afforded them to participate in the bold, creative, and historical measures being set in motion by the Union of Burma to secure for her people the full enjoyment of their rich resources.

Respectfully yours,



General Manager

FOREWORD

AUTHORITY

This Comprehensive Report is being submitted to the Government of the Union of Burma as the concluding service in the fulfillment of the contract dated August 8, 1951, and terminating on August 8, 1953, between the Government of the Union of Burma and Knappen Tippetts Abbett Engineering Company of New York City. As provided in the contract, the Knappen Tippetts Abbett Engineering Company has associated itself with Pierce Management, Inc., of Scranton, Pennsylvania, Coal and Metal Mining Engineers, and Robert R. Nathan Associates, Inc., Washington, D.C., Economists. The dollar costs under this contract are being paid by the Technical Cooperation Administration of the United States.

Article I, Section C, subsection 1c of the contract provides that "at the conclusion of the term of this contract, the Consulting Engineer will present a written report recommending a comprehensive, integrated program for the over-all development of the resources of Burma and governmental and private measures in addition to those which may already have been taken, designed to place such program into operation . . ." The recommendations shall be made "in the light of the desire of the Government to improve the productivity, production, and standard of living of the people of Burma as rapidly as possible and to achieve a diversified and balanced economy appropriate to the national and economic independence of Burma." This Report is now presented in fulfillment of that requirement.

SCOPE

The responsibilities of Knappen Tippetts Abbett Engineering Company and its associates under the contract fall into six categories:

1. Surveys and Reports
 - a. Preliminary Survey and Report.
 - b. Project Surveys and Reports.
 - c. Comprehensive Report.
2. Preparation of Applications for Financing.
3. Services Relative to Specific Projects.
4. Continuous Engineering, Consulting, and Economic Advisory Services.
5. Purchasing Services.
6. Training of Burmese technicians.

Under category 1a, Knappen Tippetts Abbett Engineering Company, following a preliminary survey of the resources and the national economy

of Burma, submitted a written Preliminary Report on January 31, 1952. Subsequently, a large number of detailed reports on specific projects have been submitted. Many services have been rendered relative to specific projects; continuous engineering, consulting, and economic advisory services have been rendered and on occasion purchasing services have been performed. A number of Burmese technicians have assisted in the work, and have received training in various engineering and economic fields and in office procedures. No preparation of applications for financing has been requested.

In the foreword to the Preliminary Report it was observed that "because of the shortage of time and insufficient primary information, it has not been possible to achieve the degree of precision or balance in the proposed program which it is hoped will characterize the Final Report . . . Likewise these limitations have prevented the establishment of a final order of priorities for projects and final judgements concerning policies." This Comprehensive Report recommends a balanced program of public and private investment for the entire economy, together with measures to train the necessary skilled, professional, technical and managerial workers, indicates the feasibility of the program, recommends priorities and indicates the measures necessary to carry it out.

ORGANIZATION

The following principals have visited Burma to initiate and supervise the survey, furnish consulting and advisory services during its course and assist in the preparation of the Preliminary and Comprehensive Reports:

- Ernest F. Tippetts, Partner, Knappen Tippetts Abbett Engineering Company.
- Robert W. Abbett, Partner, Knappen Tippetts Abbett Engineering Company.
- Gerald T. McCarthy, Partner, Knappen Tippetts Abbett Engineering Company.
- James H. Pierce, Chairman, Pierce Management, Inc.
- John S. Marshall, President, Pierce Management, Inc.
- Robert R. Nathan, President, Robert R. Nathan Associates, Inc.

The General Manager of the survey is Homer B. Pettit, and the Deputy General Manager and Chief Engineer is John B. Alexander.

The following have served in Burma as Consultants:

Economic Geologist: Stuart St. Clair.
 Economist: Louis J. Walinsky.
 Editorial: Donald P. Barnes.
 Hydroelectric Engineer: Frank P. Fifer.
 Industrial Engineers: Donald F. Othmer,
 Lawrence E. Peterson.
 Mining Engineer: Evan Bennett.
 Transportation Engineer, Ports and Waterways:
 Francis B. Wilby.
 Transportation Engineer, Railways, Highways,
 Airways, and Communications: Ewart G.
 Plank.

The following have been members of the field staff:

Frank D. Ahern, Construction Engineer.
 Carleton W. Bacon, Communications Engineer.
 Thomas H. Baker, Highway Engineer.
 B. A. Blanchard, Management Administrator.
 Charles MacA. Carman, Industrial Engineer.
 J. B. Chadwell, Office Manager.
 Donald E. Cupp, Industrial Engineer.
 E. W. Englebright, Railway Engineer.
 Everett E. Hagen, Industrial Economist.
 Sam Hancock, Mining Engineer.
 Pitt W. Hyde, Mining Engineer.
 Joseph A. Jordan, General Civil Engineer.
 Kenneth A. Lambert, Mining Engineer.
 Irving H. Licht, National Income Economist.
 Homer E. Montgomery, Office Manager.
 Howard S. Nelson, Agronomist.
 Jack W. Ninneman, Aerial Survey Engineer.
 Henry R. Norman, Ports and Waterways
 Engineer.
 Arnold A. Olsen, Chief Driller.
 Philip A. Parry, Industrial Engineer.
 C. M. F. Peters, Mining Engineer.
 Ernest J. Petersen, Chief Draftsman.
 Arthur R. Reitter, Irrigation Engineer.
 Benjamin P. Robinson, General Civil Engineer.
 Alfred A. Strauss, Industrial Engineer.
 Shigeharu Takahashi, Agricultural Economist.
 William W. Tamplin, Economic Geologist.
 George M. Tapley, Hydroelectric Engineer.
 Eugene P. Tubman, Construction Engineer.
 Peter N. Vukasin, Economic Analyst.
 Paul A. White, Industrial Engineer.
 Donald Wilhelm, Jr., Industrial Economist.
 Kenneth B. Wolfskill, Highway Engineer.
 George O. Zalkind, Ports and Waterways
 Engineer.

The following members of the home office staffs have devoted a large part of their time to the survey during the period of the contract:

Volney A. Poulson, Project Engineer.
 A. J. Creshkoff, Project Economist.

ACKNOWLEDGEMENTS

Heartfelt appreciation is expressed to the Hon. U Nu, Prime Minister of the Government of the Union of Burma, whose effective consecration to promoting the welfare of Burma has been an inspiration to the survey group and whose steady support of the aims of the survey has facilitated the work throughout the contract period. Gratitude is expressed also to all of the Ministers of the Government, whose unfailing courtesy and cooperation has opened the resources of their agencies to the survey staff members and greatly increased the effectiveness of their work.

All of the Ministries and other agencies of the Government of the Union of Burma from whom information and other help has been sought have been extremely cooperative, as have the personnel of the Special Technical and Economic Mission of the United States Technical Cooperation Administration in Rangoon, the personnel of the various missions of the United Nations and its affiliated organizations, and a large number of other individuals and firms. Because of the many sources from which aid has been received, the absence from Burma as this Report is being prepared of some persons who earlier served as members of the field staff, and human error, it has been necessary to omit from acknowledgement the names of some from whom important aid was received. To all of these as well as to the individuals hereinafter listed are extended the deepest appreciation of the associated firms and their staffs.

OFFICE OF THE PRIME MINISTER

U Win Pe, Secretary.

Economic and Social Board

U Hla Maung, Executive Secretary.
 U Ba Sein, Joint Secretary.
 U Kyaw Sein, Statistician.

MINISTRY OF NATIONAL PLANNING

U Tin Pe, Secretary.
 J. S. Furnivall, Planning Adviser.
 U Maung Maung Kyaw, Executive Officer,
 Burmese Economic Aid Committee.
 U Kyaw Khaing, Census Commissioner.
 R. C. Barber, Officer on Special Duty.
 Lt.-Col. Ba Han, Officer on Special Duty.

Central Statistical and Economics Department

U Tha Tun Oo, Deputy Director.
 U Thet Tun, Assistant Director (Economics).
 U Nyunt We, Assistant Director (Economics).
 Daw San Shin, Assistant Director (Statistics).
 And the entire staff of the department.

Economic Planning Commission

U Tun Tin, Secretary.

Social Planning Commission

U Aung Min, Chairman.
U Ba Kin, Secretary.
U Ko Ko, Member.

MINISTRY OF AGRICULTURE AND FORESTS

U Chit Pe, Secretary.

Agriculture Department

U Khin, Director.
U Ba Tin (2), Deputy Director of Agriculture.
U Ba Thein, Economic Botanist.
U Ohn Tin, Engineer.

Agricultural and Water Resources Development Corporation

U Hpu, Chief Executive Officer.

Directorate of State Credit

U Hla Maung, Director.

Agricultural Department: District Agricultural Officers

Mandalay: U Khin, Senior D.D.A.
U San Pe, Asst. Econ. Botanist.
U Aung Khin, S.A.A.

Magwe: U Ba Wan, D.D.A.
U Thant, A.D.A.
U Khin Maung Tint, S.A.A.

Meiktila: U Shwe Tha Htwe, D.D.A.
U Ba Thein, A.D.A.
U Po Htoo, A.D.A.
U Kyaw Sein, S.A.A.

Toungoo: U Maung Gale, A.D.A.

Pyinmana: U Shein Maung, Dy. D.A.
U Aung Khin, A.D.A.
U Soe, S.A.A.
U Hla Shein, S.A.A.

Myaungma: U Hla Baw, A.D.A.
U Aye Thwin, S.A.A.

Bassein: U Thein Maung, D.D.A.
U Sein, A.D.A.
U Aung Min, A.D.A.
U Khing Maung (5), S.A.A.

Forest Department

Mr. C. Kyaw Khine, Conservator of Forests.
U San, Conservator of Forests, Working Plans Circle.
Mr. Taw Kyi Saing, Conservator of Forests, Sittang Circle.

U Thein, Conservator of Forests, Chindwin and Northern Circles.

U Aung Baw, Conservator of Forests, Hlaing and Utilization Circle.

U Tun Ngwe, Conservator of Forests, Research and Training Circle, Ahlone.

U Thein Han, Acting Conservator of Forests, Working Plans Circle.

Mr. C. Kwet Kaw, Conservator of Forests, Timber Research and Agency Division, Ahlone.

U Aung Tin, Divisional Forest Officer, Delta Division.

U Saw Ohn Yin, Superintendent of Wood Working Shop.

Mr. Thomas, Construction-in-charge, Saw Mill No. 3, Kemmendine.

Irrigation Department

Mr. L. J. McLean, Chief Engineer.

U Bi, Superintendent Engineer.

Mr. A. C. Munro, Personal Assistant to Chief Engineer.

U Maung Maung Lay, Works Officer.

Fisheries Bureau

U Ba Kyaw, Fisheries Officer.

U Aung Myint, Secretary, Fishing Cooperation.

State Timber Board

U Hman, Chairman.

Mr. Tan Chein Hoe, General Manager.

U Tin Gyi, Director of Marketing and Milling.

U Aung Baw, Director of Extraction.

U Tun Gyaw, Zone Manager.

U Tha Htay, Manager, Saw Mill No. 2.

U Shein Toe, Acting Manager, Ahlone.

U Soe Maung, Chief Accounts Officer.

U Aung Tun, Statistical Officer.

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U Than Nwe, Assistant Secretary.

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U Kyin Sein, General Manager.

U Maung Maung, Chief Movement Officer.

U Chit Tin, Executive Officer (Movement).

U Tin Chaing, Executive Officer (Direct Handling).

Mark Yain Kee, Chief Accounts Officer.

U Thet Zin, Executive Officer, Akyab.

U.E. Thein, Executive Officer, Bassein.

U.E. Cho, Executive Officer, Moulmein.

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DISTRIBUTION**

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Mr. W. J. Goddard, Joint Registrar.
U San Nyunt, Assistant Registrar, Moulmein.

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U Ba Thi, Textiles Marketing.
U Than Sein, Chief Accounts Officer.
U Sein, Senior Accounts Officer.

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C. P. Michael, Assistant Secretary.

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U Ba Hli, Dean, College of Engineering.
Murray D. Harwood, Visiting Professor,
Sanitary Engineering.
Daniel D. Streeter, Jr., Visiting Professor,
Mechanical Engineering.
U Tun Thin, Professor of Economics.
Mr. Saw William Paw, Head of Commerce.
U Ko Lay, Principal, Mandalay University.

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B. K. Bose, Additional Secretary.
U Kyaw, Assistant Secretary.

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U Aung Soe, Financial Commissioner.
U Thi, Secretary to Financial Commissioner.

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U Lu Gale, Commissioner of Income Tax.
U Ko Ko Lay, Income Tax Officer.

Customs House

U Ba San, Collector of Customs.
U Nyunt, Assistant Collector of Customs.
Mr. Morris, Customs Officer, Mergui.
U San Lwin, Auditor General.
U Ba Khin, Accountant General.

Union Bank of Burma

U San Lin, General Manager.
U Tin Tun, Deputy General Manager.
Dr. Clay Anderson, Adviser.

U Khin Maung Gyi, Deputy Controller.
U Maung Maung Hla, Economist.
Daw Tin Yi, Economist.

MINISTRY OF HOME AFFAIRS

U Khin Maung Pyu, Chief Secretary.

MINISTRY OF HOUSING AND LABOR

K. F. Ho, Secretary.
U Sein, Chief Inspector of Factories.
U Khint Maung, Director of Labor.
J. C. Koop, Statistical Officer.
U Tha Din, Labor Officer, Moulmein.
U Kyaw Sein, Director of National Housing
Board.
U Tun Sein, Assistant Executive Officer.

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E. R. Grey, Assistant Secretary.

Directorate of Industries

U Saw Tun, Deputy Director.
Dr. Kyaw Htin, Industries Officer.
Saw Rally Bain, Assistant Superintendent,
Cottage Industries.
U Chit Hlaing, Supervisor, Weaving Loans,
Moulmein.

Government Cotton Spinning and Weaving Factory

U Kyaw Sein, General Manager.
C. C. Holmes, Former General Manager.
Charles N. Smith, Assistant Manager.
Clayton A. Cook, Superintendent.
U Ba Kin, Head Accountant.
U Khin Maung, Technical Adviser.
S. K. Burman, Ibcon Consultant.
A. D. Patraval, Ibcon Consultant.

Electricity Supply Board

U Tun Ohn, Chief Administrative Officer.
U Aye, Hydroelectric Survey Engineer.
U Kyi Khin, Assistant Hydroelectric Engineer.

MINISTRY OF INFORMATION

U Thant, Secretary.
U Maung Maung Than, Deputy Secretary.
U Saw Aung, Acting Deputy Superintendent,
Govt. Printing and Stationery Office.
U Sa, Manager, Govt. Book Stores.

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U Ba Htay, Secretary.
U Ohn Shwe, Deputy Secretary.

Burma Survey Department

U Hla Khin Maung, Director.

Office of the Commissioner of Settlement and Land Records

U Ba Htin, Acting Assistant Commissioner.
 U Thaw, Superintendent, Land Records,
 Moulmein.

Land Nationalization Department

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 U Ohn Pe, Executive Officer.
 U We Lin, Executive Officer.
 U Thant, Executive Officer.
 U Tun Tin, Executive Officer.
 Thakin Tun Tin, Executive Officer.
 Mr. A. Barrow, Administrator of State Colonies.

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Rapheal Peter Thaug, Secretary.
 U Kyaw Myint, Assistant Secretary.
 U Kyaw Pe, Executive Engineer, Loikaw.

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U Kyaw Thein, Secretary (also Director-General,
 Mineral Resources Development Corporation)
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 Dr. A. N. Ghosh, Director, GUB Metal-
 lurgical Research.
 U Pu, Mining Adviser.
 Dr. Ba Thi, Acting Director, Geological Depart-
 ment.
 U Min Din, Geologist.
 Kon Hock Chaw, Mining Engineer.
 Dr. Kyaw Myint, Geologist.
 U Ba Maung, Statistical Officer.

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U Saw Lwin, Secretary.
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 U Tha Dok, Acting Chief Engineer (March-
 June, 1953).
 U Kyi Mun, Personal Assistant to Chief
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 U Ko Ko, Meiktila.
 U Shwe Chan, Monywa.
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 J. H. Martin, Shwebo.
 Mr. Gian Chand, Tharrawassy.
 Mr. P. H. McLean, Kyaukme.

Superintending Engineers

U Aung Tun, Mandalay.
 U Maung Maung, Pegu.
 U Hla Maung, Prome.
 U Kyaw Nyunt, Sagaing.
 U On Nyun, Tenasserim.
 U Tha Tin, Electrical and Mechanical Code.
 U Maung Gale, Maritime Circle.

Rehabilitation Centre, Aung San Village

U Win Maung, Director of Training.

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 U Khin Maung, Assistant Secretary.

MINISTRY OF SHAN STATE

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 U Nyun, Principal Works Offices.
 Sao Khun Mong, Superintending Mechanical
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 U Thaug Pe, Resident, Shan States, Toungyi.
 Sao Tun E, Ex-Resident, Shan States, Toungyi.
 Mr. Anthony, Secretary to Resident, Shan
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 Sao Sai Long, Sawbwa, Kentung.
 U Tun Pe, Executive Engineer, Loilem, Shan
 State.
 U Po Ngwe, Executive Engineer, Western Shan
 State.
 Saw Htun Yin, Executive Engineer, Loilem
 District.
 Saw Mya Thi, Executive Engineer, Taunggyi
 District.
 Saw Tun Pe, Executive Engineer, Eastern Shan
 State.

MINISTRY OF SOCIAL SERVICES

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 U Ba Sein, Deputy Secretary.
 Dr. S. Suvi.
 Dr. Ahad.
 U Chit Thoug.

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U San Ni, Chief Executive Officer.
 U San U, Superintendent of Motor Vehicles.

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 U Tun Thwin, General Manager.

Union of Burma Railways Board—contd.

U Sett Kaing, Secretary to General Manager.
 U Kyi Win, Chief Engineer.
 U Yone Mo, Chief Engineer (Mechanical).
 U Aye Maung I, Traffic Manager.
 U Han Tin, Controller of Railway Accounts.
 Saw McCarthy Gyaw, Statistical Officer.
 U Shwe Thane, Deputy Chief Engineer (Permanent Way).
 U Hla, Deputy Chief Mechanical Engineer (Locomotive).
 G. E. C. Peters, Deputy Traffic Manager (Transportation).
 U Thein Nyun, Deputy Controller of Railways Accounts.
 Mr. Daniels, District Mechanical Engineer.
 Mr. Johnson, Locomotive Inspector.

Inland Water Transport Board

U Tsau Un Gyi, Chief Accounts Officer.
 Captain Kyaw Din, Traffic Superintendent.

Union of Burma Shipping Board

U Ba Chan, General Manager.

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 U Aung Saw, Deputy Secretary.
 Mr. Dass, Chief Accountant.
 B. B. Crabbe, Chief Engineer.
 R. I. Warwick, Deputy Engineer.
 U Khin Maung Gyi, Executive Engineer.
 Mr. W. H. M. Todd, Traffic Manager.
 H. C. H. Berry, Master Attendant.
 J. H. Kirkham, Harbor Master.
 R. B. Alphonsi, Mechanical Chief Engineer.
 S. W. Spencer, Port Officer, Akyab.
 Mr. Dunlop, Port Officer, Bassein.
 Mr. D. S. Harding Raines, Port Officer, Moulmein.

Mercantile Marine Department

J. C. Needham, Nautical Adviser and Principal Officer.
 Mr. C. W. Hancock, Nautical Surveyor.
 Mr. W. W. Mortimer, Nautical Surveyor.

TELECOMMUNICATIONS

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 U Maung Maung, Divisional Engineer, Telecommunications, South Burma.
 W. A. Raymond, Divisional Engineer, Rangoon Telephones.
 U Kyaw Win, Divisional Engineer, Wireless.

H. N. Laval, Personal Assistant, Traffic.
 U Myoe Thaw, Personal Assistant, Engineer.
 U Soe Thin, Assistant Engineer, Electrical.
 U Myint Aung, Assistant Engineer, Marine Station.
 U Tha Hla, Assistant Engineer, Transmitting Station.
 D. S. McMahon, Assistant Engineer, Receiving Station.
 U Sein Ban, Superintendent, Telecommunications Stores.
 H. Mainuddin, Superintendent, Central Telegraph Office.
 A Aung Tah, Sub-Divisional Officer, Prome.
 U Yoe Maung, Sub-Divisional Officer, Rangoon.
 U Tun Zan, Attached Officer, Wireless.
 U Nyint We, Assistant Superintendent, Instrument Room.
 U Kyaw Wan, Office Superintendent.

Union of Burma Airways

U San Thein, Chairman.
 U Taw, General Manager.
 O. W. Ah Hee, Chief Accountant.

Department of Civil Aviation

U Kyaw Tha, Director.
 U Kyaw Tun, Assistant Director.

CIVIL ADMINISTRATION

U Soe Tint, Commissioner, Arakan Division.
 H. Keeley, Former Commissioner, Arakan Division.
 W. J. Carrott, Commissioner, Sagaing Division.
 U Mo Myint, Commissioner, Tenasserim Division.
 U Kyaw Zan, Deputy Commissioner, Akyab.
 U Thaug Lwin, Deputy Commissioner, Moulmein.
 U Maung Maung, Deputy Commissioner, Pegu.
 U Thaug, Deputy Commissioner, Tharrawaddy, Warden of the Oilfields.
 Dr. Tun Aung, Civil Surgeon, Moulmein.

AMERICAN EMBASSY

Mr. W. J. Sebald, Ambassador.
 Mr. R. A. Acly, Counsellor.
 Mr. A. B. Franklin, 2nd Secretary.
 Mr. W. S. Anderson, Jr., Economic Counsellor.
 Mr. J. H. Boulware, Agriculture Attaché.
 Mr. J. R. Ward, Labor Attaché.
 Mr. A. E. Bergeson, 3rd Secretary.
 Mr. James Boyce, Burma American Institute.
 Mrs. Zelma Graham, U.S.I.S.
 Miss Caroline Knapp, U.S.I.S.

UNITED NATIONS TECHNICAL ASSISTANCE MISSIONS

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- Mr. F. R. Scott, former Resident Representative.
 Mr. A. J. Wakefield, Resident Representative.
 Mr. J. P. B. Ross, former Acting Resident Representative.
 Mr. F. S. Smith, Assistant to Resident Representative.

Technical Assistance Administration

- Mr. Y. L. Wong, Senior Technical Adviser to the GUB on Cottage Industries.
 Mr. A. S. Windett, Statistical Adviser to the GUB.
 Mr. M. D. Lieberman, Census Adviser to the GUB.
 Mr. George T. Jackson, Expert on Public Administration, Adviser to the GUB.
 Mr. A. C. Marriott, Expert on Civil Supplies.

Social Services Mission to Burma

- Dr. J. F. Bulsara, Head of Mission.

International Labor Office

- Mr. P. V. K. Ayyar, Head of Mission, Co-operative Expert.
 Mr. C. R. Crews, Co-operative Expert.
 Mr. Sheldon Ross, Manpower Survey Expert.
 Mr. J. I. Saks, Labor Expert.

United Nations International Children's Emergency Fund

- Mr. John Barnabas, Chief of Mission.

Food and Agriculture Organization

- Dr. I. W. Kelton, Head of Mission.

UNITED STATES TECHNICAL COOPERATION ADMINISTRATION

- Mr. Abbot Low Moffat, Former Director ECA.
 Dr. F. N. Trager, Former Director.
 Dr. R. B. Finch, Acting Director.
 Dr. T. E. Posey, Economic Adviser.
 Mr. G. F. Winfield, Program Officer.
 Mr. R. K. Eyster, Executive Officer.
 Mr. W. J. Green, Agricultural Officer.
 Mr. Isom Deshotels, Acting Agricultural Officer.
 Dr. W. W. Burr, Agricultural Research Adviser.
 Dr. E. V. Staker, Agricultural Chemist.
 Dr. J. M. Deal, Entomologist.
 Mr. R. R. Covell, Land Capability Specialist.
 Mr. G. L. Reed, Housing Consultant.
 Mr. R. E. Paulson, Industry Officer.
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 Dr. George Crowl, Geologist.

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 Mr. Raman, Assistant Secretary, Burma Chamber of Commerce.
 Mr. W. T. Williams, Assistant Secretary, Burma Chamber of Commerce.
 Mr. A. A. Khan, Assistant Secretary, Burma Indian Chamber of Commerce.
 Mr. M. Sulaiman, Assistant Secretary, Burma Indian Chamber of Commerce.
 Mr. J. C. Dass, Acting Secretary, Burma Mariwari Chamber of Commerce.
 Mr. C. O. Mohamed, Assistant Secretary, Burma Mariwari Chamber of Commerce.
 Mr. M. A. Kadir, Permanent Secretary, Burma Mariwari Chamber of Commerce.
 U Thein Aung, Secretary, Rangoon Chamber of Commerce.
 Mr. Gulabchand Zaverchand, Upper Burma Chamber of Commerce.
 Mr. Khoo Eo Khwet, President, Burma Chamber of Commerce.
 Mr. C. Su Bin, Secretary, Burma Chamber of Commerce.

OTHER ASSOCIATIONS

- U Tin Hla, Secretary, Rice Industrialists Association.
 U Ba Yin, Chairman, Board of Rice Surveyors.

COMPANIES AND INDIVIDUALS

East Asiatic Company

- Mr. O. Terjellesen, General Manager.
 Mr. C. E. Olsen, Machinery and Engineering Department.
 Mr. J. S. Hummert, Mining Engineer.
 Mr. K. Narasimbam, Textile Department.

Rangoon Electric Tramway and Supply Company

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 Mr. W. C. White, General Manager.
 Mr. C. H. Mellor, Chief Engineer.
 Mr. Eric Maw, Chief Engineer.

General Electric Company Ltd.

- Mr. C. S. Dickinson, General Manager.
 Mr. Horace Hartley, Engineering Department.

Burma Corporation

- Mr. R. C. Leach, General Manager.
 Mr. E. H. Tregoning, General Manager, Operations, Namtu.

Burma Corporation—contd.

Mr. Derek Morris, Acting Mine Superintendent,
Bawdwin.

Mr. R. O. Morris, Geologist, Bawdwin.

Burmah Oil Company

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Mr. K. S. Laurie, Manager.

U Myo Khin, Sales Manager.

Mr. R. A. Johnson, Assistant to General
Manager.

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Mr. J. B. Dent, General Manager.

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PART I
INTRODUCTION

