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MUTISO CONSULTANTS LTD.

PRESENTATION FOR MINISTRY OF TOURISM AND WILDLIFE

TENDER NO. 1/83-84

NORTHERN ZONE SPECIAL STUDY

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A. Mutiso Consultants Ltd.

Mutiso Consultants Ltd offers professional services in development management. It is geared to helping public and private institutions and their decision-makers in solving problems by application of institutional, policy, socio-economic, technological and environmental analysis.

We pride ourselves in being informed about the latest research findings and thus are able to create effective solutions to development problems.

Mutiso Consultants can assist development managers with:

- . Formulation of development ideas and programs
- . Design of institutional framework for their execution
- . Drawing of implementation schedules and strategies
- . Routine monitoring for effective management
- . Evaluation of results
- . Design of liason relationships between different development bodies - donors, contractors and governments.

Mutiso Consultants Ltd has this year drawn together a group of 30 core professionals for more effective work. Between them they have more than 100 man years of research and consulting experience. We believe we have the greatest concentration of talent any one local consulting firm. Most of our consultants have multidisciplinary training and work experience.

Mutiso Consultants Ltd is managed on a full time basis by Prof. G. C. M. Mutiso who has taught at the University level both in the United States (Rutgers University, Montclair State and St. John's University) and in Kenya (University of Nairobi). He also has management experience in the private sector over and above extensive consultancy experience.

Mutiso Consultants Ltd staff have participated in varied consultancies. The following are a sample:-

- . Development Strategies in Arid and Semi-arid Lands, GOK - USAID
- . Unemployment Analysis - GOK - UNESCO
- . Women in Agricultural Extension - GOK
- . Refugee Administration Problems - GOK - UNHCR
- . Evaluation of Rural Development Strategies - GOK
- . African University Training - UNESCO
- . Tourism Development - GOK - UNDP
- . The Urban Poor - GOK - University of Nairobi
- . Livestock Development Strategies - GOK
- . Fisheries Development Strategies

Mutiso Consultants Ltd will welcome all opportunities to discuss development and management problems with a view to finding solutions.

We are happy to submit tender documents to Ministry of Tourism and Wildlife. Tender No. 1/83-84. Tender for Wildlife and Tourism Study.. Northern Zone Special Study.

B. Scope of Work and Methodology

a. Introduction

From the documents it is clear that the ministry desires the consultant to essentially concentrate on the analysis of the already existing data.

This will essentially be collected from the Government, Tour companies, Hotel Chains, The World Bank, various Donor Countries, Churches and most significantly the County Councils and District Teams who will be involved in the joint development.

This study must also be seen in the context of the new district development focus which will shift the determination of development priorities to the districts (ministerial) decentralisation of Ministry of Tourism and wildlife staff to the districts, which is supposed to be completed by the 28th of August, will clearly shape what recommendations we are likely to give on several matters with regard to the planning and execution of the development of the circuit.

b. General Comments on Scope of Work

1. For purposes of identifying the local physical tourist attraction features, it will be necessary to inventory them on the ground. This is taken care of in the subsequent travel budget.

Traditions and cultural aspects which are of attraction to the tourists are widely researched. We shall review and synthesize those which are relevant to tourism growth.

We will note the impact of tourism on local cultural traditions.

We shall examine Turkana, Marsabit and West Pokot new population concentration generated by famine relief related agricultural schemes. These are likely to grow because of activities planned by other ministries. We shall examine how they may provide labour pools and social cultural activities for tourist oriented industry.

2. This circuit has lagged behind because the road network is so absolutely terrible.

We shall examine how the tour companies who have tried to expand operations in the circuit by use of planes, have been constrained by the problem of moving the people around when they get on the ground.

We shall examine whether investors are willing to put large amounts of money into boats to beef up Lake Turkana operations.

Finally we shall examine how creation of parks competes for land with the already existing farming, pastoral and nascent fishing activity.

There may well be ways the economic activities could compliment tourist industry in the area.

We, by discussion with all the existing development authorities in the region, will phase the constraints over time.

3. Suitable sites for development of lodges will have to be identified on the ground. They have to fit basic criteria.

First is possibility of the future regional development plans of the region being able to supply the basis minimum services of roads, water and labour.

Secondly, in this circuit more than in others there, will be need for assuring security. Plans for this will be ascertained from the relevant quarters.

The third factor is scenic attractions which will be inventoried. They will form a major basis for the selection of sites.

4. Destination points will either be within parks or on the lakes. Already there are high cost operations at these points. These are operated by the very exclusive and therefore highly capitalised operators.

We assume that under this heading the idea is to find solutions to get mass tourism in the circuit and thus there will be need to come up with alternatives within the reach of the ordinary tourist.

Programmes will be identified which include the bread and butter activities of ordinary tourists i.e. game viewing and photographing, boating for pleasure, water skiing, snorkling and fishing, cultural dances, hiking, mountain climbing, camping, anthropological and historical sites, and the like.

Investigation of the artifacts industry capacity at destination points will be conducted.

5. Inventory of wildlife has gone on in the area under the ministry for quite some years. Although ideally there is need for ground check of ungulate wildlife species the low level budgeting of the study and the time precludes overall survey of the whole area. The Ministry of Tourism and Wildlife has collected some data over the years.

We shall analyse this data to show changes over time and relate the distribution to destination points.

6. Transportation circuits and sub circuits will essentially depend on whether the nearer circuits have surplus tourists to feed the northern bits further out. There is of course the already refected idea that the Central Circuit can stretch from Marsabit to Turkana cheaply. That leaves only the Pokot, Kerio and South Turkana as possible bits of the Northern Circuit to be fed from the Central Circuit

We shall examine the viability of:

- (a) Feeding Losai, Marsabit National Reserve and Sibiloi from existing circuits in Isiolo, Samburu and Meru districts.
- (b) The possibility of creating an independent Lake Turkana circuit which will need major investiments into water related activities on the lake.
- (c) How the roads to South Turkana could be developed, to link South Turkana National Reserve either to the lake circuit or
- (d) the Kerio Circuit.
- (e) How Nasolot and the Kerio Valley operations could be fed by the Western Circuit and the Central Circuit.
- (f) We shall further look in detail if the relative merits/demerits of how the major national central circuit could feed the subcircuit in the Kerio Valley.

Ways of relating Pokot to the Western subcircuit will be examined.

- (g) Since ongoing developments on the Turkwell River will greatly improve transportation, we shall examine whether the Western Circuit can be extended through Pokot to Turkana Central Island.

- 7. Local modes of transport will essentially be camels, boats and possibly donkeys. They need to be organised in terms of local investors.

The tour companies already using camels will be interviewed for costing purposes.

There is the basic problem of continuous movement of the peoples in the area. What we will establish is

- (a) The possibilities and the opportunity cost to the locals of establishing operations which can support these local modes and sustain them for a large numbers of tourists and people operating there.
- (b) How and where these local modes of transportation can be intergrated with the identified subcircuits.

- 8. Circuits and subcircuit study is enumerated in 6 above. We shall examine the possibility of creating a major marketing focus based on Lake Turkana, semidesert and desert attractions as a new focus for marketing Kenyan tourism in general and the Northern Circuit in particular.

We intend to analyse, at the national level the bed occupancy rates in all adjoining circuits to the northern one and to identify those which can maximise the flow of tourism into the area.

9. We shall carry out a cost benefit analysis of the identified options to develop the Northern Circuit taking to account (a) the new district focus strategy (b) development programmes by the Kerio Valley Authority (c) development plans of donor agencies (d) sociopolitical considerations.
10. We shall estimate the cost of wildlife conservation in the area and compare it with other ongoing/planned activities.

Given projected government development budgets, it is not clear that there will be monies coming for large scale parks as in the past. As in 9 above, the tradeoffs, we imagine will be limited. We therefore intend to only project available funds for development and show different returns if invested in other economic activities decided upon by national government,, districts and donors.

The ministry is aware that significant external development funds will increasingly shift to the private sector. We shall take this into consideration in particularly evaluating the projected farming, irrigation, fishing and pastoral plans.

11. We are informed that the government strategy is to supply basic infrastructure and increasingly allow the private sector to take on the productive economic role. This is the focus of the ongoing investigations on parastatals. We will therefore seek to establish the possible futures for government investing in hotels, as opposed to private sector or local authorities. Incidentally given district focus, and, the already apparent diminuation of the local authorities, we will investigate whether the government through the districts focus could get involved. To the extent that ministries will post technical staff to the districts this may be an opportune time for it to break the perrenial problem of county councils establishing parks and other infrastructure.

We shall therefore investigate through:-

1. GOK interviews, priorities and probable availability of funds for:-
 - (a) Infrastructure e.g. roads, water supply, electricity and airstrips in the study area.
 - (b) Lodges
 - (c) Wildlife conservation
 2. Private Sector investment in:
 - (a) Lodges
 - (b) Transport
 3. County Councils/Districts in any under 1 and 2 above.
12. We are not clear whether the ministry has solved the administrative problem of revenue sharing with County Councils. But given increased decentralisation, it may make sense to channel GOK involvement in the development of this circuit to the districts and Kerio Development Authority.

If this move materializes, it may allow contractual relations for services like national and international marketing to be costed and paid for by the bodies to the ministry.

Large amounts of foreign capital investment into the tourism sector are not envisaged since the rehabilitation of some of the circuits among our neighbours has attracted big chunks of it. The question we will therefore address is whether there are possibilities of attracting locally based capital into the region.

Similarly, given that increasingly donors have preferred to develop regions in an integrated manner, we will liaise with the GOK ministries responsible for these plans and the donors to establish the patterns of their funding to different sectors. This ought to give us new ways of looking at the question of revenue sharing. This implies that we shall have to examine new institutional mechanism for sharing costs and revenues.

C. Work Schedule

We propose to execute the project in three phases.

1. Phase One

This will consist of examination of the existing data and intensive interviews with government ministries, international agencies and tour operators, to prepare a preliminary analysis which will include:

- (a) Compiling of inventory and distribution of ungulate wildlife species, marine ecology and physical ecology of the study area.
- (b) Identification and assessment of the land use patterns and potentialities of the area.
- (c) Listing of ongoing and planned programmes by government and international agencies.
- (d) Identification of constraints to future development.
- (e) Identification of development role of government, private sector and local authorities.

- (f) Identification of existing methods for sharing and distribution of development costs and revenue and the problems.
- (g) Cost of wildlife conservation in the area.

2. Phase Two

This will include visits to the study area to:-

- (a) Identify and assess transportation circuits and sub-circuits in the study area including identification of local modes of transportation that may be attractive to tourists.
- (b) Identification and assessment of suitable sites for lodges and how they could be linked to the other infrastructure in the area.
- (c) Interviews and consultations with:
 - (1) District Teams.
 - (2) International agencies and church personnel in the study area.
 - (3) Local authority officials.
 - (4) Local leaders.
 - (5) Kerio Development Authority.

Consultancies will be carried out in view of:

- (a) Updating information gathered in phase one.
- (b) On the spot check of the potentials and the problems of developing tourism in the area.
- (c) To get feedback on points a) and b) of phase two

3. Phase Three

Data analysis and Report Writing. In addition to the data obtained in phases one and two we intend to carry out the following analysis:-

- (a) Cost benefit analysis of wildlife conservation as opposed to other economic activities in the area.
- (b) Estimate benefits which will accrue to the local people and communities and the national economy.
- (c) Linking of the existing Northern Zone sub-circuits and Western Circuit with those identified in the study.

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C. Study Costings

SUMMARY BUDGET

Travel and Accomodation	K.Shs.	116,000.00
Professional Fees	K.Shs.	102,000.00
Office Expenses	K.Shs.	<u>82,000.00</u>
Total	K.Shs.	<u>300,000.00</u>

SUMMARY OF TRAVEL AND ACCOMODATION EXPENSES

K.Shs.

1	-	Marsabit National Reserve	16,450.00
2	-	Losai National Reserve	7,420.00
3	-	Sibiloi National Park	7,420.00
4	-	Lake Turkana	
		(a) Central Island National Park	21,284.00
		(b) Southern Island National Park	15,969.00
5	-	South Turkana National Reserve	9,275.00
6	-	Nasolot National Reserve	14,070.00
7	-	Kerio Valley	
		(a) Kerio Valley National Reserve	12,880.00
		(b) Kamnorok National Reserve	10,570.00

115,338.00

Say 116,000.00

NORTHERN CIRCUIT

(1) Marsabit National Reserve

NRB - Marsabit - 550 x 2 return	=	1100 km.	
5 No. Trips to National Park (Internal Travel)	=	250 km.	
		<u>1350 km</u>	@ 7/= Land Rover
Travel Time	2 days		
Work on Site	5 days		K.Shs.
Transportation Cost	1350 x 7	9,450.00	
4 Persons Accomodation Cost 5 Nights @ 350/=		7,000.00	
	Total	<u>16,450.00</u>	

(2) Losai National Reserve

Marsabit - Losai	280 km x 2 Trips	=	560 km
Internal Travel			100 km
			<u>660 km</u>
Travel Time and Working on Site	2 days		
(Cost of lodge 3 persons + driver 2 Nights)			
Transportation Cost	660 km @ 7/=		
Accomodation Cost 4 x 350/= x 2 Nights		4,620.00	
Cost of 3 Professionals (on time basis)		2,800.00	
		<u>7,420.00</u>	

(3) Sibiloi National Park

* Cost Same as No. (2)		<u>7,420.00</u>	
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4. Lake Turkana

(a) Central Island

Nrb - Lodwar - Ferguson Gulf ... 806 x 2 return = 1612 km
1 Trip to Central Island by boat Say 3,000.00
Travel time to Lodwar 2 days
Travel time to Ferguson gulf 1 day
Working on site 1 day
Back to Lodwar 1 day K.Shs.
Transportation Cost ... 1612 x 7/= = 11,284.00
Boat Cost = 3,000.00
Accommodation 5 Nights at Lodges for
3 persons + driver 4 x 350/= x 5 = 7,000.00
21,284.00

(b) South Island(to be done by air)

Fly Nrb - Loyangalani (3 Persons) 9,819.00
Travel time 1 day
Work on Site 3 days
Transportation Cost 9,819.00
Boat Cost 3,000.00
Accommodation 3 Nights 3 x 350/= x 3 3,150.00
15,969.00

5. South Turkana National Reserve

Lodwar - Lokori	350 km.
Internal Travel	175 km.
	525 km.
Travel time	1 day (Lodwar - Lokori)
Travel time	2 days (Lokori - Nrb)
Work on Site	2 days
Transportaion Cost	525 x 7/= =
	3,675.00
Accomodation Cost (4 Nights for 3 persons + 1 driver) 350 x 4 x 4 N. =	5,600.00
	9,272.00
* To be incorporated with No (4a) trip	

6. Nasolot National Reserve

Nairobi - Kitale	760 km
Kitale - Kapenguria - Nasolot Park	350 km.
Internal Travel	100 km.
	1210 km
Transportation Cost	1210 @ 7/= =
	8,470.00
Accomodation Cost (4 Nights for 3 Persons + 1 driver) 4 x 350 x 4 N. =	5,600.00
	14,070.00

7. Kerio Valley

(a) Kerio Valley North Reserve

Nrb - Kitale	760 km
Kitale - Sigor	180 km
Internal Travel	100 km
	1040 km
Travel time -	2 days
Site Work -	3 days
Transportation Cost	1040 x 7/=
	7,280.00
Accomodation Cost (4 Nights for 3 Persons + 1 driver) 4 x 350 x 4 N.	5,600.00
	12,880.00

(b) Kamnorok National Reserve

Nrb - Eldoret	622 km
Eldoret - Chebloch - Kamnorok	210 km
Internal travel	78 km
	<hr/>
	910 km

Travel time 2 days

Site Work 2 days

Transportation Cost $910 \times 7/=$ = 6,370.00

Accommodation Cost(3 Nights for 3 Professionals
+ 1 driver) $4 \times 350 \times 3 \text{ N.}$ = 4,200.00

10,570.00

PROFESSIONAL FEES

Resource Planner/Team Leader 3 Months	K.Shs. 42,000.0
Marine Biologist 3 Months	K.Shs. 15,000.0
Ecologist 3 Months	K.Shs. 15,000.0
Economist 3 Months	K.Shs. 15,000.0
Transportation Planner 3 Months	K.Shs. 15,000.0
Total	K.Shs. 102,000.0

OFFICE EXPENSES

3 Months	K.Shs. 82,000.0
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D. Study Consultants

GIDEON-CYRUS MAKAU MUTISO-TEAM LEADER

Address: P.O. Box 14333,
Westlands,
NAIROBI.

Telephone: Office - 339646/23772
Home - 501780

Date of Birth: November 1942

Place of Birth: Kangundo, Kenya

Marital Status: Married. Three children.

Education: B.A. Political Science - 1965 (Cum Laude)
Parsons College, Fairfield, Iowa.

M.A. Political Science - 1966
University of Kansas, Lawrence, Kansas.
Thesis Topic: "The use of Economic and Political
Development as Ideology in Kenya, 1952-1963".

Ph. D. Political Science - 1968
Syracuse University, Syracuse, New York.

Thesis Topic: "Socio-political Ideas in African
Literature in English, 1945 - 1967".

Teaching
Experience:

1. Tutor. Department of Government, parsons College,
Fairfield, Iowa, 1965.
2. Tutor. Department of Political Science, University
of Kansas, Lawrence, Kansas. Summer, 1966.
3. Lecturer. Program of East African Studies, Syracuse
University, Syracuse, New York. Summer 1967.
4. Lecturer. Program of East African Studies,
Syracuse University, Syracuse, New York. Summer
1966.
5. Assistant Professor: African politics
Montclair State College, Montclair, New Jersey.
September 1968 June, 1969.
6. Adjunct Assistant Professor. African Politics,
St. John's University, Jamaica, New York. Spring
1969.
7. Assistant Professor. African politics, Rutgers
University, New Brunswick, New Jersey. September
1969 June, 1970.
8. Lecturer, Department of Government, University of
Nairobi, June 1970-1972.
9. Senior Lecturer, Department of Government, University
of Nairobi, September, 1972-1976.

19. Associate Professor. Department of Government,
University of Nairobi 1976-1979.

Subjects Taught:

1. American Government - Undergraduate
2. African Social and Political Theory - Undergraduate
3. Introduction to Political Science - Undergraduate
4. Governments of southeast Asia - Graduate
5. Comparative European Governments - Graduate
6. Contemporary African Politics - Graduate
7. African Political Thought - Undergraduate
8. Governments of the U.K; U.S.S.R; and U.S.A. - Graduate
9. Politics and Literature of the Caribbean - Undergraduate
10. Comparative politics of the U.S. and U.S.S.R.
- Undergraduate
11. Comparative Politics of Post Industrial States (Japan,
U.S. and U.S.S.R. - Undergraduate
12. Issues in African Public policy - Undergraduate

Administrative Experience:

- (a) Deputy Director - Diplomacy Training Programme
1973 - 1974
- (b) Assistant Managing Editor, Daily Nation 1979 - 1983

Consultancies:

1. Consultant, District Focus and Kitui Arid and Semi-Arid
programme. To Louis Berger/USAID and GOK. 1983
2. Consultant, Government of Kenya/World Bank second Urban
Project. Kenya Low Cost Housing By Laws Study - 1979
3. Consultant, Government of Kenya/CID/USAID Marginal Semi
Arid Lands Preinvestment Inventory, Institutions
Report No. 7. 1978
4. Consultant, IDEP/ENDA, Clark University, Drought Data
1976 (Dakar)
5. Consultant, ILO/ARLAC Labour Training, Arusha, 1976
6. Consultant, UNESCO Methods and Analysis Division, Paris
1974.
7. Consultant, World Council of Churches CCPD Division
1974 (Geneva).
8. Consultant, Education and Development. All African
Conference of Churches, 1972
9. Consultant, Kenya Government Special Rural Development
Evaluation Team, 1972

10. Consultant. Kenya Government Employment Mission, ILO/UNDP 1971/1972.
11. Consultant, Kenya Government National Committee on Educational Objectives and Policies, 1971
12. Consultant. General African Programme Urban Institute Montclair State College, Upper Montclair, New Jersey - 1969.
13. Consultant General African programme; New Jersey Urban Education Corps, Camp Kilmer, Edison, New Jersey - 1969.
14. Consultant Urban Institute, Montclair College.
 - (a) Reading Programme Evaluation - 1969
 - (b) Development of Social Science and Literary Materials for use in the TRY and Upward Bound Programmes - 1969.
15. Consultant New Jersey Urban Education Corps. Development of African Materials and Training of Teachers Teaching African History - 1969.
16. Consultant New Brunswick Board of Education. Development of African Materials for use in Grades K-7th. Under contract to New Jersey Urban Schools Development Council. - 1969.
17. Consultant Long Beach Board of Education. Social Science programme and In-service Teacher Training on African Materials - 1969.
18. Consultant Caldwell Board of Education. Caldwell Social Science programme - 1969.

Books Published/Edited
Contributing Author:

1. Akina: EALB. 1978
2. Politics, Economics and Technical Training (with Martin Godfrey), EALB, 1976.
3. Hadith IX: B.A. Ogot (Ed.) (Contributing author) EALB, 1976.
4. La Civilization de la Femme daps la Tradition Atricaïne Societe' Africaïne de Culture, 1975
5. To break the Chains of Oppression, OCPDY (Contributing Consultant), Geneva, WCC, 1975.
6. African Political Thought: A Reader (with S. W. Rohio) HEB, 1975.

7. Kenya Politics: Policy and Society, EALB, 1975.
8. Weusi: Socio-Political Thought in African Literature, Mcmillan, 1974.
9. The Executive in African Governments (with Bereket Sellasie), HEB, 1974.
10. Education, Society and Development: New perspectives from Kenya. D. Ghai and D. Court (eds.), (Contributing author), Nairobi, OJP, 1974.
11. Creating the African University: Emerging Issues in the 1970s. T. N. Yesufu (Contributing author), Ibadan, OJP, 1973.
12. Black Aesthetics: A. Gurr and P. Zirimu (eds.) (Contributing author), Nairobi, EALB, 1973.
13. Report of the Seminar for Members of the Kenya Public service Commission, James Nti, (contributing author) 1975.
14. The Literature of Africa: Joint Editor with Hans Zell, Barbara Abrash and Helen Silver. African Publishing Corporation, New York, 1971. HEB, London, 1971.
15. Topics in Afro-American Studies, edited by Henry J. Richards (contributing author) Black Academy press, Inc. Buffalo, New York, 1971.
16. Messages: An Annotated Bibliography of African Literature for Schools. Montclair State College, New Jersey, 1970.

Articles Published:

1. "Sketches of Pariah and Pervenu". Forum Spring, 1969.
2. "Oshango: Uses of African Literature", Social Studies, Vol. 35, No. 2 February 1970.
3. "Social Change and Pan Africanism", Black World, Vol. 19, No. 10, August 1970.
4. "Women in African Literature", East African Journal, Vol. 8, No. 3, March 1971.
5. "Faenon, Kathue and the Failure of the African Revolution" Black World Vol. 20, No. 7, May 1971.
6. "Kenya Technical Education and change", East African Journal, Vol. 8 August, 1971. and Presence Col. VI, No. 1, 1973.
7. "The Pariah Literati", Trans-Action, Summer, 1971
8. "Zamani: Scholarship and the Uses of the past". Social Studies, Summer 1971.

9. "Chicawa: The Politics of Education and Research Anglophonic African", African Scholar, Summer 1971.
10. "Perceptions of social and political Actors and Processes in African Literature", Journal of the New African and Literature and the Arts, Vol. 9 and 10. 1971.
11. "Notes on a Spastic Montage of an Intellectual Broker". Busara, Vol. 4, No. 1, 1972.
12. "Tools are for people: Toward an Africanized Technology" The Ecumenical Review, Vol. XXIV, No. 3, July, 1972.
13. "Cleavage and the Organizational Bases of politics in Kenya: A Theoretical Framework". Journal of East African Research and Development, Vol. 3, 1, 1973.
14. "Lara July", Busara, Vol. 4 No. 3, and 4, 1972
15. "The political Economy of self-Help Harambee Institute of Technology" Canadian Journal of African Studies, Vol. 8, No. 1, 1974. (with E. M. Godfrey).
16. "Inter-tribal and inter-ethnic Interaction". Journal of Literature and Society, Vol. 1, No. 2, 1973.
18. "Khamsin", Journal of Literature and Society, Vol. 11, No. 2, 1973.
19. "Planning High level Manpower and the African University", Association of African Universities Magazine, 1973
20. "A Note on Soyinka", Joe, September 1973.
21. "Economics, politics and Education: Kenya's Harambee Institutes of Technology", Human Resources Research, Vol. 6 No. 3, February 1975. (with Martin Godfrey).
22. "The Irrational as a System Control", Thought and practice, Vol. 11 No. 1, 1975.
23. "African perceptions of the Idea of Freedom and Revolution". Thought and practice, Vol. 11, No. 2. 1976.
24. "Kitui: The Ecosystem, Integration and Change". African Environment, Occasional paper, Series No. 1976.
25. Individualists go Because They have no Institutionalized Roles. ASA Bulletin, April, 1979.

Editorial Responsibilities:

1. Associate Editor for East Africa, Black Academy Review, Buffalo, New York.
2. Associate Editor for Africa, African Scholar, Washington D.C.

3. Deputy Editor, Journal of East African Research and Development, Nairobi Kenya.

4. Associate Editor, African Review, Dar es Salaam, Tanzania.

Papers Read:

1. Black politics and the Crisis of Democratic practice, Black Coalition of Scotch plains, New Jersey, February 20, 1969.
2. The politics of Black Education, New Jersey, Association of black Educators, Cleveland school, newark, New Jersey, March 11, 1969.
3. Blacks in African literature, seaton Hall, University public Lectures, South Orange, New Jersey, March 19, 1969.
4. African literature and the Black Revolution. Countee Cullen library, Harlem, New York, March 25, 1969.
5. Racism and the politics of protest. Uppsala College Public lectures, Orange, New Jersey, April 28, 1969.
6. The Political Role of the Black Educator, New Jersey State Social Studies Teachers Conference, Trenton, New Jersey, May 16, 1969.
7. Apartheid and Civil liberties in an International Context. U.N. Association of New Jersey Conference, Seaton Hall University, South Orange, New Jersey, May 24, 1969.
8. Teaching African Politics: The Ideological parameter. South African Heritage Studies Association Conference Federal City College, Washington D.C. June, 27 1969.
9. The politics of Studying African politics. Lehman College public Affairs Lecture series, New York, July 8, 1969.
10. Ousman Sembene's Commentary on Sengalese Politics. National Association of black Artists Conference, New York, October 3, 1969.
11. Race as a Factor in International politics. African Studies and Research Centre public Lecture series, Cornell University Ithaca, New York, October 14, 1969.
12. Political Uses of Africana: New Jersey Urban Educational Corps Black History Symposium, Camp Kilmer, Edison, New Jersey, November 3, 1969.
13. Mau Mauing as politics of the Diaspora. Second Annual Conference of African and Afro-American Studies, Atlanta University, Atlanta, Georgia, December 4-6, 1969.

14. Radical Materials in African politics. North Carolina, Greensboro, North Carolina, February 19, 1970.
15. The politics on Education and Research in Anglophonic Africa. American Educational Research Association, Minneapolis, Minnesota, March 2-6, 1970.
16. African and Black Studies: Towards Relevance in Social Studies, African Heritage Studies Association Conference, Washington D.C. May 1-2, 1970.
17. We Calibans: An Evaluation of the Diaspora on Returning, Africana Studies and Research Centre public lecture series, Cornell University, Ithaca, New York, May 16, 1970.
18. The Karani Complex, Technological Education and Society. Proceedings of the East African Academy, Nairobi, Kenya. September 13-15, 1970.
19. Ujadiliano: The Art of Political Commentary in Africa. United Kenya.
20. Women in Rural politics: A Report of the Machakos Pilot study. Political Science workshop, Molo Kenya, February 19, 1971.
21. Rural Women, politics and Development. Institute of Adult Studies Conference on Rural Women and Development, Kikuyu Adults Centre, Kenya, March 3, 1971.
22. The political Development of Kenya and Marginal Groups in politics. Social Work Training programme, Kenya Institute of Administration, Kabete, Kenya March 5, 1971.
23. Rural politics in Kenya: The Organizational Structure. Danish Volunteer programme, Arusha, Tanzania, March 19, 1971.
24. On Improving Rural Welfare: Notes Towards Matapolicy. Conference on improving Rural Welfare. Institute for Development studies, Nairobi, Kenya, May 31-June 3, 1971.
25. Technological change in Rural Development. Danish Volunteer Organization, Tengeru, Tanzania, June 7, 1971.
26. African Politics in Literature, American political Science Association, Chicago, Illinois, September 7-10, 1971.
27. Political Bases and Interpretation of Imaginative literature. Nairobi Workshop and Colloquium on East African literature, Nairobi, Kenya June 20-25, 1971.

28. Politics and Social Change in East Africa, Phelps Stokes Fund Seminar, Nairobi, Kenya, July 26, 1971.
29. Mwethya: The Socio-Historical Basis of Collective Action in Machakos District. The Historical Association of Kenya, Conference, Nairobi, Kenya, August 1971.
30. Rural politics: Impact on planning. Conference on planning Evaluation and Implementation, Nairobi University and York University, Nairobi Kenya, July 15-17, 1971.
31. Literature as politics. Guest Seminar. Centre for Inter-Cultural Documentation, Cuernavaca: Mexico, August 20-September 12, 1971.
32. Women and Harambee: Politics as the Quest for Status: Colloquium on the African Woman, Abidjan, Ivory Coast, December 1971.
33. Towards a National Research Council: Policy and Composition. Workshop on the coordination of production, Dissemination and Utilization of Social Science Research Findings, University of Nairobi, January 20-22, 1972.
34. Science, Technology, Economic Growth and Social Justice: The African perspective: Paper prepared for the West African Conference on Science, Technology and the Future of Man and Society, World Council of Churches, March 24-30, 1972, Legon, Ghana.
35. The politics of land. Paper prepared for ILO/UNDP Kenya Employment Mission, April/May, 1972.
36. Changing Roles of Women and Employment. Paper prepared for ILO/UNDP Kenya Employment Mission, April/May, 1972.
37. Harambee and Employment. Paper prepared for the ILO/UNDP Kenya Employment Mission, April/May, 1972.
38. Equity and Education (with P. Kinyanjui). Paper prepared for the ILO/UNDP Kenya Employment Mission, April/May, 1972.
39. Tourism and Employment. Paper prepared for the ILO/UNDP Kenya Employment Mission, April/May, 1972.
40. The African University: Issues for the Seventies. Paper prepared for the Association of African Universities Conference on the African University in Seventies. Ghana, July, 1972.

41. The political Sociology of the Kenya Bureacracy of EAUSSC. December 19-13, 1972, Nairobi.
42. Machakos: Intraethnic political Evolution. EAUSSC. December 18-23, 1972.
43. Intellectual channels and Alternative Futures, Makerere Golden Jubilee Writers' Workshop. University of Nairobi, December 18-23, 1972.
44. Cleavage and the Organizational Base of Politics in Kenya: A Theoretical Framework, EAUSSC, December 19-23, 1972.
45. The political Economy of self-Help: Kenya Harambee Institute of Technology (with Martin Godfrey), EAUSSC, December 19-23, 1972.
46. Bureacracy and the Developing Nation. Public service Commission seminar Mombasa, November 25-December 5, 1972.
47. Intertribal and Interethnic Interaction in Kenya. NCKC Conference on Race and Society, Limuru, November 1972.
48. Civic Education: Content and System: National Seminar on Adult Education. July 23-25, 1973.
49. Politics and Social change: The Recent East African Parameters. Presbyterian church of East African Committee for the Training of the Ministry. St. Paul's College, Limuru, July 30-31, 1973.
50. The Myth of Kericho: SRDP as an Experimental Approach AASA/OLC Development from Below Seminar/Field Trip Addis Ababa, October 12-20, 1973.
51. Political Trends in East Africa Since Independence. A Comparative study. University of Wisconsin Extension Seminar, Nairobi, August 8, 1973.
52. The Political Economy as a Constraint to Equitable Distribution. IDS Nairobi/IDS Sussex Seminar on strategies for increasing productive Employment in African Countries. October-December, 1973.
53. The Myth of Kericho: Was SRDP Experimental? IDS Nairobi IDS Sussex Seminar on Strategies for Increasing productive employment in African Countries. October-December, 1974.
54. Education for Black Civilization. Society of the African Culture Seminar Black Civilization. Paris, July, 1973.
55. Food, population and Rural Development in Kenya: Progress, policies, problems and prospects. IAAE/UNFPA FAO Seminar on the Inter-relationship between

population, Food and Agricultural Development, Rome, December, 1975.

56. Ecology and Society: The Role of the Ecodevelopment approach, HAK, Nairobi, August 1975.
57. The Black Hermit. An Interpretation. Paper for a High School reader, January, 1975.
58. Some sins of Omission in Kenya Urban Writing. Exhibit chapter, Lagos Black Arts Festival, March 1975.
59. Alternative in planning Arid Zones. Centre for International studies, M.I.T. Cambridge, March 11, 1975.
60. Development Alternatives in Arid Areas. PASTAM Midwest University Consortium for international Activities. Inc. Indiana University, November 17, 1976.
61. Development Research Theory and Methodologies: The Kenyan case. Centre for Social Science Research, Howard University December 7, 1975.
62. The Case against detente: AACC Consultation on Liberation, Justice and reconciliation, March 1976.
63. Kitui: The Ecosystem, Intergration and change. IDEP/UNEP Sida Seminar on Environment and poorly Intergrated Societies in Africa. Mauritius, April 2-20, 1976.
64. African perceptions of the idea of Freedom and revolution. African regional American studies Conference. University of Lagos, March 31-April 3, 1976.
65. Educational Harambee: National committee on educational objectives and policies, May 1976.
66. Technical training and Harambee Institute of Technology: National Committee on educational objectives and policies, May 1976.
67. Kenya's codified Ideology. National committee on Educational objectives and policies, May 1976.
68. Creation of the Kitui Asomi. IDS Working paper no. 304, October 1977.
69. Kitui Livestock. IDS working paper No.305, October 1977.
70. Kitui Trade. IDS Working paper No. 306, October 1977.
71. Kanduti: A Case study. IDS Working paper No.307, October, 1977.

FRANCIS JOHN GICHAGA

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Date of Birth:

8th December, 1942.

Marital Status:

Married.

Academic and Professional Qualifications:

B.Sc. Civil Engineering. University College
of Nairobi. 1968.

M.Sc. University of Nairobi. 1971.

Ph.D. University of Nairobi. 1980.

Fellow, Institution of Engineers of Kenya (FIEK)
Member, Institution of Civil Engineers (M.I.C.E.)
(U.K.)

Registered Engineer (Kenya).
Chartered Engineer (U.K.)

Administrative
Experience:

1. Graduate Engineer with Nairobi City Council,
City Engineers Department. 1968.
2. Assistant Engineer, Principal Assistant Engineer,
and acted as Chief Assistant Engineer in Assistant
City Engineer, (was involved in transportation
planning, design of roads, design of services to
housing estates and supervision of the same.
Supervised labour force of about 2500) 1971-1974.
3. Chairman, Department of Civil Engineering.
University of Nairobi.

Teaching Experience:

1. Demonstrator. Highway Laboratory classes and
Engineering Drawing classes. University of
Nairobi. 1968-71.
2. Part time Lecturer. Transportation and Highway
Engineering courses, University of Nairobi.
1973-74.
3. Senior Lecturer and Associate Professor University
of Nairobi. 1974 to date.

...../2

Consultancies:

1. Consultant: Ministry of Education Mombasa Polytechnic. Laboratory and Workshop design. 1976-1981.
2. Consultant: Ministry of Water Development. Management/Organisational study of the Ministry of Water Development. 1978.
3. Consultant: Ministry of Education. Evaluation of Kenya Technical Teachers College. 1979.
4. Consultant: Ministry of Water Development. Layout designs and Equipment requirements for laboratories and workshops at the National Water Institute - Kajiado. 1981 to date.
5. Consultant: UNESCO mission to Ethiopia, Tanzania, Zimbabwe, Zambia to seek support for the World Federation of Engineering Organisations. 1982.

Research Experience:

1. Long-term study of the elastic response and structural behaviour of flexible road pavements in Kenya.
Laboratory tests have involved tests on subgrade materials, subbase and road base construction materials, surfacing materials especially bituminous materials. Field tests have involved measurements of pavement bearing capacity in situ by dynamic cone penetrometer and clegg impact hammer, pavement deflections, deflection basins and radius of curvature and condition survey of full-scale pavements; classification and axle weighing of vehicles; measurement of bearing capacity of crushed stone-base using plate bearing test. Theoretical work has been in form of structural techniques (e.g. Finite element technique) with help of Computer. 1968 - date.
2. Urban Transport Study for Nairobi - was involved in data collection and analysis (including recommendations) on Public Transport in Nairobi. 1971. Work formed part of the Nairobi Metropolitan Growth Strategy (1973) of the Nairobi Urban Study Group.
3. Highway maintenance in Nairobi 1972.

Publications: (since 1982)

1. Evaluation of flexible Road Pavements in Kenya, International Conference on Criteria for Planning Highway Investment in Developing Countries. Institution of Civil Engineers. London 17-18 May 1982.
2. Strength of flexible Road Pavements in Kenya. International Symposium on Bearing Capacity of Roads and airfields. Trondheim, Norway, 23-25 June 1982.

3. Study of Structural Behaviour of Flexible Road Pavements with thin bituminous surfacings in Kenya. Kenya Journal of Science and Technology. Series A. Vol.2, 1981 pp. 105 - 115 Nairobi.
4. Distress Features of Flexible Road Pavements in Kenya. International Seminar on Maintenance and Drainage Aspects of Road Pavements. Indian Road Congress Bangalore. 1-4 July 1982.
5. Behaviour of Flexible Road Pavements under tropical climate. 5th International Conference on Structural Design of Asphalt Pavements. Arhem. Netherlands. 23-26 August 1982.
6. Laboratory study of Deformation modulus/time relationship for various subgrade soils under Road Pavement structure. Kenya Journal of Science and Technology. Series A. Vol.3 No.2 1983. Nairobi.
7. Urban Transportation in Kenya. Highway Engineering Course TRRL/MOTC/UON 8-19 November 1982. Nairobi.
8. Pavement Design in Kenya. Highway Engineering Course. TRRL/MOTC/UON. 8-19 November, 1982.
9. Storm Water Drainage Design. Highway Engineering Course. TRRL/MOTC/UON. 8-19 November 1982.
10. Maintenance of Roads in Kenya. Highway Engineering Course. TRRL/MOTC/UON 8 - 19 November 1982.
11. Transportation for Low income people in Nairobi, Mombasa and Kisumu. IULA Large Cities Forum. Nairobi November 1982 (Jointly with O.O. Mbeche).

STEPHEN DADZIE

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Date of Birth:

20th September 1940

Marital Status:

Married. Three children.

Education:

1. Ghana National College, Cape Coast, Ghana: 1955-1959
2. Master of Science Fisheries Biology - University of Leningrad. 1966.
3. Diploma in Fish Culture: Fish Culture and Fishery Management. Israel Ministry of Agriculture. 1969.
4. Doctor of Philosophy. Fisheries Biology. University of Stirling, U.K. 1970.

Teaching Experience:

1. Senior Lecturer in Fishery Biology. Zoology Department. University of Nairobi, 1982 - date.
2. Senior Lecturer. Fishery Biology. Zoology Department. University of Nairobi. Kenya. 1976-79.
3. Lecturer. Fishery Biology. Zoology Department. University of Nairobi, 1972-76.
4. Fishery Research Officer Institute of Aquatic Biology, Council for Scientific and Industrial Research, Accra, Ghana. 1970-72.

Subjects Taught:

1. Vertebrate Zoology
2. Mammalian Physiology
3. Comparative Endocrinology
4. Seed Production and Cage culture
5. Ichthyology
6. Fishery Biology
7. Hydro biology-Fresh water/marine.

- Administrative Experience:
1. Head of Research Team - FAO/Africa Regional Aquaculture Training and Research Center Port Harcourt Nigeria 1979-1981.
 2. Fishery Research Officer. Institute of Aquatic Biology. Council for Scientific and Industrial Research. Accra. Ghana. 1970-72.

Consultancies:

Consultancy and advisory services to:

1. Kenya Marine and Fisheries Research Institute.
2. Department of Fisheries, Ministry of Tourism and Wildlife.
3. Designed the Fisheries component of the Institute of Fisheries and Wildlife in Naivasha, Kenya.
4. Member of the Kenya delegation to the Intergovernmental Oceanography Commission of UNESCO.

Publications:

1. The effects of certain ecological factors on growth and sexual maturation in Tilapia (Pisces: Cichlidae). M.Sc. Thesis. University of Leningrad. (1966).
2. The structure of the chorion of the egg of the mouthbrooding cichlid fish, Tilapia mossambica. J. Zool, London (1968). 154, 161 - 163.
3. Spermatogenesis and the stages of maturation in the male cichlid fish, Tilapia mossambica. J. Zool., London (1969) 159, 399 - 403.
4. Preliminary report on induced spawning of Tilapia aurea Bamidgeh, Bull Fish Cult. Israel (1970a). 22: 9 - 13.
5. Laboratory experiment on the fecundity and frequency of spawning in Tilapia aurea. Bamidgeh, Bull Fish Cult, Israel. (1970b). 22:14
6. Growth, maturation and pituitary activity in Tilapia species. Ph.D. Thesis, University Stirling. (1970).
7. Inhibition of pituitary gonadotrophic activity in cichlid fishes of genus Tilapia by a dithiocarbamoylhydrazine derivative (I.C.I. 33, 828). Ghana, J. Sci. (1972). 12: 41 - 53.
8. Effects of exogenous hormones on the pituitary gonadotrophic activity in Tilapia previously treated with a dithiocarbamoylhydrazine derivative (I.C.I. 33, 828). Ghana, J. Sci. (1973). 13: 20 34.

9. Methallibure studies in Tilapia: Effect of Tilapia Pituitary Homogenate, Human Chorionic Gonadotrophin and Testosterone Propionate on the testes of methallibure treated Tilapia nigra. Gen. Comp. Endocrinol. (1974). 23: 245 - 255.
10. Oogenesis and the stages of maturation in the female cichlid fish, Tilapia mossambica. Ghana, J. Sci. (1974).
11. A preliminary report on the use of Methallibure in Tilapia Culture. Afri. J. Trop. Hydrobiol. Fish. (1975). 4: 127 140.
12. Compensatory Hypertrophy of the remaining ovary and the effect of Methallibure in the unilaterally ovariectomized Tilapia aurea. Gen. Comp. Endocrinol. (1976). 79: 433 - 440.
13. A preliminary report on the fishery resource in the development and management of fisheries in the Kamburu Lake. Report on trans-disciplinary ecological study of the Kamburu/Gitaru hydro-electric dam area on the Tana River Basin. Edited by R.S. Odingo. (1975).
14. Predator-prey relationships in Tilapia Culture. FAO/CIFA Symposium on River and Foodplain Fisheries, Bujumbura, 1977.
15. Aquatic ecology and fisheries. In "African Dam: Ecological Survey of the Kamburu/Gitary hydro-electric dam area, Kenya". (R.S. Odingo, ed), Ecol. Bull. (Stockholm (1979) 29, 65 - 84.
16. Species combination in Tilapia culture. (1980). Aquaculture, 27: 295 - 299.
17. Recent changes in the fishery of a new tropical man-made lake, Lake Kamburu (Kenya) J. Fish-Biol. (1980) 16, 361 - 367.
18. Reproductive biology, length-weight relationship and relative condition of pond-raised Tilapia Zilli (Gervais) J. Fish Biol. (1980) 17, 243 - 253.
19. Methallibure studies in Tilapia: Effects of Luteinizing Hormone - Releasing Hormone on the ovaries of methallibure - treated Tilapia Zillii. Gen. Comp. Endocrinol. (In Press).
20. The effects of low temperatures on growth and maturation in Tilapia mossambica. Ghana J. Sci. (In Press).
21. Controlled breeding techniques and fry production in the brackishwater cichlid Tilapia guineensis (T. melanopleura). (In Press).

M.S. MUKRAS

Address:

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Date of Birth:

14th June 1941

Place of Birth:

Nairobi, Kenya.

Marital Status:

Married. Two children.

Education:

B.A. Economics - University of East Africa,
Dar-es-Salaam, Tanzania 1969.

B. Phil. Economics - University of East Africa,
Nairobi, Kenya - 1970.

M.A. Economics - University of Toronto, Toronto,
Canada 1971.

Ph.D. Economics - University of Toronto, Toronto,
Canada, 1976.

Teaching Experience:

Lecturer - Department of Economics - University
of Nairobi. 1977 - 1982.

Senior Lecturer. Department of Economics.
University of Nairobi. 1982 to date.

Subjects Taught:

Mathematics for Economists.

Publications:

1. Comparative Regional Distribution of Educational Facilities in Kenya Paper presented at Kenya Economic Association Conference in 1977.
2. Regional Distribution of Resources in Kenya. Paper presented at a Symposium on "The Kenya We Want" at University of Nairobi, 1978.
3. "An Input-Output Model for Secondary School Examination Performance". Journal of Eastern Africa Research and Development 1979.
4. Some Aspects of Determinants of Fertility Report of Research on Determinants of Fertility submitted to Ministry of Health, 1979.
5. "An Economic Appraisal of the Minority" Nubian Muslim Community in Kenya" Journal of Institute of Minority Muslims, 1982.

- 2 -

6. "Resource Mobilization and the Household Economy" Journal of African Sociology
(Next Issue).

EDWARD K. MBURUGU

Address:

Department of Sociology
University of Nairobi
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NAIROBI

Date of Birth:

May 22, 1945; Meru, Kenya

Marital Status:

Married. Two children

Education:

Ph.D. University of Wisconsin, Madison U.S.A.
1978

Area of Speciality: Demography and Ecology.

Thesis Topic: "Structural Modernization and
Fertility Change in Africa. The case of Zambia."

M.Sc. University of Wisconsin, Madison (U.S.A.)
1974.

Thesis Topic: "Age at Marriage and Fertility
in the United States".

B.A. University of Nairobi Department of
Sociology.

Thesis Topic: Attitudes Towards Family Size
in Rural Areas of Meru District.

Teaching Experience:

1. Lecturer. Department of Sociology,
University of Nairobi, 1978 to date.
2. Tutor. Department of Sociology, University
of Nairobi. 1972 - 1974.

Courses Taught:

1. Formal Organisations
2. Demography and Population
3. Studies of Developing Countries
4. Urban Social Structures
5. Methods of Social Investigations.

Administrative
Experience:

Research Assistant, Institute for Development
Studies, University of Nairobi, 1972.

Consultancies:

1. Consultant: FAO/Population and Research
Institute Workshop. "Rural Development".
1980.
2. Consultant: Agricultural Consultants of
M.c. Gowan Property Ltd. GoK / Australian
Government. "Baseline Survey of Magarini
Land Settlement Scheme". 1980.

3. Consultant: USAI/GoK - Ministry of Health.,
"Field Report on Existing Community Based Health. Projects and Potential of Communities in Machakos and Kitui Districts to support such Projects". 1981.
4. Consultant: UNESCO Integrated Project in Arid Lands (IPAL), UNESCO Programme on Man and the Biosphere (MAB). "Land use Practices, Population Movements and Perceptions of Changes in the Environment among the Rendille in Marsabit District". 1982.
5. Consultant: USAID/Coordination in Development Ltd/Catholic Church.
"Final Evaluation of the Kitui Primary Health Care Project". 1982.
6. Consultant: UNESCO. Factors Related to Stock Ownership and Population Movement and Perceptions on land Pressure and other Environmental Changes among the Rendille in Marsabit District. IPAL Technical Report, No. F-2; 1983
7. Consultant: ADEC/Energy Development International/GoK - 1983.
"An Evaluation of the Agro-Forestry Development in Kenya".

Publications:

1. "Adoption of Farm Innovations in Special Rural Development Programmes (SRDP)". I.D.S. 1972.
2. "Rural Leadership Patterns and Community Action Styles" I.D.S. 1972.
3. "Problems of Adoption of Family Planning in Kenya I.D.S. 1972.
4. "Population Change and Prospects of Fertility Control in Africa". 1973.
5. "Process of Urbanization and Squatter Settlements in Zambia Urban Areas", African Studies Center, University of Wisconsin, Madison, 1972.
6. "Age and Educational Selectivity of Migrants by size of Rural Urban Centres in Wisconsin" Madison. 1973.
7. "Age at Marriage and completed Family Size", Journal of Social Biology, Vol.24, No.1, pp. 31-37 (with L. Bumpass), 1977.

8. "Factors related to Ethnic Identification in African Urban Setting: The case of Nairobi". Paper No. 32. Department of Sociology. University of Nairobi. 1979.
9. "Introduction to Population Dynamics" (with R. Henin).

Population and Agricultural/Rural Planning

Proceedings of the FAO/UNFPA/PSEJ Workshop,
1980.

DAVID KIMENYE

Address: University of Nairobi
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Date of Birth: 2nd June, 1944

Marital Status: Married. One child.

Education: B.Sc. Agriculture. Makerere College (UEA) 1980.
M.Sc. Animal Breeding. University of Nairobi 1973.
Post Graduate Diploma, Animal Breeding. Institute of Animal Genetics. University of Edinburgh - 1973.
Ph.D. Animal Production. University of Nairobi, 1978.

Teaching Experience: 1. Assistant Lecturer. Department of Animal Production. University of Nairobi. 1974.
2. Lecturer. Department of Animal Production. University of Nairobi. 1975 - 1982.
3. Senior Lecturer. Department of Animal Production. University of Nairobi. 1982 to date.

Subjects Taught: 1. Animal Breeding and Genetics - Undergraduate & graduate.

Administrative Experience: 1. Agriculture Officer - GoK. 1970 - 1974.

Consultancies: 1. Genetic and non-genetic influence on cattle milk yields. Institute of Animal genetics and Breeding. The Agricultural University of Norway, As. 1977.
2. Report of the National Council for Science and Technology. (Ed. S.W. Muri) Animal Production at the Coast of Kenya. 1980.
3. Animal Production Extension to small scale Farmers. Ministry of Livestock Development. 1981.

Publications

Theses:

1. Comparison of Ayrshire and Sahiwal crossbred cows with high grade Ayrshire on Kilifi farm Coast Province of Kenya. M.Sc. Thesis, University of Nairobi 1973.
2. A genetic study of the Kenya Sahiwal cattle Ph.D. Thesis, University of Nairobi 1978.

Symposium/Conference Papers

1. Kimenye, D. (1975). The choice of dairy breeds for the different environments of Kenya.
Proceedings of the Animal Production Society of Kenya 1975. 8: 8-10. Animal Breed. Abstr. 44: 3551.
2. Kimenye, D. and Mwandotto, B. (1979). Genetic aspects of increasing milk production in Kenya.
Paper presented to the Animal Production Society of Kenya 7th December, 1979, ILRAD, Nairobi.
3. Richards, C.I., Carles, A.B. and Kimenye, D. (1976). Should agriculture and veterinary students have a common course in Animal Production?
Paper presented to the 7th Annual East African Animal Science Teachers Conference, University of Nairobi June, 1976.

1. Kimenye, D. Crossbreeding between Sahiwal and European Breeds in Kenya.
Paper presented at the 19th International Dairy Congress Karnal, India 2-6 December 1974.
2. Kimenye, D. Review of breeding programmes in East Africa.
Paper presented to the F.A.O. Expert Consultation on Dairy Cattle Breeding in the Humid Tropics. 12-17 February 1979, Hissar - India.
3. Kimenye, D. Breeding programmes and livestock production systems in Kenya.
Paper presented at the first committee on Animal Genetics Resources and Conservation for the Region of Africa 13-15 April 1981 Nairobi - Kenya.

Published Papers.

1. Kimenye, D. and Russell, W.S. (1975), Comparison of Ayrshire and Sahiwal cows with high grade Ayrshire in Kenya.
E. Afric. Agric. For. J. 40: 416-421.
2. Kimenye, D. (1978). Relative influence of age and body weight at first calving on milk production of Kenya Sahiwal cattle.
African Journal of Agricultural Sciences 5: 29-33.
3. Kimenye, D. (1978). Milk production of Ayrshire and its crossbred with Sahiwal at Machakos and Ngong Veterinary farms, Kenya.
Anim. Breed. Abstr. 47: 5935.
4. Kimenye, D. (1979). Influence of calving periods on Kenya Sahiwal milk yields.
Egerton College Agric. Bull. 3: 44-46.
5. Kimenye, D. (1979). Milk production of Friesian and Boran heifers in Kenya.
Egerton College Agric. Bull. 3: 44-46.

6. Kimenye, D. (1980). Genetic improvement of Sahiwal milk yields
Kenya Journal of Science and Technology Series B. 1: 47-44.
7. Kimenye, D. (1980). Influence of age on Kenya Sahiwal milk yields.
Kenya Journal of Science and Technology Series B. 1: 67-70.
8. Kimenye, D. (1981). Production traits of Kenya Sahiwal cattle.
Bulletin of Animal Health and Production in Africa.
29(2): 121 - 124.
9. Kimenye, D. (1980). Influence of seasons on milk yields of Tropical
cattle.
Egerton College Bulletin 5: 20-25.

JOSHUA AKONGA

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Date of Birth:

25th April, 1949. Kakamega, Kenya.

Education:

B.A. Sociology - University of Nairobi. 1975.

Ph.D. Anthropology - University of California.
San Diego. 1979.

Teaching Experience:

1. Teaching Assistant. Department of Anthropology
University of California. San Diego. 1976-79.
2. Lecturer, Department of Sociology, University
of Nairobi. 1979 - 1983.

Subjects Taught:

1. Anthropology.

Research Experience:

1. Self-help projects. A survey carried out
for Prof. P.M. Mbithi and Rasmuson.
1974-75.
2. Adoption of small scale business practices in
Kakamega District. Research for B.A. Hons.
Thesis 1974-75.
3. Research assistant in a cross-cultural
study of the nuclear family: The Swahili
of Mombasa. 1975 - 1976.
4. Research assistant in a cross-cultural study
of the nuclear family: The upper middle
class of La Jolla, San Diego, U.S.A. 1976-1977.
5. Drought, Population dynamics and public
policy: A socio-economic study of Kitui
District. 1980-1982.

Consultancies:

Ministry of Economic Planning and Development/
University of Nairobi. Cultural Profiles of
Busia District. 1982.

Publications:

1. "Traditional processes of social control
among the Kitui Kamba" African Journal of
Sociology Vol. 11 No. 1, May 1982.
2. "Persistence and continuity in traditional
pastoralism in Kitui District, Kenya." Afri-
can Journal of Sociology, Vol. 11 No. 2
November, 1982.

3. "Report of the study committee on United States International University-Nairobi-Campus. 1982.
4. Adoption of small scale business practices in Kakamega District. Thesis presented at the Department of Sociology, University of Nairobi in partial fulfilment of B.A. Hons degree". 1975.
5. Social training: perspectives on obedience and autonomy in boys among the Swahili of Mombasa and the Upper middle class of La Jolla, California." Ph.D thesis presented at the Department of Anthropology, University of California, San Diego. 1979.
6. "Mobilization of local resources". A paper presented at the In-service course of Child Welfare Society of Kenya, at the Kenya Science Teachers' College Nairobi on August 2, 1979.
7. "Traditional and Modern Kinship Systems and Authority structures in African societies."
A paper presented at the Inter-regional Seminar of UNICEF at the Flying Doctor Service Headquarters in Nairobi, on August 7, 1979.
8. "Social training: The Swahili of Old Town Mombasa". Paper No. 132, Institute of African Studies, University of Nairobi. 1980.
9. "Institution of Marriage". A paper presented at the Marriage Counselling Course held at Brackenhurst, Limuru on April 11, 1980. The course was sponsored by the National Christian Council of Kenya. 1980.
10. "Prostitution and its effects on society". Paper presented at the University of Nairobi extra-mural workshop at Kajiado, Kenya, on May 28, 1980.
11. "The African family structure". Paper presented at the orientation seminar for TUI-tourist guides at the Hotel Oceanic, Mombasa, on November 16, 1980.
12. "Famine, population pressure and the search for water in Kanziko location of Kitui District." Paper No. 150, Institute of African Studies University of Nairobi, March 10, 1981.

13. "The role of the man in the family." Paper presented at the National Christian Council of Kenya sponsored marriage Counselling course at Limuru, near Nairobi on May 11, 1981.
14. "Famine, famine relief and public policy in Kitui district." Institute of Development Studies, Working paper No. 388 February, 1982.
15. "The rural world". Paper presented at the International Seminar on Rural Scouting-Africa Region-for English speaking countries, at the Kenya Science Teachers' College, Nairobi, Kenya, on May 15, 1983.

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Date of Birth:

28th March 1947. Machakos.

Marital Status:

Married, Four children.

Educational Experience:

B.A. Department of Sociology,
University of Nairobi. 1972.

Thesis Topic: "Socio-Economic Characteristics
and Educational Aspirations of Harambee Secondary
School Students in Machakos District".

M.A. Department of Sociology, University of
Nairobi, 1974.

Thesis Topic: "The effects of Extension
Workers Role Orientation on Rural Development
in Kenya".

M.A. Department of Communications, Stanford
University. 1978.

Thesis Topic: "The Impact of Communication
Channels Among Small and Large Farmers in
Eastern Nigeria".

Ph.D. Department of Communications, Stanford
University. 1981.

Thesis Topic: "Socio-economic and Communication
Factors Influencing the Diffusion of Solar
Energy Equipment among California Homeowners."

Teaching Experience: 1. Teaching Assistant, Department of Communications,
Stanford University, 1979.

2. Lecturer. School of Journalism, University
of Nairobi. 1982 to date.

Research Experience: 1. Research Fellow. Institute for Developing
Studies, University of Nairobi, 1981.
2. Research Assistant, Department of Sociology,
University of Nairobi. 1973.
3. Research Assistant, Department of Government,
University of Nairobi. 1971.

Subjects Taught:

1. Communication and Development.
2. Research Methods in Communication.

Consultancies:

1. Consultant. UNESCO/Friedrich-Ebert - Stiftung., Mass Media Information Flow Between Kenya and West Germany. 1983.
2. Consultant. UNESCO. Survey of Rural Newspapers in Kenya. 1983.
3. Consultant. W.H.O. Socio-cultural Aspects of Leprosy in Kenya. 1983.
4. Consultant. Swiss Government/I.D.S. Study of Tourism in Kenya. 1982.
5. Consultant. Ministry of Culture and Social Services. Conditions of the Disabled in Kenya. 1982.
6. Consultant. Institute of Cultural Affairs. Evaluation of Health and Agricultural Changes in Kenya. 1982.
7. Consultant. World Bank. Social Cultural Influence on Human Development. 1980.
8. Consultant. UNESCO/I.D.S. Communication Strategies for Family Planning. 1980.

Publications:

1. "Social Cultural Influencies on Human Development" Chapter in Implimenting Programs for Human Development. IBRD Staff Working Paper No. 403, 1980.
2. "Planning for Effective Rural Communication and Development in Kenya." Institute for Communications Research. Stanford University. 1978.

JOSEPH PETER MBUVI

- Address: Department of Soil Science
University of Nairobi
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NAIROBI
- Date of Birth: 12th March, 1944, Machakos
- Education: M.Sc. 1970. Thesis Topic. The effect of varying degree of erosion on available plant nutrients from different soil types.
Ph.D. Thesis Topic. Comparing the erodibility of various soil types. 1972.
- Teaching Experience: Lecturer - Department of Soil Science -
University of Nairobi. 1980 to date.
- Administrative Experience: Ministry of Agriculture, Kenya Soil Survey,
1973 - 1980.
- Consultancies:
1. Consultant GoK. General development plan for the Kerio Valley Basin 1980.
 2. Consultant GoK. Kiambere hydro electric power project pre-construction environmental study. (Under preparation).
 3. Consultant GoK. Kerio Valley Catchment Conservation and rehabilitation. (under preparation).
- Publications:
1. W.G. Sombroek, J.P. Mbuvi and H.W. Okwaro, December 1973.
A preliminary evaluation of the irrigation suitability of lands in the pre-delta Tana Flood Plain (for use by TRDA for Horticultural crops).
 2. W.G. Sombroek, J.P. Mbuvi, J.M. Kibe and H.W. Okwaro. March, 1974. A preliminary evaluation of the irrigation suitability of the lands in the middle lower Tana Valley (for use by GOK and TRDA for various irrigated crops).
 3. J.P. Mbuvi, R.F. van de Weg and H.M.H. Braun July, 1974. A preliminary evaluation of the soils of New Machakos District (for African Medical Research Centre for growing of various crops).
 4. J.J. Vleeshouwer and J.P. Mbuvi, September 1974.
A preliminary evaluation of the irrigation suitability of the soils and the waters of Katilo Irrigation Scheme (Turkana District) for NCKK and GoK for growing various crops.
 5. J.P. Mbuvi and R.F. Van de Weg. December 1974
Preliminary evaluation of soils around Nyangoma Missions, Bondo Division for Nyangoma Catholic Church.

6. W.G. Sombroek, J.P. Mbuvi and R.A. Leyder, June 1975.
Preliminary evaluation of soil conditions on the East Bank of Lower Tana Bura East Area for large scale irrigation development (for TRDA cotton and sugarcane development).
7. J.P. Mbuvi and R.G. van de Weg. June 1975.
Some preliminary notes on the soils of Katumani, Kampi Ya Mawe, Embu and Murinduko Agricultural Research Stations.
8. J.P. Mbuvi, Oct. 1975.
A preliminary evaluation on the suitability of the area Busia District for sugarcane development (for GoK).
9. S.M. Wokabi, W.G. Sombroek and J.P. Mbuvi.
November 1975. Evaluation of Tana Delta soils for large scale irrigation development (for TRDA Horticulture crops).
10. R.G. van de Weg and J.P. Mbuvi, 1975.
Soils of Kindaruma area (for GoK).
11. W.G. Sombroek, J.P. Mbuvi and H.W. Okwaro
1975. Soils of the semi-arid Savanna zone of the North Eastern Kenya. (Paper for the ISSS - Government of Ghana Conference on African Savanna soils, Accra).
12. J.P. Mbuvi, and E.B. Njeru. March 1977.,
Soil resources of the Melili area (Narok District), a preliminary assessment of wheat growing possibilities (for GoK and World Bank).
13. H.R. Sketchley; J.P. Mbuvi; F.M. Scilley and S.M. Wokabi. 1978.
Reconnaissance soil survey of portions of the Machakos-Kitui-Embu area. (USAID/GoK Project).
14. J.P. Mbuvi, S.M. Wokabi, F.M. Schilley and H.R. Sketchley
1978. Reconnaissance soil survey of Baringo-Kerio Valley AREA (USAID/GoK Project).
15. S.M. Wokabi and J.P. Mbuvi (1983).
Soils of Tharaka area - (Kitui, Embu, Meru).
16. J.P. Mbuvi and F.N. Muchena
Classification and Management of Andisols (for inclusion in soil Taxonomy. U.S.D.A.) in preparation.
17. Properties of some soils of the Central Part of Narok District of Kenya. (submitted for publication, Geoderma).
18. The influence of Geology and Geomorphology on the soils of Central and Northern parts of Kitui District (in preparation).

Field Work:

1. Participated in the field work for Kapenguria soil survey, 1973-74.
2. Participated in field work for Kwale soil survey 1975-76.
3. Participated and supervised the field work for Malka Dalla Irrigation Scheme, August-October, 1976. (GoK Project).
4. Participated and supervised the field work for Wema and Hewani Irrigation Scheme, December 1976 - March 1977.

WILDLIFE CONSERVATION AND MANAGEMENT DEPARTMENT
TOURISM DEVELOPMENT
TERMS OF REFERENCE
NORTH COAST/TANA ZONE SPECIAL STUDY

1. INTRODUCTION:

The Wildlife Conservation and Management Department has identified 6 major tourism circuit zones each incorporating key tourism attractions and wildlife areas. These are:-

1. Southern Circuit
2. Central Circuit
3. Coastal/Marine Circuit
4. Western Circuit
5. Northern Circuit
6. North Coast/Tana Zone.

These areas are unique and different from one another. Some of the zones have been developed and well exposed to tourism and yet there are some of them which have not been well understood in terms of their resources and potentials as tourists attractions.

North Coast/Tana Zone is one such undeveloped tourism circuit area which include Arawale, Rahole and Boni National Reserves in Garissa District; Dodori and Kiunga Marine National Reserves in Lamu District and Tana River Primate and Kora National Reserves in Tana River District.

2. PURPOSE OF STUDY:

Wildlife Conservation and Management Department is interested in the future of North Coast/Tana Zone and especially what potentials it has to be developed as a major tourist destination in light of its wildlife, marine and tourist resources. The Wildlife Conservation and Management is therefore requesting proposals for a study which would provide an inventory of wildlife, marine and tourist resources in this zone and what kind of development input is necessary to develop this area as a tourist attraction. The study should be able to link this area with the already existing tourist circuits particularly Southern and Central circuits.

3. STUDY AREA:

The area under study includes Arawale National Reserve, Boni National Reserve, Dodori National Reserve, Kiunga Marine National Reserve and their immediate environs as indicated in their border plans, taking into account the Tana River basin as a whole and Lower Tana in particular. To the south of this region the Tsavos and the north the Meru Park and the mountain region of the Central zone.

4. SCOPE OF WORK:

The consultant will gather and analyse past and present information and describe future proposals presently being considered, by consultation with various government and international agencies which are interested in the area. The end result should outline the scenic, wildlife, marine and tourist resources in the area and propose a number of development strategies for the zone which link it with the existing tourist circuits and should examine the following aspects. Aspects of cultural diversity must also be highlighted as an attraction in its own right.

- (a) Identify local tourist attraction and features including traditions and culture.
- (b) Identify constraints to future development.
- (c) Selection of suitable sites for lodges/tourism infrastructure.
- (d) Develop lists of programmes/facilities/activities at destination points.
- (e) Inventory and distribution of ungulate wildlife species.
- (f) Identification of transportation circuits and sub-circuits.
- (g) Identification of Local modes of transportation and other traditional activities which would be considered as exotic by tourists e.g. the use of camels and traditional canoes.
- (h) Identification of how tourist circuits could be linked and intergrated to maximise marketing of Kenya as a tourist destination in general and North Coast/Tana Zone in particular.
- (i) Initial costing and feasibility analysis of preliminary development options/concepts.
- (j) The cost of Wildlife Conservation development strategy for tourism as opposed to other economic activities of the region.
- (k) Identification of developmental role of government versus the private sector and local authorities.
- (l) Study and recommend methods of sharing and distribution of development cost/revenue accruing from common services to government and respective local authorities as well as the private sector.

5. ADMINISTRATION OF THE STUDY:

- (a) The work ideally, should be undertaken by an interdisciplinary team which must include an economist, ecologist, marine biologist, a resource planner, a transportation planner, and access to a quantity surveyor.
- (b) An upper limit of Kenya Shillings 250,000/= is budgeted for the study.
- (c) The final report must be presented not later than three (3) months after the signing of the contract.
- (d) All personnel to be involved in the study must be listed in the study proposal with pertinent professional information and each of them must be prepared to discuss issues with the Steering Committee.
- (e) All personnel involved in the study will have to be available to the contractor during times of work review.
- (f) Proposals must stipulate the methods to be used in carrying out the required work.
- (g) Specific tasks and time estimates (men-days) will be required for all personnel involved in the study.
- (h) Proposals must include budget estimate with a clear delineation between fees and expenses including possible sub-contracting.
- (i) At least one progress report will be required and a presentation before steering committee of the final study results. Other meetings may be held at the request of the successful consultant or the contractor or by the steering committee.
- (j) The consultant will be required to submit ten copies of the final report plus one clear original copy suitable for reproduction.
- (k) Proposals must be received by the Wildlife Conservation and Management Department not later than 10.00 a.m. on 15/8/83.
- (l) The study will be administered by a steering committee to be chaired by the Assistant Director in charge of Wildlife Planning Unit of the Wildlife Conservation and Management Department or any other appointee of Director who will be appointed in writing.
