

⑩ ケニアポリテクニク測量地図学HNDコース推薦図書リスト

HIGHER DIPLOMA IN SURVEYING AND MAPPING  
HIGHER

RECOMMENDED BOOK LIST

<u>BOOK TITLE</u>	<u>Author</u>	<u>PUBLISHER</u>	<u>PRICE (KSH)</u>	<u>BOOKSHOP</u>
*1. Principles of Surveying	J. J. Clendinning	Van Nostrand	Vol. 1 395.00	UB
	S.G. Oliver	Rernhold Co	Vol.2 155.00	UB
*2. Surveying	Bannister & Raymond	E.L.R.S.	214.30	UB
*3. Elements of Cartography	Robinson & Others	John Wiley & Sons	493.70	UB
4. Practical Map Production	J. Loxton	John Liley & Sons	145.00	CH
*5. Cartographic Design & Repro	J. S. Keates	Longman	284.00	UB
*6. Field Astronomy for Surveyors	Blackies	Charles Graffin & Co.	475.00	UB
7. Principles & Use of Surveying Instruments	Clendinning & Oliver	Von Nostrand Reinhold	296.00	UB
8. Practical Field Surveying & Computations	Allan Hollway & Maynes	Heinmann	873.30	UB/TUC
9. Elements of Photogrammetry	Paul Wolf	Mc Graw-Hill Co.	800.00	TUC/UB
10. Photogrammetry	Moffit & Mikhael	Harper & Row	720.00	TUC/UP
11. Land Law	Curson	Macdonald & Evans Ltd.	191.00	TUC/Charita
12. Land Law & Conveyancing in Kenya	Onalo P.L.	Heinemann Kenya	225.00	TUC/Charita
13. Law of Real Property	David J. Hyton	ELBS	101.00	UB
14. Land law & Registration	Rowton Simpson	Surveyor Publisher	275.00	T.B.C.

H. O. D. SURVEYING & MAPPING  
KENYA POLYTECHNIC

<u>BOOK TITLE</u>	<u>AUTHOR</u>
15. Cadastral Surveys and Records of Rights in Land	Binns
16. Registration of Title "Torrens Essay"	R. R. Torrens
17. Cadastral Surveys within the Commonwealth	Dale
18. The land Surveyor and the Law	Simpson & Sweaney
19. Introduction to Microcomputers	Osborne
20. Computer and Statistical Techniques for Planners	Baxter
21. First steps in Remote Sensing	Bullard & Lakin
22. Land use	Rhind & Hudson
23. An Introduction to Town and Country planning	Ratchffe
24. Urban and Regional Planning	MacLoughlin
25. Urban and Regional Planning	Hall
26. Project Planning & Management	L.J.J. Cordman & R.N. Love
27. Geography	G. Hombford
28. Principles and Practice of town and county planning	K. Keebles
29. Geology for engineers	Blyth

7.40.00

141.00

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30. Computer Data Processing	Gordon B. Davis	Mc Graw Hill	199.00
31. Mathematical Analysis	Binmore	Cambridge	203.50
32. Interactive Computing with Basic	Donald M. Monro	Edward Arnold	264.10
33. A Basic course in Statistics	G. M. Clarke	ELBS	199.70
34. A Study of Urban Geography	Cater	Arnold	290.70
35. Computer Programming for Geographers	D.J. Unusin		326.90
36. Principles of Remote Sensing	P. J. Curran	ELBS	436.70
37. Applied Remote Sensing	C. P. Lo	Longman	495.30
38. Engineering Surveying	F.A. Shepherd	E. Arnold Vol.I Vol.II	572.15
39. Mathematics for Engineers & Scientist	Allan Jeffrey	ELBS	192.50
40. Essential of Highway Engineer	Gichaga & Porter	McMillan	163.50
41. Advanced Engineering Mathematics	C. Ray Wylie	McGraw Hill	242.90
42. Planning for Engineers & Surveyors	F.D. Hobbs & F.J. Doling	Birmingham	435.40
43. Site Surveying & Leveling	John Clancy	Edward Arnold	169.50
44. Management	Harold Kootz-Heinsweilwich	Mcgraw Hill	271.70
45. Fundamental of Mathematical Statistics	C.B. Gupta	Vikes	148.50
46. Highway Engineering	Orialarty	E. Arnold VOL.I & II	192.00
47. Pure ad Applied Maths	Frontier & Lanbe		220.00 200.00 TBC

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48.	Advanced level Physics	Melkon & Parker	Heinman	250.00
*49.	Cartography Drawing Instruments			2600.00
*50.	Electronic Calculator (scientific)			600.00
51.	First Steps in Cartography	See Mr. V.C. Lusweti for Photocopying		
52.	Geodesy	Torgue		
53.	Land Information Management	By Prof. Dale		
*54.	Hydrography for Surveyors	Inghan		284.60
*55.	Analysis and Adjustment of Survey Measurements	Van Nostrand		920.00
*56.	Fundamentals of Surveys Measurements and Analysis	By Copper	Collins	730.00
*57.	Control Surveys in Civil Engineering	Copper	Collins	1659.00
*58.	Project Surveys	Richardus		734.60
*59.	Practice and Principle of Surveying	Davies		436.70
*60.	Mapping from Aerial Photographs	Burnside		

NOTE: The books marked with asteriks are essential for the course

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H. O. O. SURVEYING & MAPPING  
KENYA POLYTECHNIC

⑪ ケニアポリテクニク地図学図書

CARTOGRAPHY BOOKS

1. Principles of Thematic Map Design - By Borden D. Dent  
- Publisher - Addison Wesley.
2. Cartographic Design & Production 2nd Edition - By John S. Keates  
Publisher - Longman
3. Principles of Geographical information systems for Land Resource assessment - By P. A. Burrough
4. Remote Sensing & Image Interpretation - By T. M. Lillesand
5. Cartography in Prehistoric, Ancient, Medieval Europe & Mediterranean - By J. B. Harley
6. Elements of Cartography 4th Ed. - By A. Robinson
7. Understanding Maps - By J. Keates
8. Land Use Mapping - By Alice Coleman
9. Display and Analysis of Spatial Data - By J. C. Davis & M.J. McCullagh
10. Development of Digital Maps - By Prof. Pap - Ordnance Survey
11. Computer Programs for Mapping - By T. Long - Architectural Press.
12. Terrain Analysis & Remote Sensing - By Townshend J. R. G. (1981)
13. Introduction to Environmental Remote Sensing -
14. Remote Sensing Digital Image Analysis - By Richards J. A. (1986)



⑫ 今回の調査に関連する新聞記事

WELCOME ADDRESS GIVEN BY THE HON. MINISTER FOR LANDS AND SETTLEMENT  
DURING THE MEETING WITH THE PRELIMINARY STUDY TEAM ON THE SURVEY INSTITUTE  
OF TRAINING AND RESEARCH AT HIS OFFICE, ON 22ND NOVEMBER, 1993 AT 2.30 P.M.

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It is my pleasure to welcome you to the Ministry of Lands and Settlement and I would like to request you to feel at home. It is also my pleasure to note that the purpose of your visit is to do a preliminary study for the implementation of the Project Type Technical Cooperation of the Survey Institute of Training and Research, which is supposed to start next year, for a duration of five years.

The cooperation between the Kenyan Government and the Japanese Government dates back more than sixteen years. During this period, I must note our country has benefited immensely from the technical assistance from the Japanese Government in the following areas:-

.../2

- 2 -

- 1) Topographical Mapping of Eastern Kenya which covers 27,000 sq. km.. This project which was started in 1975 was completed in 1981.
- 2) Land Use Mapping of the Tana River Delta area and the Ranching Project area which covers an area of 14,700 sq. km. This has boosted the agricultural production in the area.
- 3) Topographical Mapping of the Southern part of the country covering an area of about 29,800 sq. km. which was started in 1985 and completed in 1991.

I would also like to note that in 1990/91, my Ministry, through the Department of Survey, also benefited from the supply of survey equipment and vehicles which has gone a long way to assist with the implementation of surveying and mapping of projects through out the country.

.../3

Finally, I would like to mention the Mini-Project Type Technical Cooperation for the Survey Training Project in Kenya which covers a period of three years from April 1991 to March 1994. By the time this expires in March, my Ministry will have trained ninety technical officers which will go along way in our efforts the transfer of technology.

At the moment, the Ministry relies on the Kenya Polytechnic to train its Surveyors, Cartographers, Lithographers and Photo~~lithographers~~<sup>grammetrists</sup> at the rate of seventy per year (this is only 7% of our requirement). According to the Government projections, we need to train one thousand technical officers per year. This has not been realised due to lack of training places. It is also worth noting that the services of surveyors are increasing due to the increase in the Administrative Districts and the awareness on the part of the citizens to have their land surveyed and registered. It is also the Government policy to develop arid and semi-arid lands which constitute about 80% of the country but so far has not been surveyed due to lack of adequate surveyors.

.../4

The construction of Kenya Survey Institute of Training and Research which is estimated to cost about 7 million US dollars for both grant aid and technical cooperation will therefore go a long way to alleviate this problem. I am pleased to note that your group is going to study the implementation of the Institute which is due to start next year.

The Kenya Government feels this proposal as a high priority area and I would like to take this opportunity to thank your Government for this good gesture in the technical cooperation.



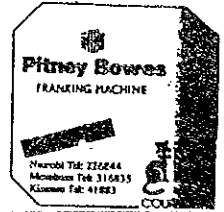
# THE STANDARD

NO. 24727 NAIROBI, TUESDAY, NOVEMBER 23, 1993.

CITY EDITION

ESTABLISHED 1902

PRICE 12/00



**ALL EARS:** Lands and Settlement Minister Gen (Rtd) Jackson Mulinge holds talks with the deputy director of the Japanese Geographic Survey Institute, Mr Kunio Nonomura (centre), when the latter paid a courtesy call on him as a Japanese embassy official looks on.

— Picture by Samson Osiga

# Times

The Voice of the People

TUESDAY, NOVEMBER 23, 1993

PRICE 12/00

Vol. 2 No. 1799

## NATIONAL NEWS



Minister Jackson Mulinge (L) talks to Mr Ninomuru Kunio of the Japanese Geographical Survey Institute who paid him a courtesy call in his office yesterday.

— Picture by REBECCA NDUKU

### Mulinge spells out training policy

By TIMES Reporter

THE Minister for Lands and Settlement, General Jackson Mulinge, (rtd), yesterday said his ministry relies on the Kenya Polytechnic to train its surveyors, cartographers and lithographers.

He said according to the Government projections, the ministry needs to train 1,000 technical officers every year, but that has not been realised due

to lack of training places.

Gen Mulinge was speaking when he received preliminary study team on the survey institute of training and research from Japan in his Ardhi House office.

The minister said the visit is to do a preliminary study for the implementation of the project type technical co-operation of the survey institute of training and research, which is supposed

to start next year and last five years.

General Mulinge observed that the services of surveyors are increasing due to the increase in the administrative districts and the awareness of the part of the citizens to have their land surveyed and registered.

He said it is also Government policy to develop arid and semi-arid lands

DAILY

# NATION

The newspaper that serves the nation

No. 10252, Nairobi, Wednesday, November 24, 1993

Price KSh12/00

## Donors agree to give Sh58.6b aid

By PAUL REDFERN  
in Paris and  
SAMUEL NDUATI

The donor community ended its aid freeze of Kenya yesterday and agreed to make new commitments of Sh58.6 billion (\$850m) for 1994.

The total was higher than many expected but the Consultative Group meeting in Paris made it clear that disbursement was conditional on continued economic and political reforms.

The amount includes Sh11.7 billion (\$170m) in general balance of payments support — quick disbursing aid.

An excited Vice-President George Saitoti broke into the proceedings of Parliament in Nairobi to deliver the news to loud Kikuyu cheers. He commended Finance Minister Musalia Mudavadi for "a commendable job".

The commitments are slightly lower than the \$900m made in 1991 before aid was suspended. Last year Kenya received some

PAGE 2 — Col. 1

## NATIONAL NEWS

# Donors to give Sh58b

FROM PAGE 1

\$700m but the bulk was project aid.

A Press statement issued in Paris by the World Bank said the commitments would adequately cover Kenya's external financing requirements provided appropriate arrangements were made to with existing debt service

The statement said the donors had noted that the Kenya Government hoped to meet the balance of its external financing requirements for 1994 through multilateral arrangements for repaying existing debt service arrears. They hoped an arrangement could be quickly concluded.

Sources at the Paris talks said the decision did not mean Kenya had received a clean bill of health. The donors would monitor the implementation of the economic reform agenda and would need to see strong positive steps on human rights, governance and corruption.

The sources said the Government had been criticised for failing to deal with tribal clashes as well as outstanding issues on corruption.

Some donors indicated they would adopt a "wait and see" attitude on the economy and the Government's commitment to bring to justice those guilty of corruption, embezzlement and fraud before agreeing to any substantial balance of payments support.

The decision to unfreeze the support programme is nevertheless a triumph for Mr Mudavadi who, the sources said, impressed most of the donors with his zeal for the economic reform programme.

The *Financial Times* described Mr Mudavadi as "progressive" and said "most donors



Mr Mudavadi: Lead team

agree Kenya has made impressive economic strides in the past six months".

It said: "Donors clearly recognised that for Mr Mudavadi's reforms to succeed, particularly his plans to reduce the overstuffed civil service, then it would be necessary for a safety net to be provided."

In Nairobi, Prof Saitoti interrupted the business of the House at 4.50 pm to announce the result of the Paris meeting.

The V-P rose on a point of order as an Assistant Minister for Commerce and Industry, Mr James Oogoo, was contributing to the Geologist Registration Bill.

"Today, the hour of reckoning has come... let us congratulate the Honourable Musalia Mudavadi for having done a commendable job," Prof Saitoti said.

Prof Saitoti said that the news was very important to the House and the nation. He said some of the opposition MPs had cam-



Prof Saitoti: Informed House

aigned against a resumption of aid and they "should be ashamed of it".

After the meeting, one member of the Kenyan delegation said they were "very pleased" with the outcome of the talks.

A representative of the German delegation told the *Nation* that his government was still concerned as to whether the Kenyan Government had the ability to carry at all the reforms promised.

He and an Italian delegate said that the reforms would continue to be monitored closely and that further aid would depend on whether or not the Kenyan Government back-tracked on reforms as it had done in the past.

A new Consultative Group meeting will be held in one year.

Nevertheless, donors are clearly impressed at the Government's economic reform efforts so far.

"All delegates expressed concern over the deterioration in

economic management that occurred after the last meeting, but warmly welcomed the recent significant efforts of the Government to re-establish an appropriate macro-economic framework and initiate structural reforms", the World Bank statement said.

"All participants including the Kenyan delegation, stressed however that this positive refocusing in recent months on improving macro-economic management and implementing structural reform must be sustained if accelerated economic growth, the employment creation and poverty reduction, is to be achieved".

Later, Mr Mudavadi said that although he was pleased Kenya is now back in the international fold, "we are handling the matter very cautiously".

"This is just the start of the process of rebuilding confidence," Mr Mudavadi went on. "There is still some distance to be covered [it is clear that further aid] will depend on how we handle the ethnic clashes problem and whether there is reconciliation between the communities over this issue".

"Equally, we have to do a lot more to ensure corrupt practices are minimized."

"This has been a traumatic two-year period for Kenya. We have accumulated a lot of balance of payments arrears. We have had increased levels of unemployment and high inflation. It is not an experience we want to go through again."

"I think, however, we have had a positive result to this experience. We have also learned we should reduce our dependence on aid."

"I would also like to say it is not true we are always reacting to meetings and that we rush through policies and programmes to fit such meetings. We have to believe in the reform process."

"It is, however, clear that we have to keep pushing to deal with the many problems we still have," Mr Mudavadi said.

• Full text of the World Bank statement on Page 2.

# 'Partnership on the mend'

Following is the statement issued after the Consultative Group Meeting:

"We have achieved an important objective that we set ourselves at the start of this meeting: For donors to assess the Government's report of recent actions taken and plans for reform and for Government to hear the concerns of the donors.

There was universal agreement that the recently negotiated Policy Framework Paper represents a bold and comprehensive programme that could be the start of a process of sustained and accelerating expansion of the Kenyan economy that, over time, would lift the vast majority of Kenyans out of poverty.

In addition to completing the current stabilisation effort, the PRP focuses in a balanced way on all the principal areas that had been of concern to the donors since the last CG meeting in November of 1991: Civil Service reform; reform of strategic and non-strategic public enterprises; rationalisation of public expenditures; creation of an environment that is more conducive to the development of the private sector (including the liberalisation of pricing and distribution of maize); and completion of a National Environmental Action and Plan and of a Poverty Assessment.

In a number of areas, the Government has already made substantial progress which helped seal the recent agreement on a new ESAP with the IMF, but the agenda of actions yet to be taken is daunting.

While impressed with Kenya's recent actions, the donors were sceptical that this agenda would be successfully tackled, given Kenya's performance during the one to two-year period preceding the spring of 1993. Only consistent and aggressive implementation of the agenda would, over time, restore Kenya's lost credibility.

However, donors expressed readiness to re-build their, at times, frayed partnerships with Kenya. They were particularly

encouraged by the Kenyan delegation's candid and open manner and the sense of confident commitment that it projected.

This process will become even better rooted once the PFP is reflected in the Sessional Paper which is to be presented to and discussed in the Parliament, thus giving it wider public exposure and participation.

"Poor governance had been the other critical issue that had caused bilateral donors to suspend new commitments of fast-disbursing assistance at the last CG two years ago.

"Bilateral donors welcomed the fact that there was now a viable opposition in Kenya's Parliament and that freedoms of speech and assembly were much enlarged, if not yet complete.

## Disturbed

However, they were disturbed by the ethnic clashes and by continued reports of corruption. With regard to the ethnic clashes, bilateral donors underlined the paramount importance of strengthened Government action to defuse the underlying tensions and deal with unrest through even-handed application of the law.

They agreed with Minister Mudavadi's suggestion that the recently prepared UNDP paper on the issue would provide a good starting point for the Government to begin to resolve the problems. It would also be a way for donors that were so inclined to provide support. On the question of corruption, there was agreement that many opportunities for corruption would be removed with the liberalisation and deregulation of the economy and with the reform of the parastatals, the Civil Service and the financial sector.

"Nevertheless, there was a sense that legal action against those involved in currently known cases of corruption, including fraud and the embezzle-

ment of public funds, has not been sufficiently systematic and has been definitely too slow. Vigorous actions in this area were seen as essential for restoring donor confidence in Kenya.

Two other issues were referred to: arrears on bilateral debt and the damaging impact of the recent drought on this year's cereal crop.

On the question of debt, the Minister assured the delegates that he has been holding discussions with the relevant parties, and that whatever the final resolution may be, it will entail equal treatment of all the affected creditors. On the impending major shortfall in this year's cereal crop, a number of delegates expressed the willingness to consider providing Kenya with additional food or financial aid in appropriate forums during the coming months.

And now to the bottom line. The donors indicated new commitment for 1994 of about US\$850 million, including at least US\$170 million of fast-disbursing balance of payments support. Such commitments, under normal disbursement patterns, should be sufficient to generate disbursements of the order of UD\$200 million in 1994.

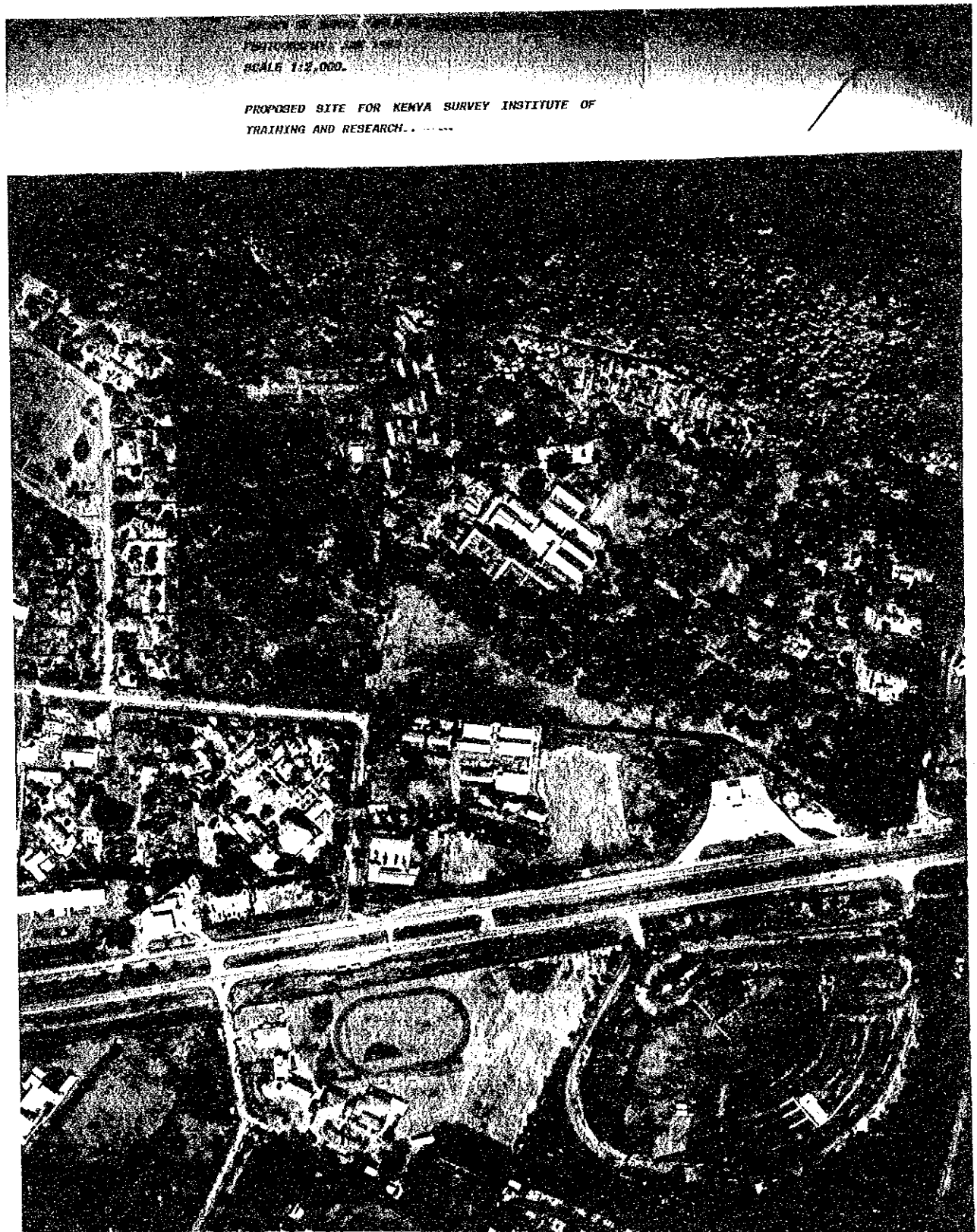
"However, a number of donors emphasised, particularly with respect to fast-disbursing aid, that translating their indications of new commitments into disbursements depended on progress in implementing the policy agenda presented by the Kenyan delegation. For a number of them, the complete liberalisation of maize prices and distribution were critical.

"So it appears that the donors' partnership with Kenya is on the mend. A number of you suggested that we meet again informally in mid-1994 to review Kenya's progress in implementing reforms and we will be happy to arrange this."

The meeting was chaired by Mr. Francis X. Colaco, the director of the Eastern Africa Department of the World Bank.



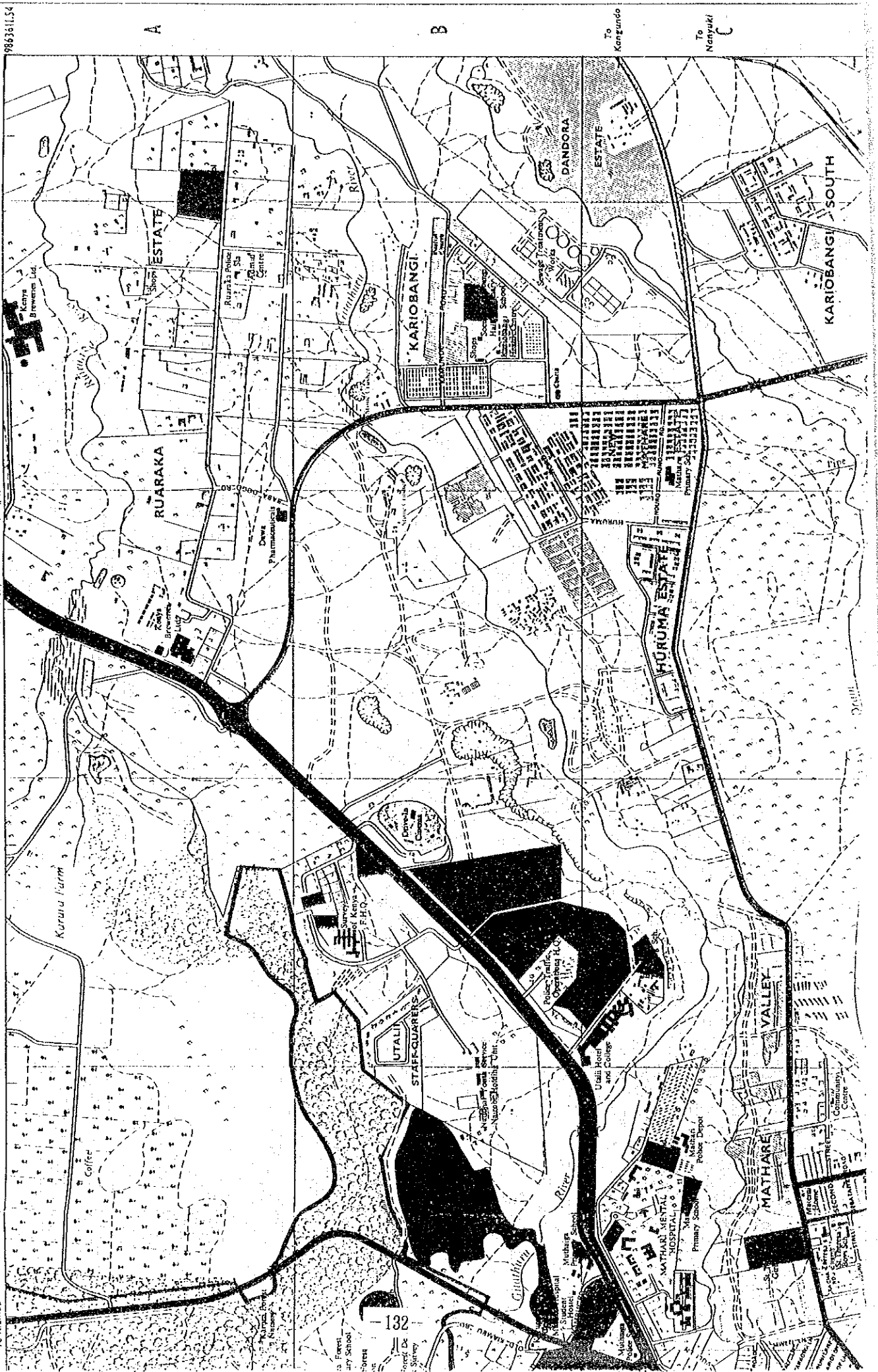
⑬ ケニア測量地図学院（仮称）建設用地の空中写真及び地図



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#### ⑭ 土地定住省大臣の挨拶文（事前調査団表敬訪問時）

土地定住省によろしくお会いしました。どうかつろいで下さい。また、あなた方の訪問目的が、測量訓練のプロジェクト方式技術協力—これは来年から始まって5年間と考えられておりますけれども—の事前調査であることも私の喜びとするところです。

ケニア政府と日本政府の協力は16年以上も以前にさかなぼります。この間、私たちの国は以下の分野で日本政府から多大の援助を得てきたことを述べねばなりません。

- 1) 27,000km<sup>2</sup>をカバーするケニア東部地区地図作成。このプロジェクトは、1975年に始まって、1981年に完了しました。
- 2) 14,700km<sup>2</sup>をカバーするタナ川デルタ地区及び牧場プロジェクト地区。これはこの地域の農業生産を押し上げました。
- 3) 29,800km<sup>2</sup>をカバーするケニア南部地区基本図作成。これは1985年に始まり、1991年に完了しました。

私はまた1990/91年にケニア測量局、即ち私の省が測量機材と車両の供与を受け、国中の測量地図作成プロジェクトの実施に大きく役だったことにも触れたいと思います。

最後に、私は1991年4月から1994年3月までの3カ年実施されているケニア測量訓練ミニプロジェクト方式技術協力に触れたいと思います。3月にこれが終了するまでに私の省では、90名の技術者を訓練したことになります。これは、我々が努力している技術の移転に大きく役立つものです。

現在のところ、わが省は、その測量技術者、地図作成技術者、製版技術者、写真測量技術者の養成をケニアポリテクニクに頼っており、毎年70名養成していますが、これは我々が必要とするものの7%にすぎません。政府の計画によると、我々は毎年1000名の技術職員を養成する必要があります。これは訓練施設の不足で実現されておられません。また、測量技術者の仕事が、行政区(District)の増加や、一部の市民が自分たちの土地が測量され登記されるべきことに気づいていることによって増大していることにも触れる必要があります。この国の80%を占め、これまで対応できる測量技術者がいなかったため測量がなされていない乾燥及び半乾燥地域の開発も、政府の政策であります。

それゆえ、無償資金協力と技術協力併せて700万USドルと見積もられているケニア測量訓練・研究所の設立は、この問題の軽減に大きく寄与するものです。あなた方のグループが、来年から始まる予定の訓練所の設立に向けて調査されることをうれしく思います。

ケニア政府はこのプロポーザルを最優先分野と考えており、この機会をお借りして、あなた方の政府に対して技術協力の調査団を派遣していただいたことに感謝いたします。









JICA