

JAPAN INTERNATIONAL COOPERATION AGENCY
THE REPUBLIC OF GHANA
MINISTRY OF ENERGY

No. 1

**BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR ELECTRIFICATION
IN LOWER VOLTA AREA
IN
THE REPUBLIC OF GHANA**

APRIL, 1993

EPDC INTERNATIONAL LIMITED

TOKYO, JAPAN

GRF
93-123

JICA
BASIC DESIGN STUDY REPORT ON THE PROJECT FOR ELECTRIFICATION
IN LOWER VOLTA AREA IN THE REPUBLIC OF GHANA

APRIL, 1993 EPDC INTERNATIONAL

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BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR ELECTRIFICATION
IN LOWER VOLTA AREA
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APRIL 1993

EPDC INTERNATIONAL LTD.
TOKYO, JAPAN

国際協力事業団

25103

PREFACE

In response to a request from the Government of the Republic of Ghana, the Government of Japan decided to conduct a basic design study on the project for electrification in Lower Volta Area and entrusted the study to the Japan International Cooperation Agency (JICA).

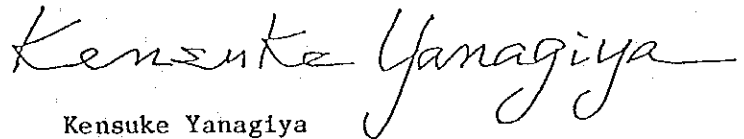
JICA sent to Ghana a study team headed by Mr. Hisatoshi Ohkubo, Grant Aid Study & Design Department, JICA, and constituted by members of EPDC International Ltd., from Nov. 12 to Dec. 11, 1992.

The team held discussions with the officials concerned of the Government of Ghana, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Ghana in order to discuss a draft report and the present report was prepared.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Ghana for their close cooperation extended to the teams.

April, 1993



Kensuke Yanagiya
President
Japan International Cooperation Agency

April, 1993

Mr. Kensuke Yanagiya
President
Japan International Cooperation Agency
Tokyo, Japan

Letter of Transmittal

We are pleased to submit to you the basic design study report on the Project for Electrification of Lower Volta Area in Ghana.

This study has been made by EPDC International Ltd., based on a contract with JICA, from Nov. 2, 1992 to Apr. 30, 1993. Throughout the study, we have taken into full consideration of the present situation in Ghana, and have planned the most appropriate project in the scheme of Japan's grant aid.

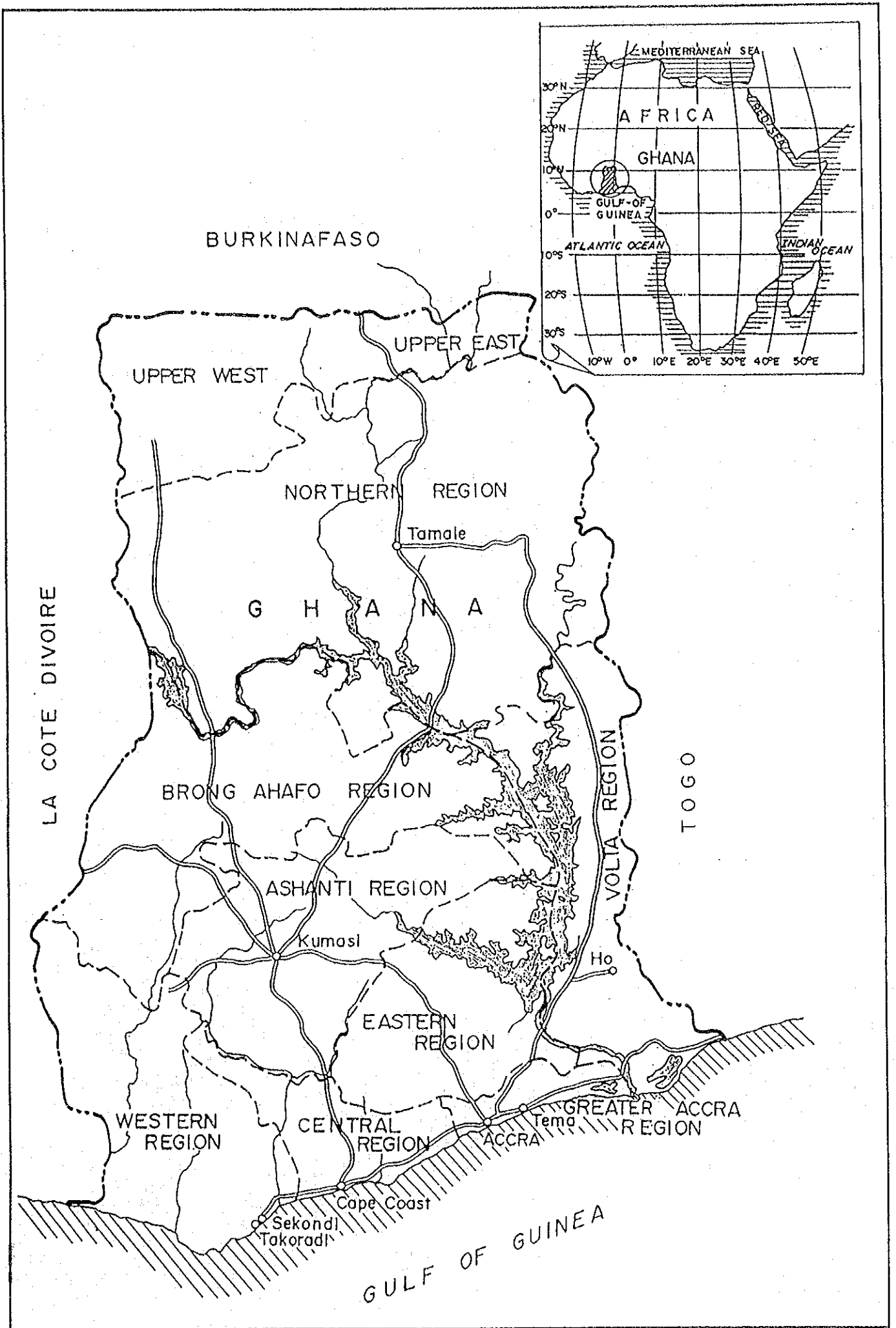
We wish to take this opportunity to express our sincere gratitude to the officials concerned of JICA, the Ministry of Foreign Affairs and Ministry of International Trade and Industry. We also wish to express our deep gratitude to the officials concerned of the Ministry of Energy of the Government of Ghana, JICA Ghana office and Embassy of Japan in Ghana for their close cooperation and assistance during our study.

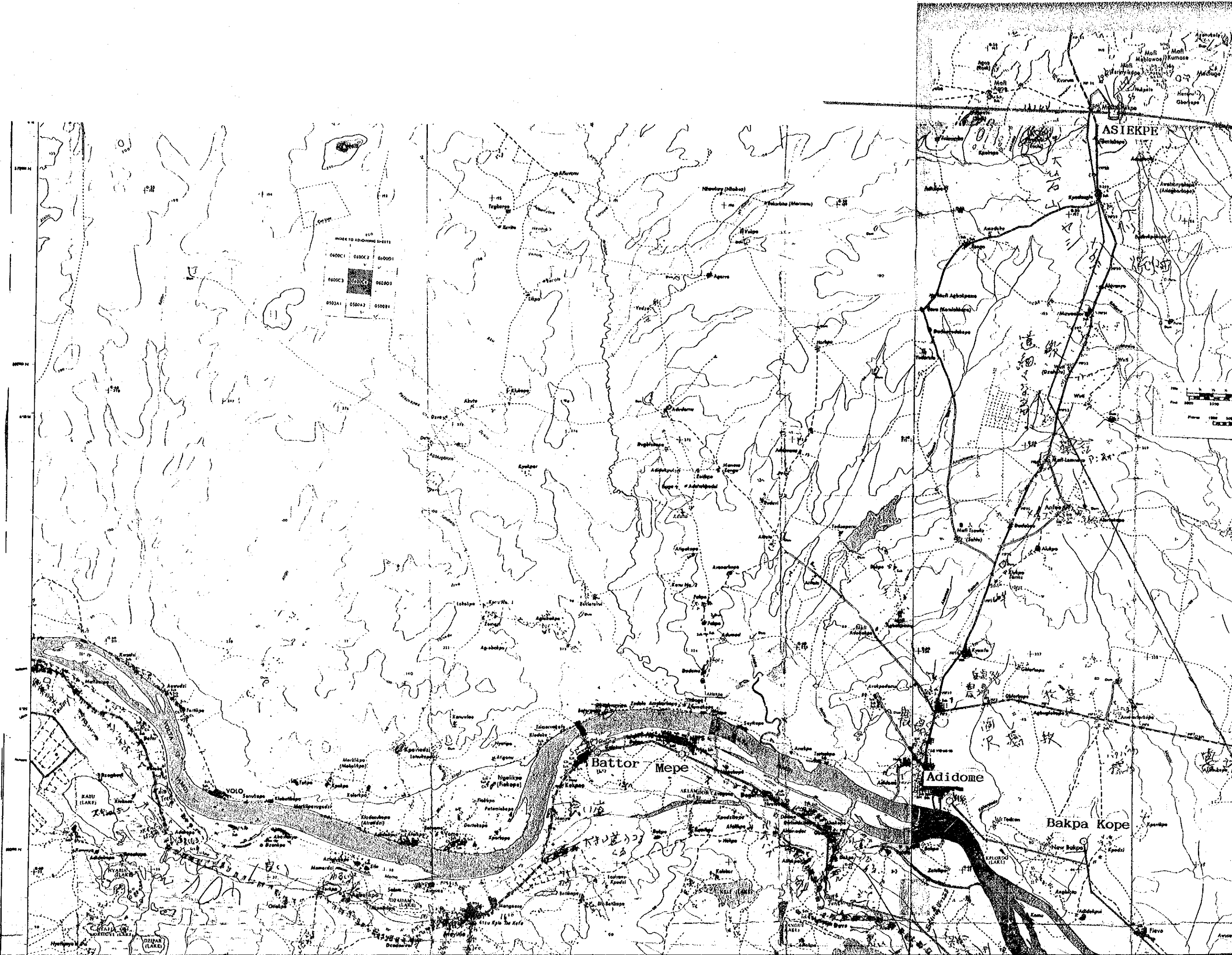
Finally, we hope that this report will be effectively used for the promotion of the project.

Very truly yours,



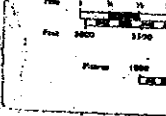
Masashi Koike, Project Manager
Basic design study team on
the Project for Electrification
in Lower Volta Area
EPDC International Ltd.



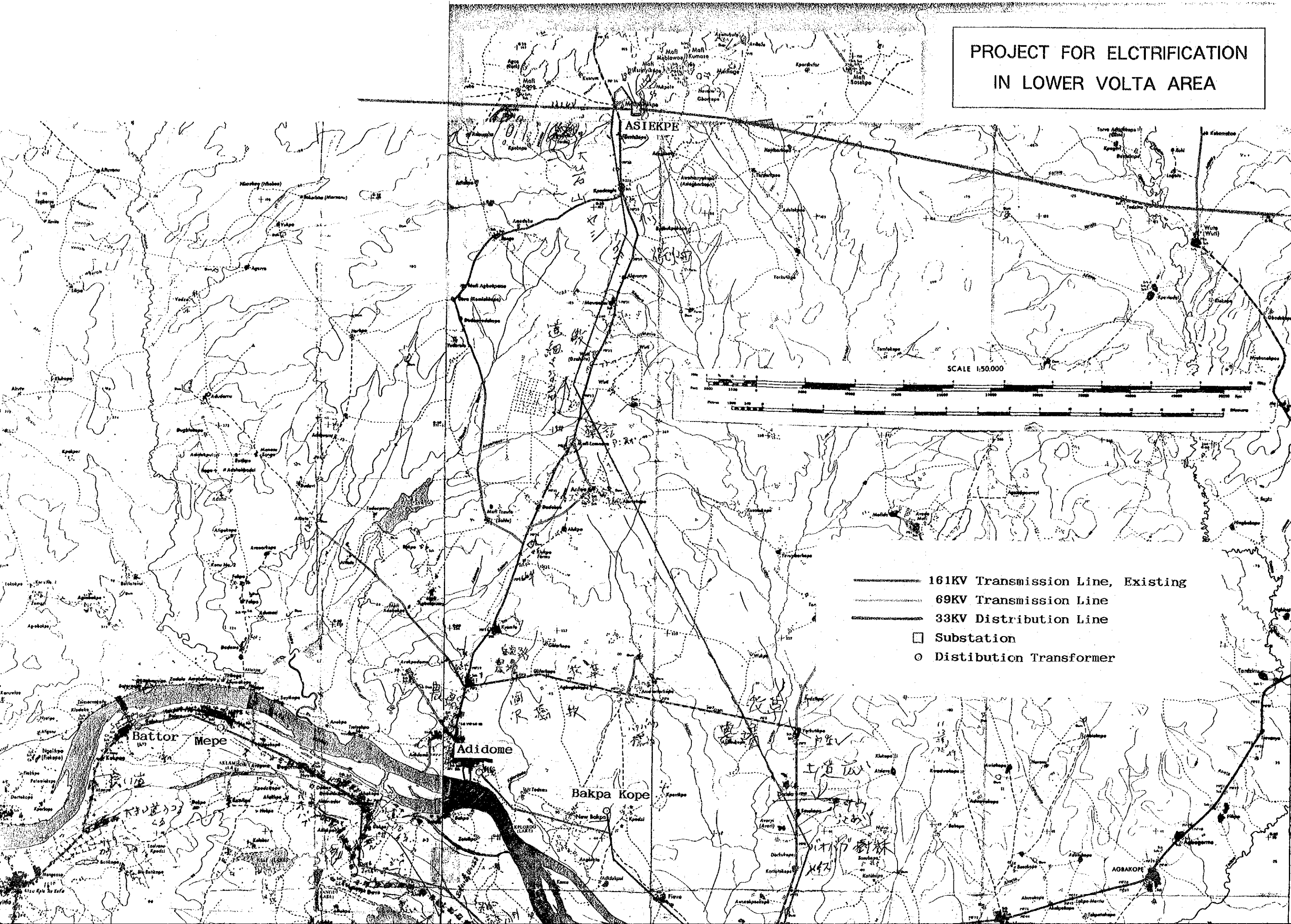


INDEX TO ADJOINING SHEETS

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| 0460C3 | 0460D3 | |
| 0502A1 | 0502A2 | 0502B1 |

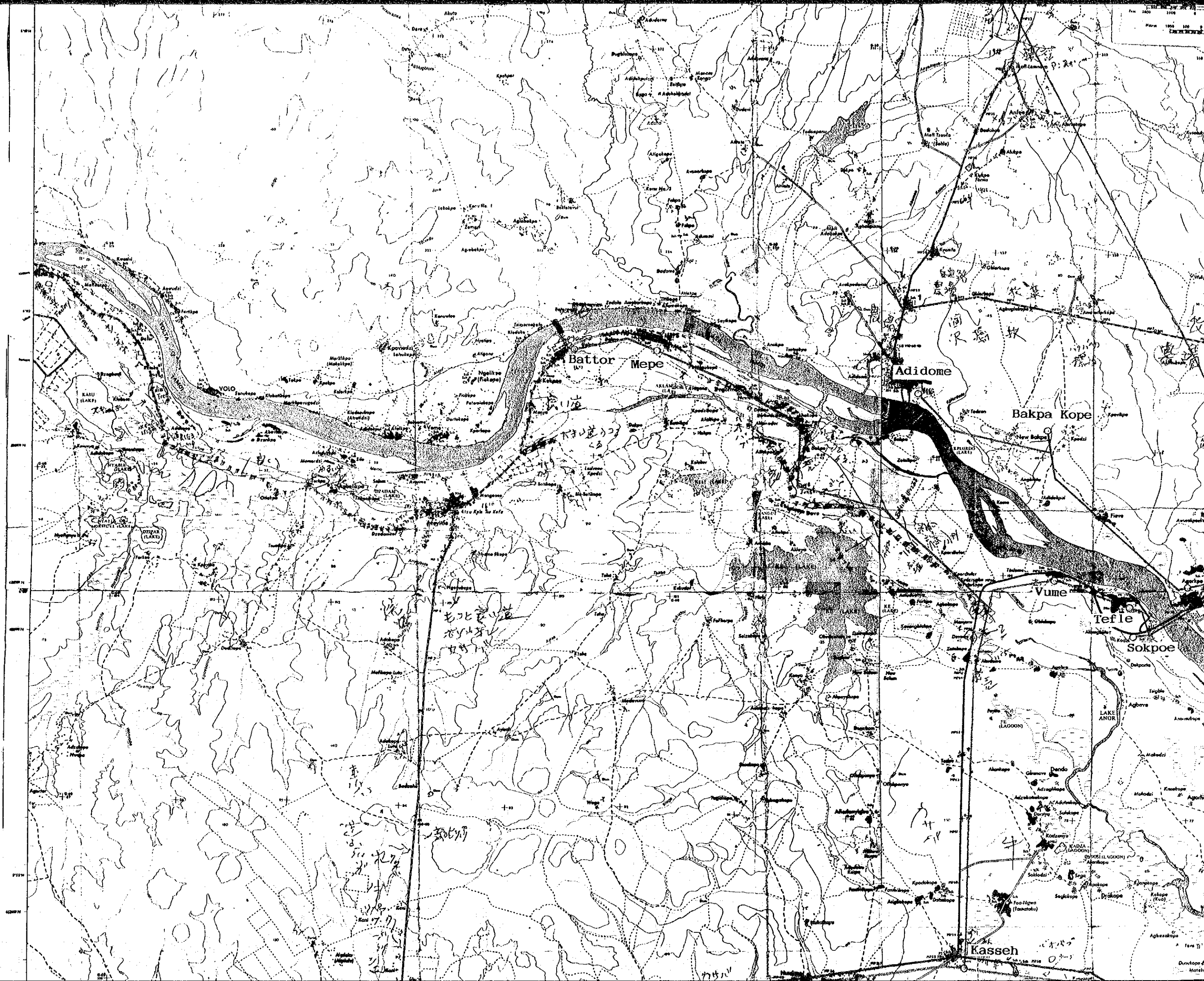


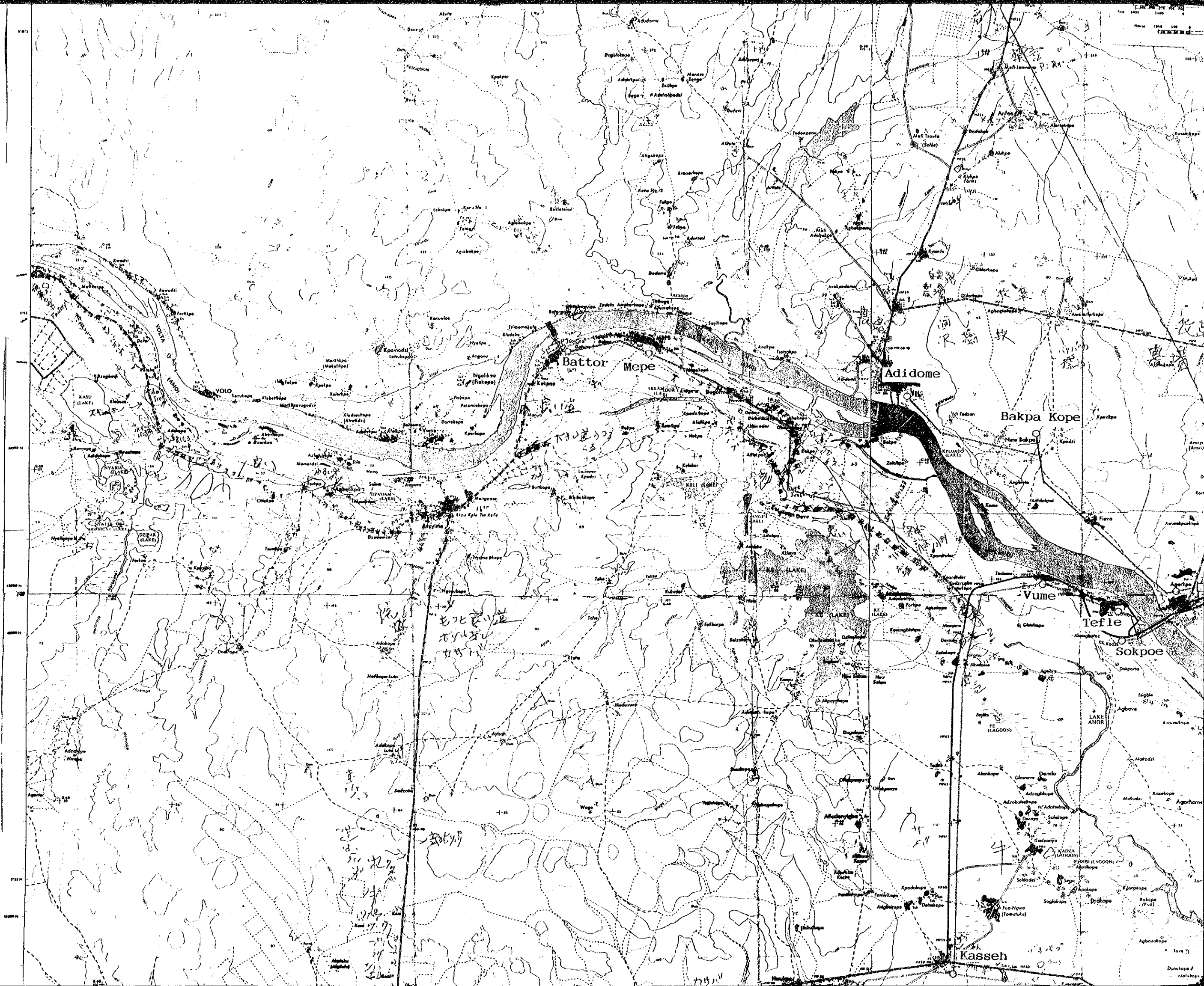
PROJECT FOR ELCTRIFICATION
IN LOWER VOLTA AREA

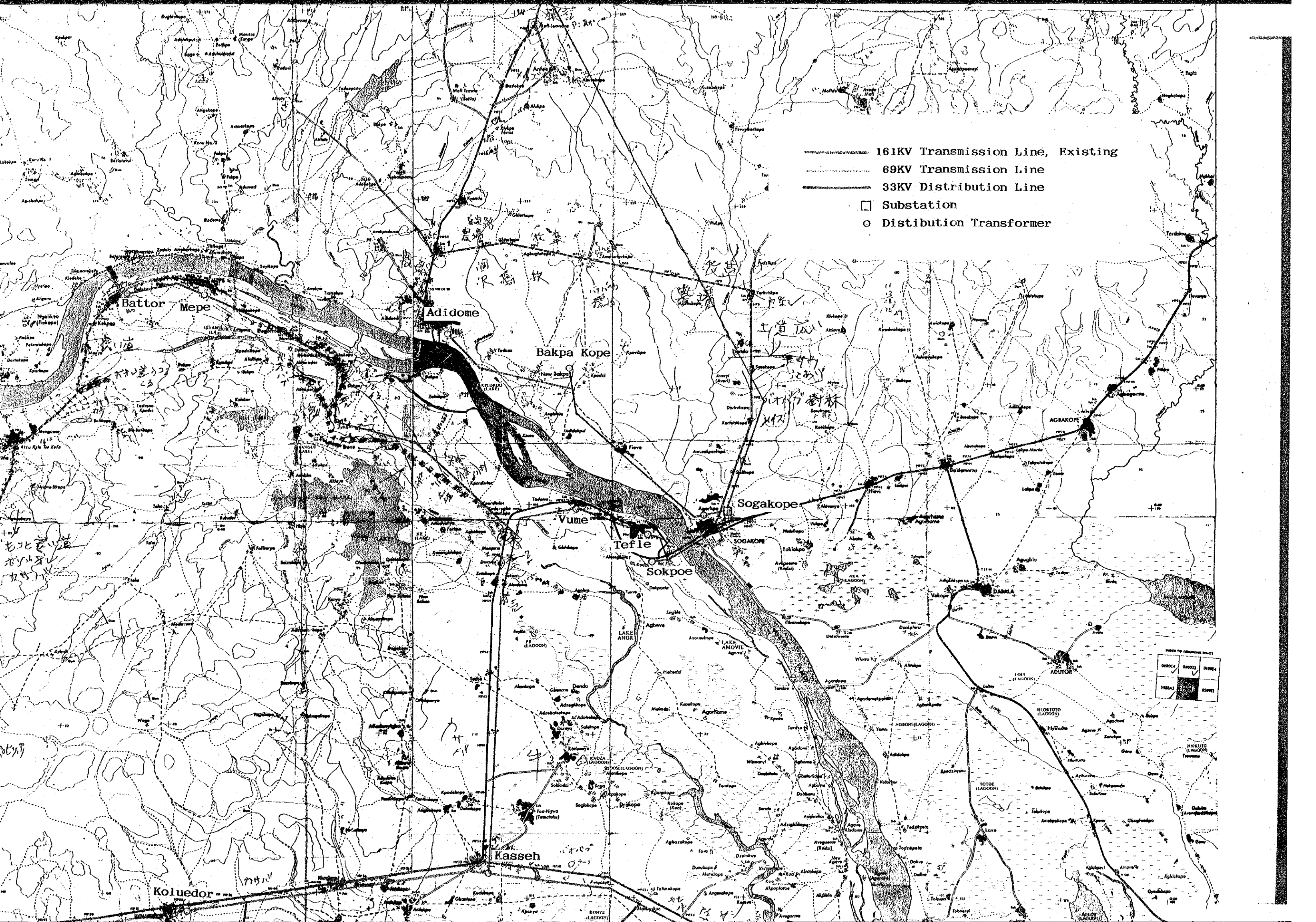


SCALE 1:50,000

- 161KV Transmission Line, Existing
- 69KV Transmission Line
- 33KV Distribution Line
- Substation
- Distribution Transformer







- 161KV Transmission Line, Existing
- 69KV Transmission Line
- 33KV Distribution Line
- Substation
- Distribution Transformer

INDEX TO ADJACENT SHEETS

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|-------|-------|-------|
| 08004 | 08003 | 08004 |
| 08001 | 08002 | 08003 |
| 08001 | 08002 | 08003 |

Battor Mepe

Adidome

Bakpa Kope

Sogakope

Tefie

Sokpoe

Kasseh

Koluedor

ADUTOR

HLOROTO (LAGOON)

TOTOE (LAGOON)

LAKE ANOR

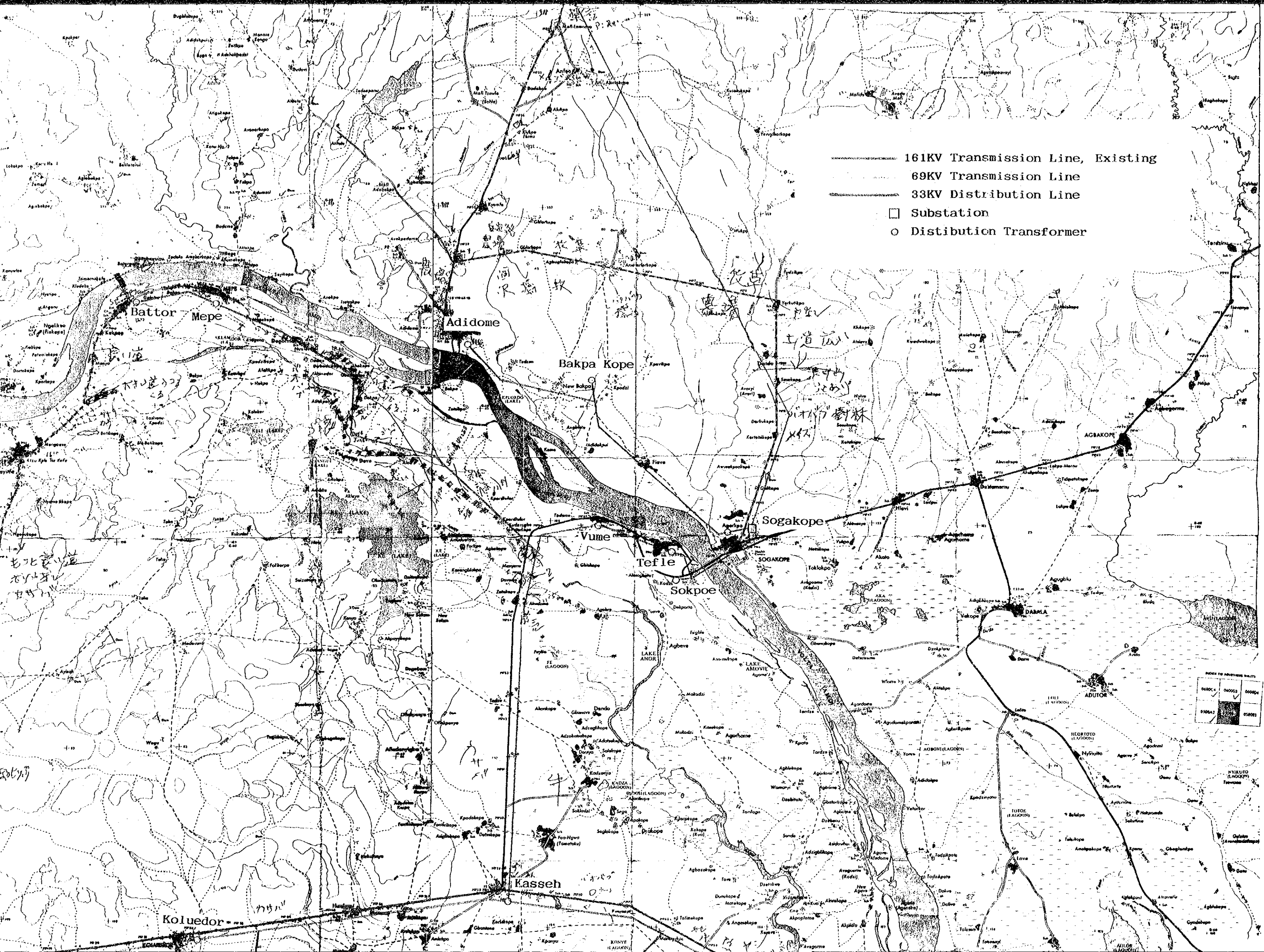
LAKE AMOVIE

KADZA (LAGOON)

AGBONI (LAGOON)

NYIKUIO (LAGOON)

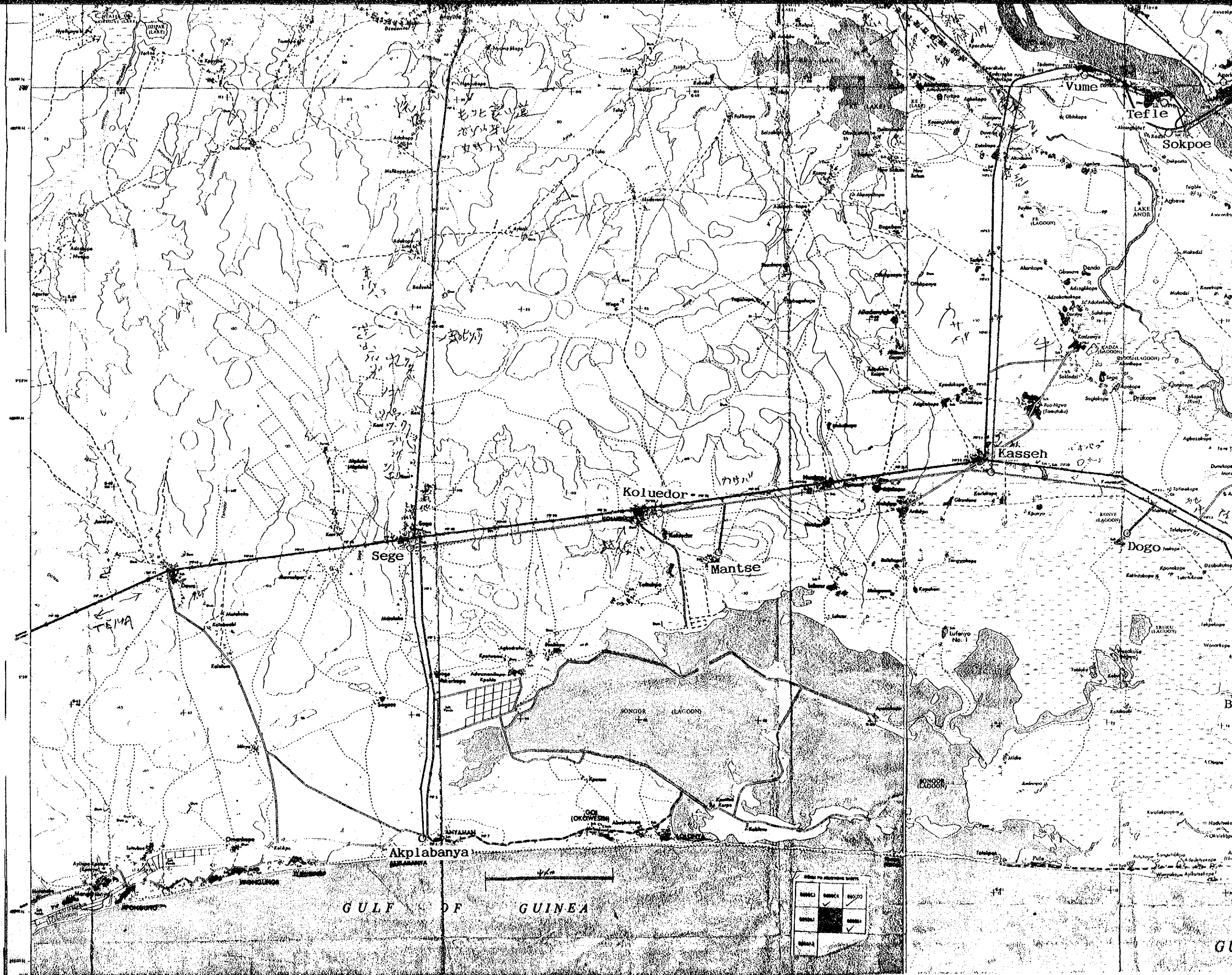
KINYE (LAGOON)



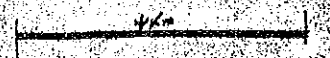
- 161KV Transmission Line, Existing
- 69KV Transmission Line
- 33KV Distribution Line
- Substation
- Distibution Transformer

INDEX TO ARABIC NUMBERS

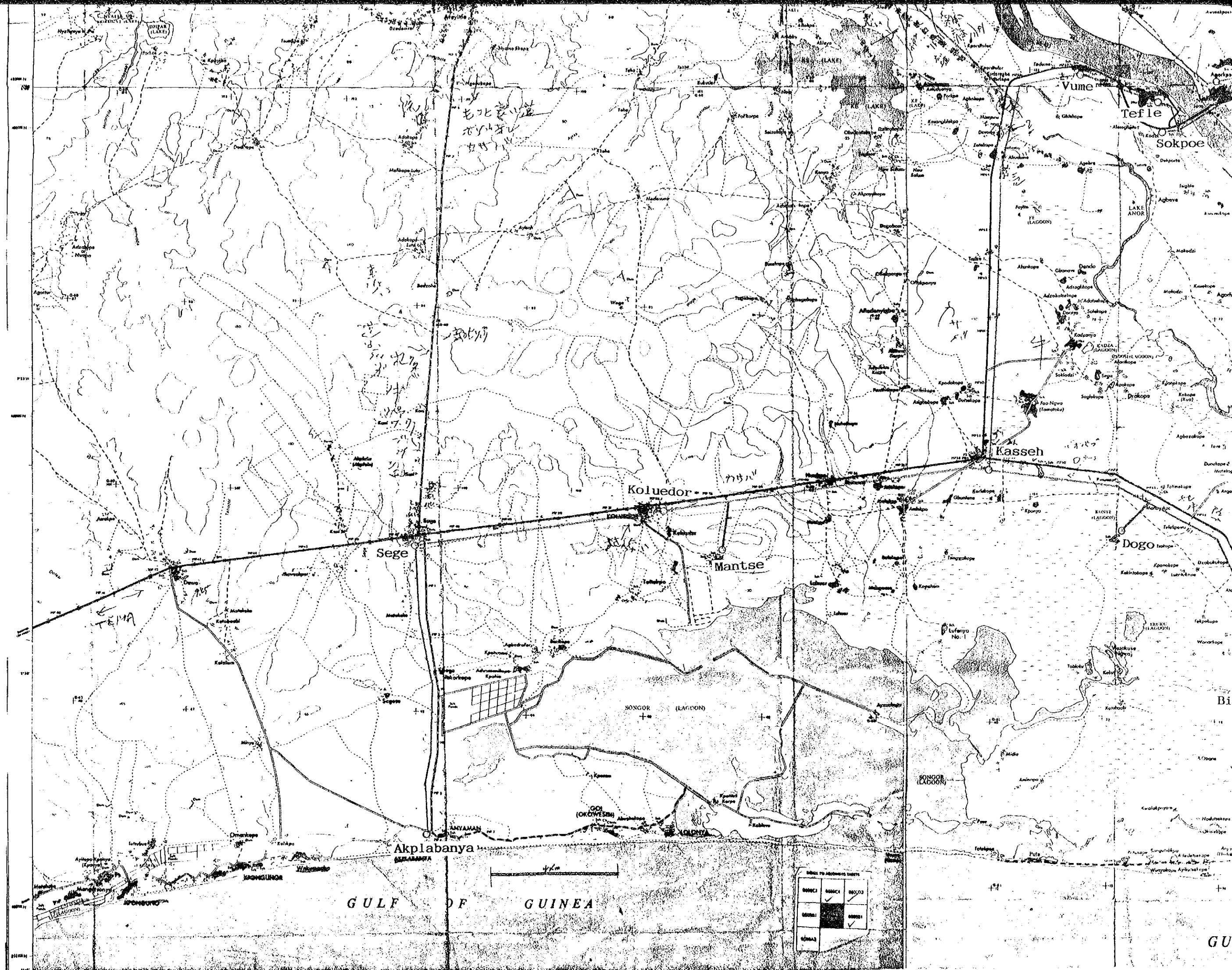
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| 05004 | 05003 | 05002 |



GULF OF GUINEA

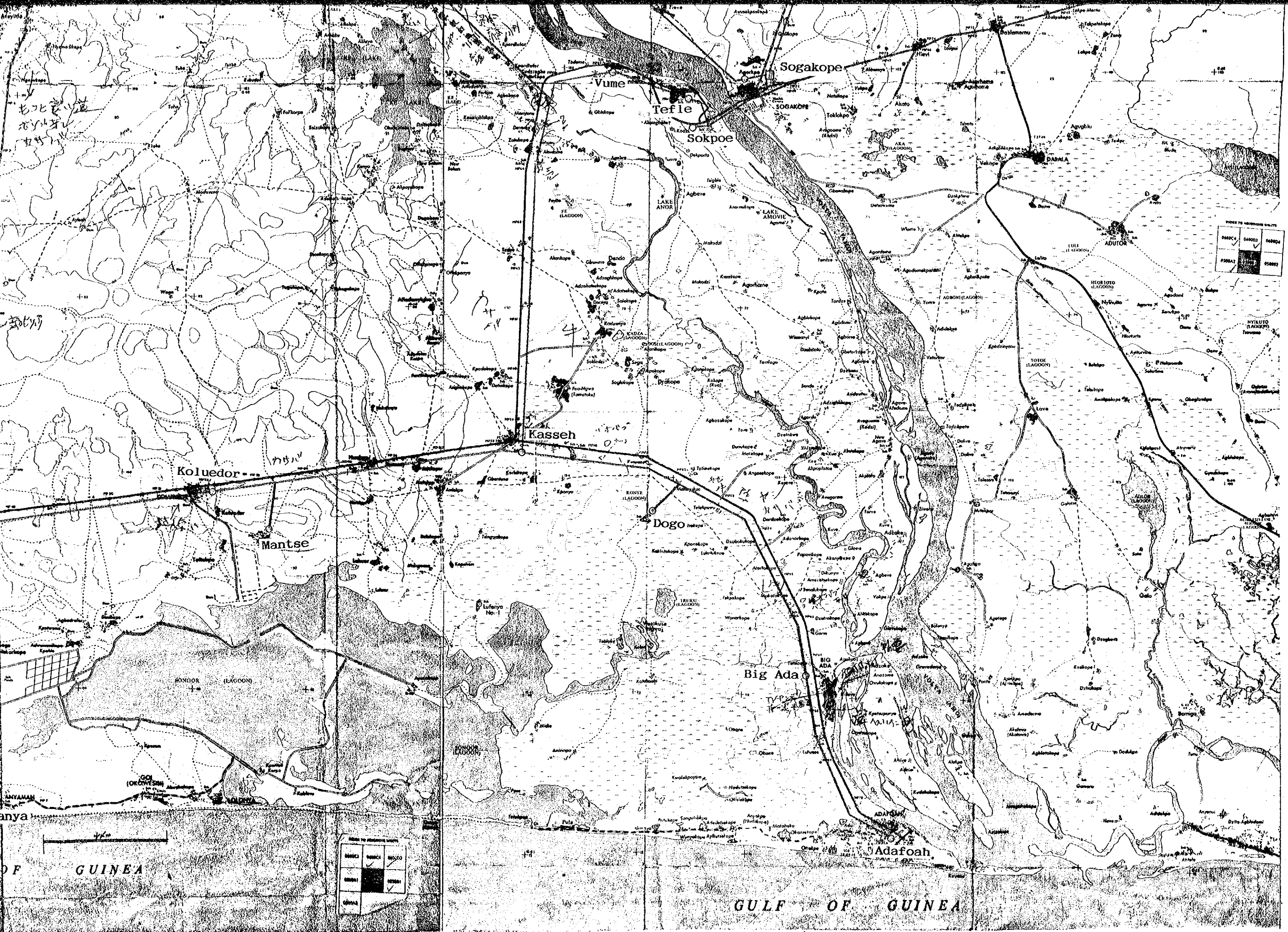


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| Symbol | Symbol | Symbol |



INDEX TO ALPHABETIC INDEX

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| 00004 | 00005 | 00006 |
| 00007 | 00008 | 00009 |
| 00010 | 00011 | 00012 |



Handwritten Japanese characters in the upper left corner.

Handwritten Japanese characters on the left side of the map.

Koluedor

Mantse

Kasseh

Dogo

Big Ada

Adafuah

Vume

Tefle

Sokpoe

Sogakope

DARALA

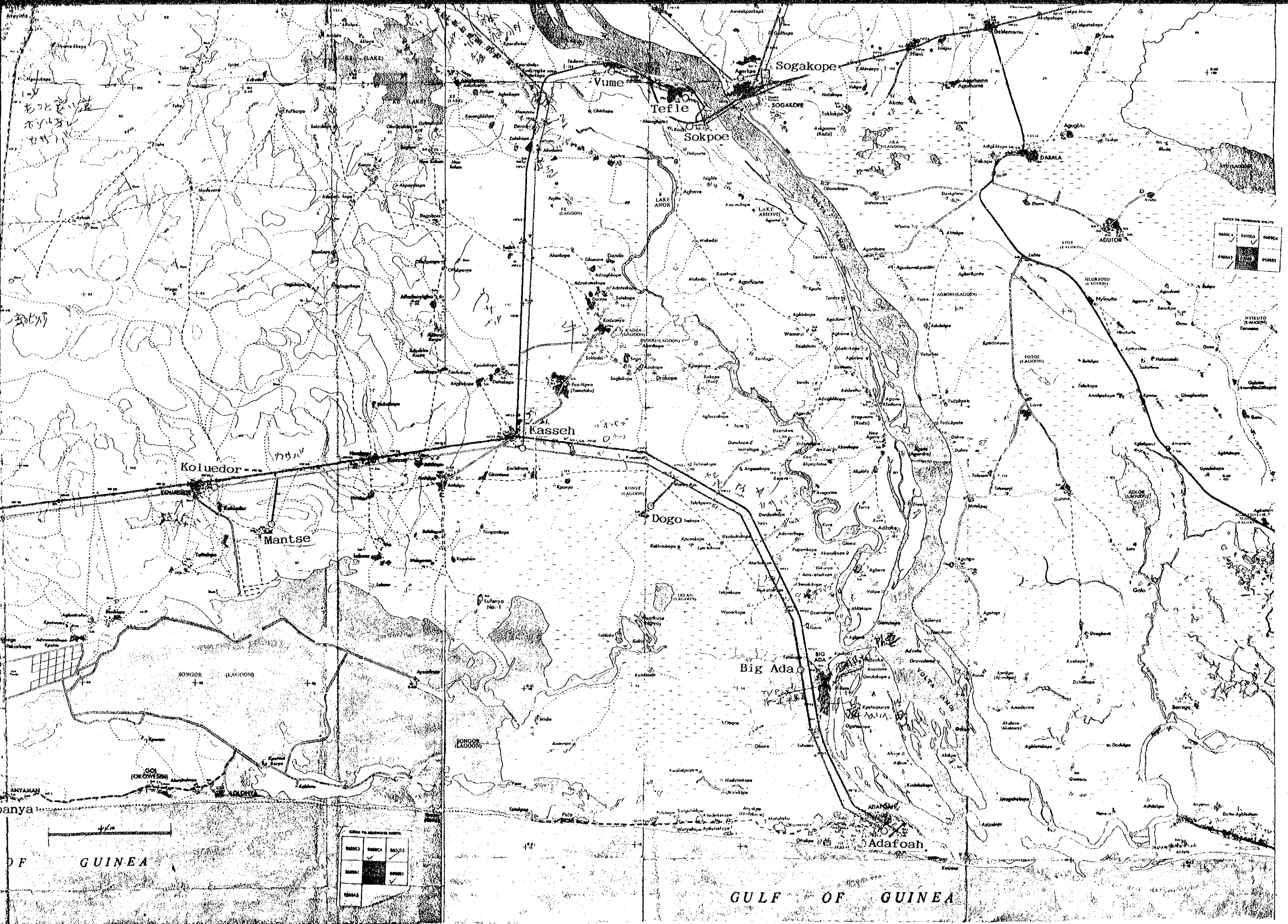
ADUTOR

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| 08804 | 08803 | 08802 |
| 08801 | 08800 | 08799 |

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| 08801 | 08800 | 08799 |
| 08802 | 08803 | 08804 |

OF GUINEA

GULF OF GUINEA



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Table with 4 columns and 4 rows, likely a magnetic variation table.

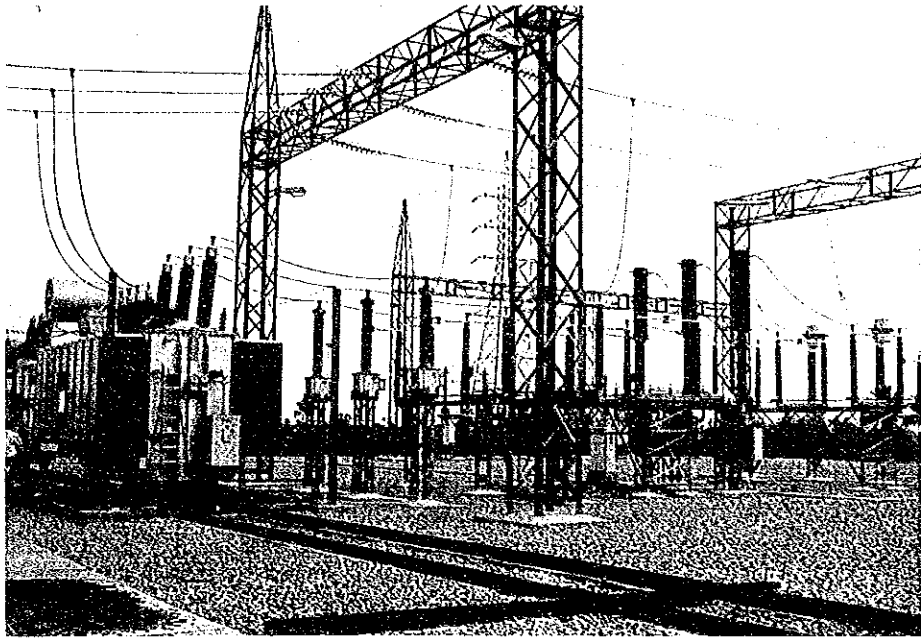
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Table with 4 columns and 4 rows, likely a magnetic variation table.

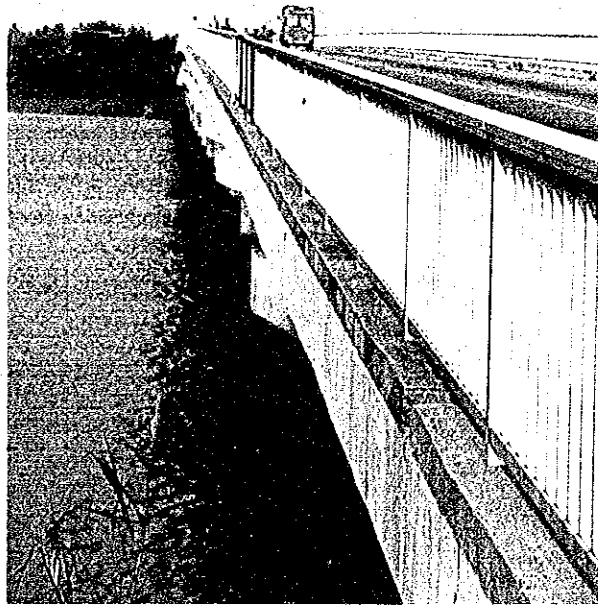
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OF GUINEA

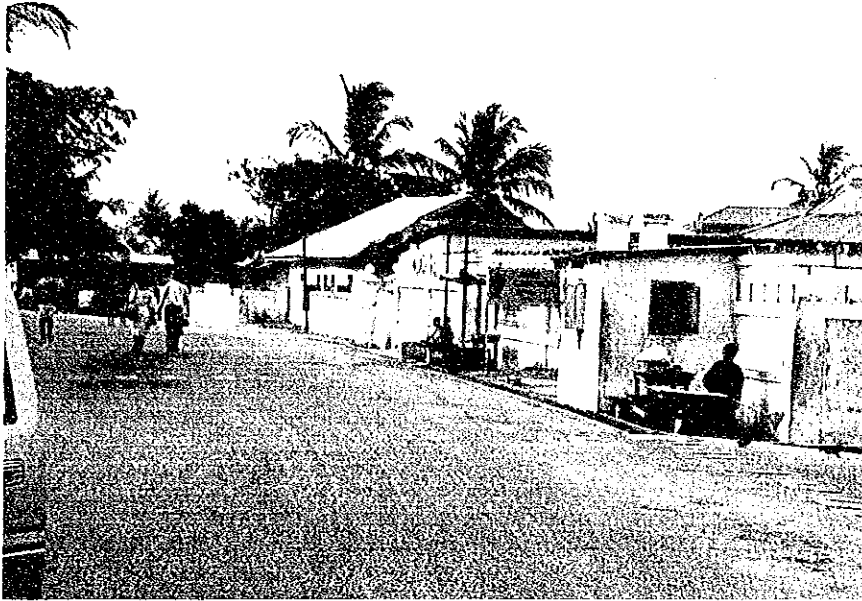
GULF OF GUINEA



Asiekpe Substation



Lower Volta Bridge



Ada Foah Town



Salt Industry at Sege (VSPL)

