

## 付屬資料

1. 要請書
2. SCOPE OF WORK
3. MINUTES OF MEETING
4. 收集資料一覽表



## 1. 要請書



TELEGRAMS: 'ECSTATC', KAMPALA

DIRECT TELEPHONE NOS:

MINISTER .. 241529.  
PERMANENT SECRETARY 232759.  
GENERAL .. 235051/4.

TELEX: 61117, ECONOMYUGA.

IN ANY CORRESPONDENCE ON  
THIS SUBJECT PLEASE QUOTE NO. ....ED/C/JAN/1/00



THE REPUBLIC OF UGANDA

MINISTRY OF PLANNING AND  
ECONOMIC DEVELOPMENT.  
P.O. BOX 7086.  
KAMPALA, UGANDA.

13th December, 1991

The Embassy of Japan,  
P.O. Box 60206,  
Nairobi,  
KENYA

Thru' The Ministry of Foreign Affairs,  
P.O. Box 7048,  
KAMPALA

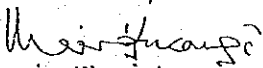
JAPAN INTERNATIONAL COOPERATION AGENCY:

TOPOGRAPHICAL MAPPING FOR REGION IMMEDIATELY NORTH OF LAKE VICTORIA

The Government of Uganda would be very much obliged to the Government of Japan if technical assistance were given in respect of Topographical Mapping of the region immediately North of Lake Victoria. This region was last mapped about thirty years ago and the information then acquired is out of date for the purposes of adequate developmental planning. Consequently, the project in question is of a high priority for us; hence this request.

I enclose a statement about the nature of the Topographical Mapping required for your information. We hope that JICA can give the necessary technical assistance.

Please accept the assurances of our highest consideration and esteem.

  
J.S. Mayanja-Nkangi  
MINISTER OF PLANNING AND ECONOMIC DEVELOPMENT

c.c. The Hon. Minister  
Ministry of Land, Housing and  
Urban Development  
KAMPALA

The Chief Government Economist,  
Ministry of Planning and  
Economic Development

Request for Technical Assistance for

Topographical Mapping for region

immediately North of Lake

Victoria

November 1991

Ministry of Land, Housing and Urban Development

## 1. SUMMARY

The Government of the Republic of Uganda seeks technical cooperation of the Government of Japan in realisation of a project of topographic mapping of the region immediately north of Lake Victoria. The tasks and objectives of the project are as defined here under.

## 2. PROJECT OUTLINE.

(a) Responsible Ministry: Department of Surveys and Mapping - Entebbe, of Ministry of Land, Housing and Urban Development, Kampala - Uganda.

(b) Location: The region immediately North of Lake Victoria. Approx. 33,000 Km<sup>2</sup> and 40 map sheets at Scale 1:50,000. Please see also Map attached.

The Sheets involved are 49/1 to 4, 50/1 to 4, 59/1 to 4, 60/1 to 4, 61/1 to 4, 62/1 to 4, 63/1 to 4, 64/1 to 3, 69/1 to 4, 70/1 to 4, 71/1 to 4, 72/1 to 4, 73/1 to 4, 74/1.

This depicts that area north of the said Lake stretching and upto the Kenya Border.

(c) Tasks involved: It is requested that the technical Cooperation by the Government of Japan include the following tasks -

i) Ground Control, Aerial photography, preparation and printing of the 1:50,000 topographical Maps covering this area, the contours and spot heighting all to be in metric measurements.

ii) Establish additional ground Control Stations to ease future Survey work for various development projects in the area.

iii) Establish additional benchmarks in the area through new level lines for future work.

iv) Institutional Support: In each phase of the tasks above strengthening of the capability of the Department will be made by training of Ugandan Staff and by modernising its facilities.

.. /2

Across all the Sections of the Department there is increasing need for training of the Staff.

Most of these are locally trained and in some cases few in number. This training is also up to technical level and there is need for more advanced courses locally and abroad and upto professional levels. This is more so given the changing nature of scientific techniques and increasing demands for up to date maps and plans.

A critical review of how things are being done here in the Department should be also be undertaken in this institutional support.

This is especially in the production routines in the Geodetic, Photogrammetric, Cartographic and printing Sections now obtaining. Concrete recommendations should be given for improvements if any.

### 3. BACK-GROUND AND JUSTIFICATION

The importance and need of national coverage of up to date maps is much evident for planning and implementation of development projects. It is indeed true that many projects in this area suffered a lot of set backs due to non-availability of updated mapping.

The base map series 1:50,000 ( and its derivatives in smaller Scales) is largely based on aerial photography taken in 1958/62 and therefore essentially represents the status of things more than thirty years ago. Because of changes in settlements and in vegetation cover, the maps no longer furnish the background data required by planners with the necessary degree of accuracy. There is therefore a great need of complete revision of the base map as a matter of urgency. A complete solution is only by photogrammetric means for Scale of 1:50,000.

As the economy takes on an upward trend.. more and more demand for maps is evident. Extensive demands for township maps are already at hand, whereas requests for development mapping are expected to come in by significant numbers in the near future. This type of mapping is done photogrammetrically and at a larger scale of photography.

In Geodesy, a potentially critical situation exists due to the war related destruction of most of the permanent geodetic infrastructure. There is therefore, need to provide for control not only for the photography to cover the mapping but also for the future survey work of a developmental nature envisaged in the area. It is being recommended here to adopt a gap-bridging type of control nets. The same should apply to the level nets. The methodology whether GPS or otherwise is left open.

..../3



The area to cover the mapping has been chosen judiciously. Firstly it encompasses the region with the most number of Development Projects hence likely to benefit most from the mapping. It also has the biggest number of and quite important urban centres. These are Kampala, Jinja, Entebbe, Tororo, Mityana, Luwero, Mukono, Lugazi, Iganga, Bugiri and Busia. It therefore constitutes an important region for township mapping. Besides the northern part is an aranching area likely to undergo a bit of restructuring.

In the field of training, the changing nature of technologies in the production fields and the advent of modern computers has made training a continuous process. It is against this background that at every phase of the tasks outlined training should be undertaken of the Ugandan nationals either through short courses here and abroad or on the job training by execution of the project tasks. This should amount to technology transfer. We regard this as an important contribution in the strengthening of the capability of the Department.

#### 4. SCOPE OF WORK.

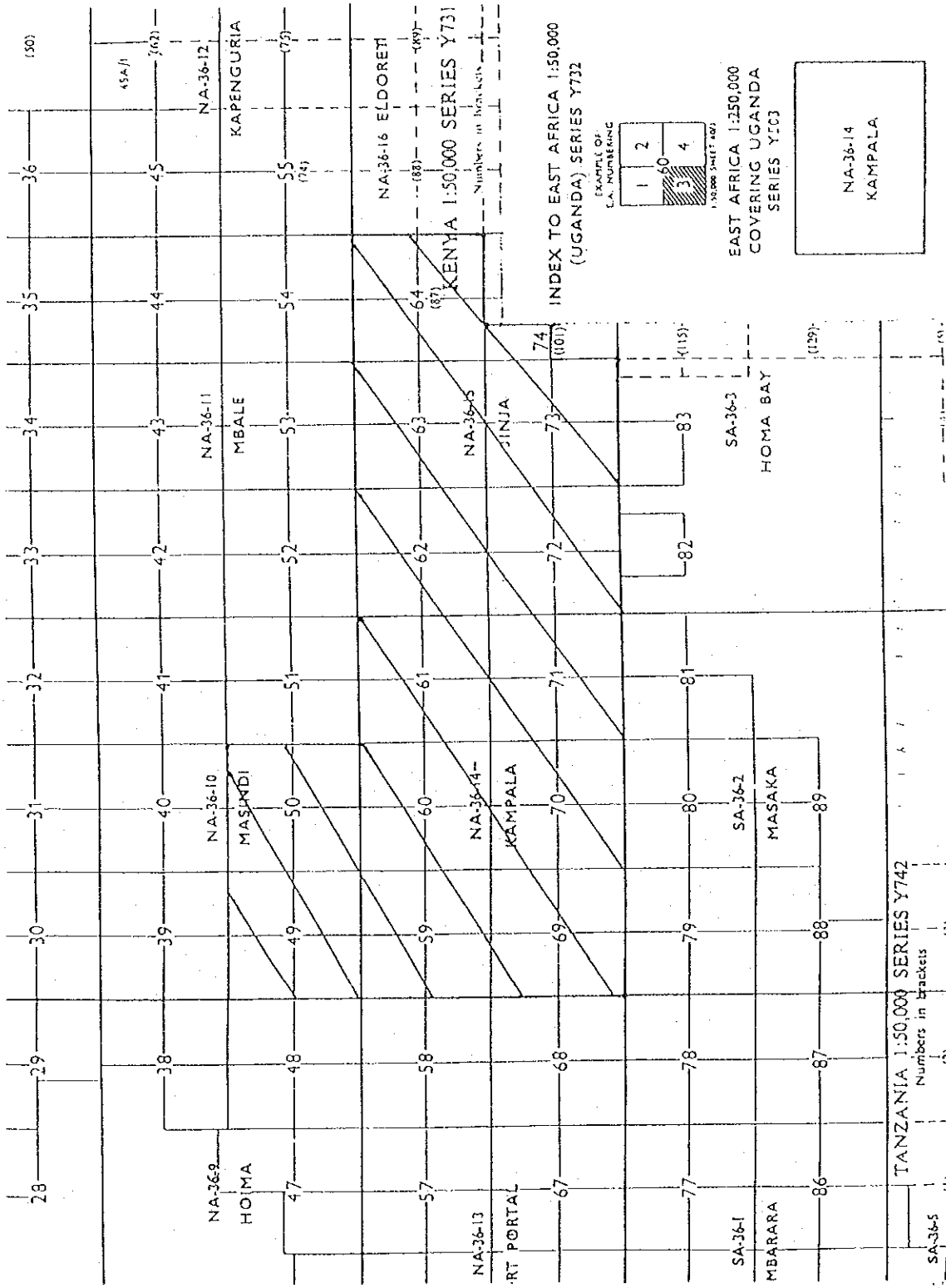
The Scope of work can be outlined in the following stages:-

- (a) Flight Planning and Field mission preparation.
- (b) Monumentation and Premarking.
- (c) Aerial Photography preferably at two scales 1:40,000 and 1:12,000.
- (d) Field and photo identification.
- (e) Ground Surveying for control and bench marks.
- (f) Aerial triangulation.
- (g) Photogrammetric plotting
- (h) Field completion.
- (i) Cartographic compilation or fair drawing.
- (j) Colour separation.
- (k) Printing.

#### 5. AGENCY RESPONSIBLE FOR THE PROJECT.

The Department of Surveys and Mapping of the Ministry of Land, Housing and Urban Development will be responsible for the project and

HON. DR. E.T.S. ADRIKO  
MINISTRY OF LAND, HOUSING AND URBAN DEVELOPMENT.





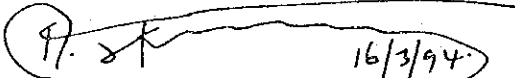
## 2. SCOPE OF WORK



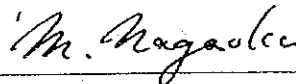
SCOPE OF WORK  
FOR  
TOPOGRAPHIC MAPPING  
OF  
KAMPALA AND JINJA BLOCKS, NORTH OF LAKE VICTORIA  
AGREED UPON BETWEEN  
SURVEYS AND MAPPING DEPARTMENT,  
MINISTRY OF LAND, HOUSING AND URBAN DEVELOPMENT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

KAMPALA, UGANDA

16TH MARCH, 1994

 16/3/94

Mr. Paul Bakashabaruhanga  
Permanent Secretary  
Ministry of Lands, Housing  
and Urban Development



Mr. Masatoshi Nagaoka  
Leader  
Preparatory Study Team  
Japan International  
Cooperation Agency

## I. INTRODUCTION

In response to the request of the Government of the Republic of UGANDA (hereinafter referred to as "UGANDA" ), the Government of Japan (hereinafter referred to as "JAPAN" ) has decided to conduct the Topographic Mapping for KAMPALA and JINJA Blocks, North of Lake Victoria (hereinafter referred to as "the Study" ) in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA" ), the official agency responsible for the implementation of the technical cooperation programmes of JAPAN, will undertake the Study in close cooperation with the authorities concerned of UGANDA.

Surveys and Mapping Department, Ministry of Land, Housing and Urban Development (hereinafter referred to as "SMD") shall act as a counterpart agency to the Japanese Study team and also as a coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.

The present document sets forth the Scope of Work with regard to the Study.

## II. OBJECTIVES

The objectives of the Study is to prepare the 1/50,000 Topographic Map covering an area of approximately 30,000 square kilometers shaded on an attached map (APPENDIX-1).

## III. SCOPE OF WORK

In order to achieve the above mentioned objective, the Study will cover the following items (The technical details are shown in APPENDIX-2).





### 1. Aerial Photography

Aerial Photographs shall be taken at a scale of approximately 1/60,000. Setting of air-photo signals shall be done, if necessary, prior to commencement of the aerial photography.

### 2. Ground Control Point Survey

Although existing control points will be used for the topographic mapping, establishment of temporary control points shall be carried out, if necessary.

#### (1) Traversing and Satellite Geodesy

Supplementary map control points necessary for aerial triangulation and mapping work shall be established by traversing and/or satellite positioning.

#### (2) Levelling

Levelling shall be carried out to obtain vertical controls for aerial triangulation and mapping work starting from existing bench marks.

### 3. Pricking

Pricking of identified control points on the aerial photographs shall be done in the field.

### 4. Field Verification

The topographic map information related to land use, vegetation, etc. shall be verified in the field.

### 5. Aerial Triangulation

Aerial Triangulation shall be carried out by analytical block adjustment method.

### 6. Stereo Plotting

Stereo Plotting shall be carried out using stereo plotting instruments at the scale of 1/50,000.

*φ 1*

*Am. R.*

#### 7. Compilation

Compilation shall be carried out based on restitution manuscripts and field verification data.

#### 8. Field Completion

Topographic features, vegetation, etc., which cannot be properly identified in the course of compilation shall be verified in the field and plotted on the compilation sheet. Administrative boundaries and geographical names shall be verified and indicated on the paper copy of the compilation sheet by SMD.

#### 9. Drafting

Based on the compiled sheet, scribing shall be carried out on stable polyester base for several color separation plates. Map style and symbols shall be those adopted by SMD.

#### 10. Printing

Plate making shall be carried out using 1/50,000 scribed negatives, and printing shall be carried out by offset method.

### IV. STUDY SCHEDULE

The whole work shall be conducted in accordance with the attached tentative schedule (APPENDIX-3).

*[Handwritten signature]*

*M. N.*

V. REPORTS AND FINAL RESULT

Reports shall be submitted to SMD by JICA every Japanese fiscal year (from April to March). The materials mentioned in APPENDIX-4 shall also be submitted to SMD by JICA as final result.

All maps produced under the Study shall bear at the lower margin the following:

"This map was prepared jointly by Japan International Cooperation Agency (JICA) under the Japanese Government Technical Cooperation Programme and the Government of Uganda."

VI. UNDERTAKING OF UGANDA

1. To facilitate smooth conduct of the Study, UGANDA shall take necessary measures ;
  - (1) to secure the safety of the Japanese Study Team,
  - (2) to permit the members of the Japanese Study Team to enter, leave and sojourn in Uganda for the duration of their assignment therein, and exempt them from foreign registration requirements and consular fees,
  - (3) to exempt the members of the Japanese Study Team from taxes, duties and other charges on equipment, machinery and other materials brought into Uganda for the conduct of the Study,
  - (4) to exempt the members of the Japanese Study Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese Study Team for their services in connection with the implementation of the Study,
  - (5) to provide necessary facilities to the Japanese Study Team for remittance as well as utilization of the funds introduced into Uganda from Japan in connection with the implementation of the Study,
  - (6) to secure permission for entry into private properties or restricted areas for the conduct of the Study,

*[Handwritten signature]*

*[Handwritten signature]*

- (7) to secure permission for the Japanese Study Team to take all data and documents (including maps, photographs) related to the Study out of Uganda to Japan, and
  - (8) to provide medical services as needed. Its expenses will be chargeable on members of the Japanese Study Team.
2. UGANDA shall bear claims, if any arises, against the members of the Japanese Study Team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Study, except when such claims arises from gross negligence or willful misconduct on the part of the members of the Japanese Study Team.
3. To facilitate smooth conduct of the Study, SMD shall take necessary arrangements for the Japanese Study Team as follows, in cooperation with other relevant organizations;
  - (1) to secure permission to flights for the aerial photography and use of airports for the implementation of the Study,
  - (2) to secure permission to the use of communication facilities including transceivers which may be used on Japanese language, with allocated frequencies, and
  - (3) to help in recruiting necessary number of labourers and watchmen in the project sites.
4. SMD shall, at its own expense, provide the Japanese Study Team with the following in cooperation with other related organizations ;
  - (1) available data and information related to the Study,
  - (2) counterpart personnel (staff of DSM),
  - (3) suitable office space with necessary equipment in Entebbe,

*[Handwritten signature]*

*M. N.*

- (4) credentials or identification cards to the members of the Japanese Study Team,
- (5) administrative and technical support,
- (6) to arrange appropriate number of vehicles with drivers,
- (7) existing facilities and space of SMD for processing aerial photographs,
- (8) information of necessary administrative boundaries and geographical names on the maps are its full responsibility, and
- (9) annotation materials and annotation sheets in Uganda.

#### VII. UNDERTAKING OF JICA

For the implementation of the Study, JICA shall take the following measures ;

1. To dispatch, at its own expense, the Study Team to Uganda for Premarking, Aerial Photography, Ground Control Point Survey, Pricking, Field Verification and Field Completion with the use of local expertise as much as applicable with JICA's supervision,
2. To carry out Aerial Triangulation, Stereo Plotting, Compilation, Drafting and Printing in Japan at its own expense, and
3. To pursue technology transfer to Uganda counterpart personnel in the course of the Study.

#### VIII. CONSULTATION

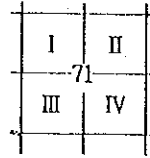
JICA and SMD shall consult with each other in respect of any matter that may arise from or in connection with the Study.

*[Handwritten mark]*

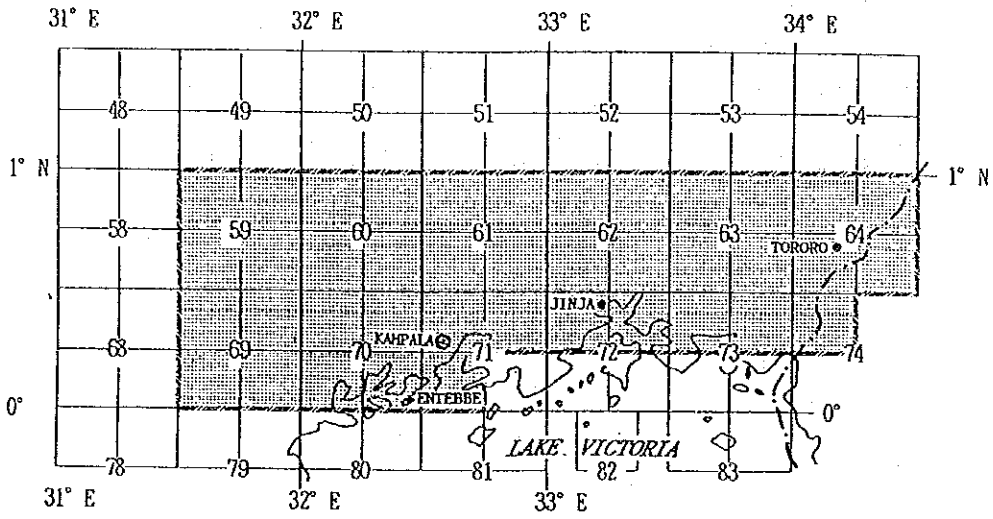
*M. N.*

### MAPPING AREA

1:50000 topographic map



Sheet Numbering Example



( 40 map sheets )

41

M.N.

APPENDIX - 2

Principal Technical Specification

1. Aerial Photography : super-wide angle camera
2. Ground Control Point Survey:  $10^{-5}$  (Relative Accuracy)
3. Levelling
  - (1) Limit of Difference of Reciprocal Observation  
for Minor Order Levelling for Photo Control  
 $5\text{cm} \sqrt{S \text{ S:km}}$
4. Mapping
  - (1) Projection : UTM Projection
  - (2) Sheet Line :  $15' \times 15'$  in Latitude and Longitude
  - (3) Main Contour Interval : 20m
  - (4) Number of Colors : 5 colors

41

M.K.

TENTATIVE SCHEDULE

ITEM	MONTH	1	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
Signalization (Premarking)		=====																
Aerial Photography		=====																
Ground Control Point Survey		①	=====	②	=====													
Pricking																		
Aerial Triangulation																		
Field Verification																		
Stereo Plotting																		
Compilation																		
Field Compilation																		
Drafting																		
Printing																		

Note : ===== Work In UGANDA      ① Traversing and Satellite Geodesy  
 ===== Work In JAPAN                      ② Levelling

47

M.A.



FINAL RESULTS

1. Aerial Photography
  - (1) original negative-film (1set)
  - (2) contact positive prints (1set)
  - (3) index map of aerial photographs
  
2. Ground Control Point Survey
  - (1) final result tables
  - (2) distribution and route diagram
  
3. Pricking
  - (1) description of Pricking
  
4. Aerial Triangulation
  - (1) final result tables
  - (2) diapositive films (1set)
  
5. Topographic Mapping
  - (1) separate scribed sheets
  - (2) printed maps (1000 copies for each sheet)

*41*

*M.H.*

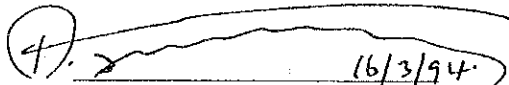


### 3. MINUTES OF MEETING

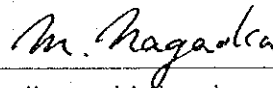


MINUTES OF MEETING  
FOR  
THE SCOPE OF WORK  
FOR  
TOPOGRAPHIC MAPPING  
OF  
KAMPALA AND JINJA BLOCKS, NORTH OF LAKE VICTORIA  
AGREED UPON BETWEEN  
SURVEYS AND MAPPING DEPARTMENT,  
MINISTRY OF LAND, HOUSING AND URBAN DEVELOPMENT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

KAMPALA, UGANDA  
16TH MARCH, 1994

  
16/3/94

Mr. Paul Bakashabaruhanga  
Permanent Secretary  
Ministry of Land, Housing  
and Urban Development



Mr. Masatoshi Nagaoka  
Leader  
Preparatory Study Team  
Japan International  
Cooperation Agency

The Preparatory Study Team (hereinafter referred to as "the Team"), for Topographic Mapping of Kamapala and Jinja Blocks, North of Lake Victoria (hereinafter referred to as "the Study") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") headed by Mr. Masatoshi Nagaoka visited the Republic of Uganda from February 23 to March 20, 1994, and had a series of discussions with the Uganda side, represented by Surveys and Mapping Department, Ministry of Land, Housing and Urban Development (hereinafter referred to as "SMD"). List of participants is shown in Attachment.A.

As a result of the said discussions, both sides came to an agreement on a Scope of Work (hereinafter referred to as "S/W") of the Study, and signed it on March 16, 1994.

This document summarizes major items discussed between both sides and is meant to supplement the S/W for the smooth conduct of the Study.

#### *1. Mapping Area*

Both sides agreed that the Mapping area was decreased to approximately 30,000km<sup>2</sup> (shown in Appendix 1 of S/W),

#### *2. Scale of Aerial Photography*

Both sides agreed that the scale of Aerial Photography is 1/60,000 ,

#### *3. Airplane for Aerial Photography*

SMD agreed that an airplane for Aerial Photography will be brought from a foreign country .

#### *4. Flight Permission*

SMD shall obtain flight permission for Aerial Photography from the Government of Uganda. And on the national border of Kenya, SMD shall obtain the permission from the Government of Kenya.

*PI*

*M. N.*

Both shall be obtained at least two (2) months prior to commencement of the Study.

In case the flight permission by Kenya is not available, the area approximately 10km inside along the national border shall be basically excluded for Aerial photography, and the existing 1/50,000 topographic maps shall be utilized for the Study.

5. RADIO FREQUENCY

SMD shall obtain a permission to radio,

6. OFFICE SPACE

SMD shall provide office space in Entebbe for the Japanese Study Team,

7. NECESSARY VEHICLES

SMD requested necessary vehicles for the Study because the Government cannot arrange the necessary vehicles. The Team promised to convey that request to JICA,

8. COUNTERPART TRAINING

SMD strongly requested to send participants to the Counterpart Training in Japan. The Team promised to convey that request to JICA and related organizations.

9. TRAVERSING AND SATELITE GEODESY

Ground control points for Traversing and Satelite Geodesy (item 111. 2. of the S/W) shall be marked as a suitable measure and where appropriate.

For instance, measures are as following:

- (1) metal tablet,
- (2) pile (plastic, concrete, metal, wood, etc.),

etc.,

10. PRINTING COLOURS

Both sides agreed that number of colours for Printing are five (5),

11. THE NUMBER OF PRINTS

Both sides agreed that printed maps will be made one thousand (1000) copies for each sheet,

*SI*

*M.N.*

12. ITEM VI. 3. (3)

In the item VI. 3. (3) . of the originally draft S/W, "to arrange necessary number of labourers and watchmen in the project sites" was amended to as "to help in recruiting local labourers and watchmen in the project sites",

13. ITEM VII. 1..

The item VII.1. of the originally draft S/W was added as "with the use of local expertise as much as applicable with JICA's supervision",

14. RETAIN OF MAPS

SMD agreed that Japanese side can retain some sets of printed maps which will be produced as a result of the Study.

15. TRIANGULATION POINT

As a result of field survey, it was found that most of triangulation points had been destroyed or stolen, and they can not be utilized for mapping. Therefore JICA requested SMD to identify the location of the triangulation points classified as Tertiary point (Y point) or higher and also requested to provide list of Coordinates which indicates existing triangulation points by the commencement of the Study.

16. BENCH MARK

As a result of field survey, most of bench marks were found out. JICA requested SMD to provide list of bench mark (elevation data) and description cards by the commencement of the Study.

*[Handwritten mark]*

*M. R.*



Attachment.A

PARTICIPANTS LIST

THE UGANDA SIDE (SURVEY AND MAPPING DEPARTMENT)

- |    |                           |                                     |
|----|---------------------------|-------------------------------------|
| 1. | Mr. Paul Bakashabaruhanga | Permanent Secretary                 |
| 2. | Mr. K. S. B. Mubbala      | Commissioner of Surveys and Mapping |
| 3. | Mr. Bwogi Justin          | Ag. Assistant Commissioner (Survey) |
| 4. | Mr. Kiwanuka D.K.         | Ag. Deputy Commissioner             |
| 5. | Mr. Kajumbula M.N.        | Senior Staff Surveyor (Mapping)     |
| 6. | Mr. Hawondo Joram         | Map Production Officer              |
| 7. | Mr. Richard Oput          | Ag. Principal Staff Computer        |

THE JAPANESE SIDE (THE PREPARATORY STUDY TEAM OF THE STUDY)

- |    |                       |                                |
|----|-----------------------|--------------------------------|
| 1. | Mr. Masatoshi Nagaoka | Leader                         |
| 2. | Mr. Masakatu Abe      | Deputy Leader/Survey Planning  |
| 3. | Mr. Mitsuo Kezuka     | Cost Estimate                  |
| 4. | Mr. Syouji Hashizume  | Photogrammetry                 |
| 5. | Mr. Chiyuki Nishimura | Control Point Survey           |
| 6. | Mr. Kenji Isomoto     | Project Formation/Planning (1) |
| 7. | Ms. Mikakao Kudo      | Project Formation/Planning (2) |

*HI*

*M.H.*



#### 4. 収集資料一覽表



## 収集資料一覧

### 1. 測地測量データ

項 目	数 量	備 考
1. 三角点点の記及び関係位置カード	1冊	7点分
2. 三角点成果表	1枚	25点分
3. 水準点点の記	1冊	14点分
4. ウガンダ国三角網図	1枚	縮尺 1/2,900,000
5. ウガンダ国水準路線図	1枚	同 上

### 2. 各種地図

図 種	枚 数	備 考
1. 1/50,000地形図一覧表	1	全国の1/50,000地形図の図郭割と図名 地形図作成対象地域のほぼ全域あり、一部はコピー図 対象地域の全域、全てコピー図現地作業に使用済（書きこみ、破損あり）
2. 1/50,000地形図	40	
3. 1/250,000地図	12	
4. その他雑図		
1) 1/1,000,000地図	1	ウガンダ国全域
2) 1/10,000地形図	1	ジンジャ地区
3) アトラスのセパレートシート	2	地形、地質
4) 1/4,000,000ウガンダ国月別雨量図	1	
5) 1/1,500,000ツーリストマップ	1	民間作成の案内図
6) 首都圏 1/2,500地形図	1	大カンバラ地区地図作成事業の成果（見本図）

### 3. その他各種資料

項 目(名 称)	数 量	備 考
1. Rehabilitation and Development Plan Vol. 1 1993/94-1995/96	1冊	A 4、コピー、96ページ、大蔵・経済計画省
2. Rehabilitation and Development Plan Vol. 2 1993/94-1995/96	1冊	A 4、オリジナル、645ページ、大蔵・経済計画省
3. Final Results of the 1991 Population and Housing Census (Pre-Release)	1冊	A 4、オリジナル、18ページ、大蔵・経済計画省 統計局
4. Background to the Budget 1993-1994	1冊	A 4、オリジナル、106ページ、大蔵・経済計画省 統計局
5. The 1991 Population and Housing Census Preliminary Estimates of Fertility and Mortality	1冊	A 4、オリジナル、18ページ、大蔵・経済計画省 統計局
6. Consumer Price Indexes, Uganda (to June 1991)	1冊	A 4、オリジナル、16ページ、大蔵・経済計画省 統計局
7. External Trade Statistics of Uganda Exports 1990	1冊	A 4、オリジナル、12ページ、大蔵・経済計画省 統計局
8. Imports and Exports, Uganda 1981-1992	1冊	A 4、オリジナル、8ページ、大蔵・経済計画省 統計局
9. Gross Domestic Product and Expenditure on GDP, Uganda	1冊	A 4、オリジナル、9ページ、大蔵・経済計画省 統計局
10. Index of Industrial Production	1冊	A 4、オリジナル、5ページ、大蔵・経済計画省 統計局
11. Key Economic Indicators	1冊	A 4、オリジナル、34ページ、大蔵・経済計画省 統計局
12. Uganda-Travel & Tourism	1冊	A 4、オリジナル、28ページ、ウガンダツーリスト協会
13. Sosial Studies Atlas for Uganda	1冊	US レターサイズ、オリジナル、57ページ、教育省
14. Uganda districts Information Handbook	1冊	A 5、オリジナル、102ページ、Fountain Publishers Ltd.
15. Pocket Facts-About Uganda	1冊	A 5、オリジナル、114ページ、Bow and Arrow Publishers Ltd.
16. Uganda 30 Years 1962-1992	1冊	US レターサイズ、オリジナル、122頁 Fountain Publishers Ltd.
17. 行政組織図及び SMD 組織図	各1枚	

### 4. 見積資料

項 目	数 量	備 考
1. 対象範囲の空中写真撮影見積書及び実績	1冊	ケニア国 Map Survey 社、Geomaps Surveying and Mapping 社、Photo Map 社の3業者分
2. 現地作業用車両見積書	1枚	三菱パジェロ5台分、カンバラ駐在丸紅(株)よりの現地購入の場合の見積書









JICA