ANNEX 3 WATER QUALITY SURVEY

Annex 3 Water Quality Survey

1. Objectives of the Water Quality Survey

The objectives of the water quality survey (WQS) were to examine existing conditions of water quality and to provide fundamental informations for both, establishing environmental management plan and facilities' design criteria in Kenya.

2. Execustion of the Services

2.1. Study Points

The survey covered cities, national parks and reserves, forest reserves, lakes, rivers, beaches and local people's house in the following locations:

1. Nairobi City	2. Nakuru City	3. Embu City
4. Naivasha City	5. Aberdare N.P.	6. Mt.Kenya N.P.
7. Kericho Town	8. Kisumu City	9. Kisii City
10. Homa Bay Town	11. Kakamega N.R.	12. Mt.Elgon N.P.
13. Lake Bogoria N.R.	14. Lake Baringo	15. Mombasa City
16. Malindi City	17. Lamu Island	18. Garsen Town
19. Shimba Hills N.R.	20. Garissa Town	21. Kailembwa Village
22. Mzima Springs		

The samplings points are shown inTable A. 35 and Figure A. 4.

2.2. Sample Size, Amounts of Sample Water and Duration of the Survey

A total of 70 samples were collected among the 22 survey sites. The survey was conducted one (1) time. The amount of water collected for each sample was at least four (4) litres. The survey was executed in 15 days w.e.f. 22nd November, 1994.

2.3. Investigated Items

The following parameter were investigated:

General Parameter :

Weather at the sampling time, Air temperature, Water temperature, Colour of water, and Smell of water.

Water Quality Items:

pH, Colon bacillus, SS, DO, BOD, COD, T-N, T-P, Cl, and Incidental items.

Other :

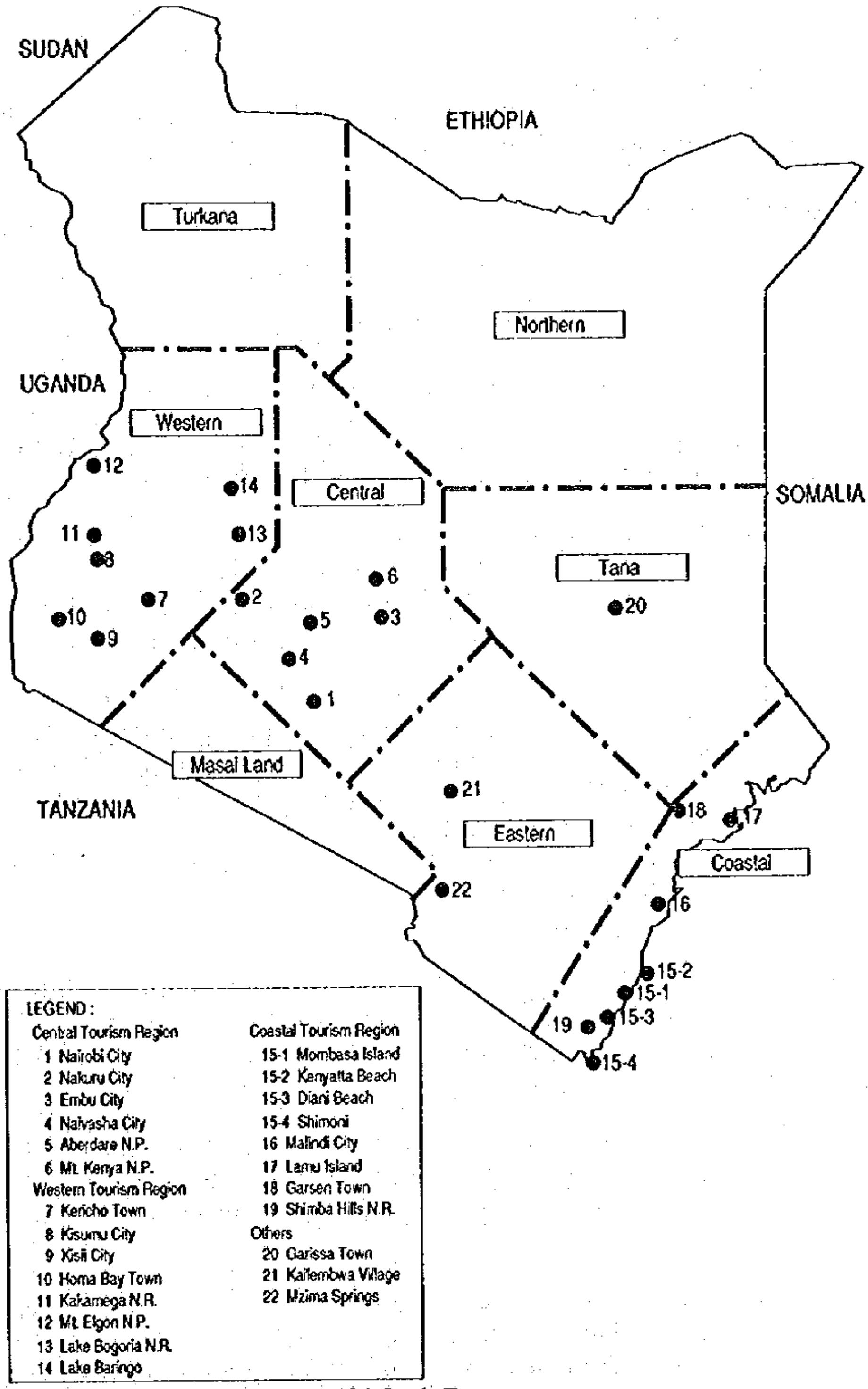
Photograph of survey site, and sampling station

Table A. 35 Survey Areas and Survey Stations

Area	Sampling Point	Kind of Water	No. of Samples
Central Tourism Region	-	-	-
1. Nairobi Town	Hotel	Drinking Water/sewerage	1-2
	Local People's House	Drinking Water/Sewerage	3-4
2. Nakuru Town	Hotel	Drinking Water/Sewerage	5-6
	Local People's House	Drinking Water/Sewerage	7-8
	Lake Nakuru	Lake Water	9
3. Embu Town	Hotel	Drinking Water/Sewerage	10-11
	Local People's House	Drinking Water/Sewerage	12-13
	Ena River	River Water	14
4. Naivasha Town	Lake Naivasha	Lake Water	15
5. Aberdare N.P.	Lodge	Drinking Water/Sewerage	16-17
6. Mt Kenya N.P.	Lodge	Drinking Water/Sewerage	18-19
Western Tourism Region			
7. Kericho Town	Hotel	Drinking Water /Sewerage	20-21
	Local People's House	Drinking Water/Sewerage	22-23
8. Kisumu Town	Hotel	Drinking Water/Sewerage	24-25
	Local People's House	Drinking Water/Sewerage	26-27
	Lake Victoria	Lake Water	28
9. Kisii Town	Hotel	Drinking Water/Sewerage	29-30
	Local People's House	Drinking Water/Sewerage	31-32
10. Homa Bay Town	Lake Victoria	Lake Water	33
11. Kakamega N.R.	Lodge	Drinking Water/Sewerage	34-35
12. Mt Elgon N.P.	Lodge	Drinking Water/Sewerage	36-37
13. Lake Bogoria N.R.	Lake Bogoria	Lake Water	38
14. Lake Baringo	Lake Baringo	Lake Water	39
Coastal Tourism Region			
15. Mombasa Town			
15-1 Mombasa Island	Hotel	Drinking Water/Sewerage	40-41
	Local People's House	Drinking Water/Sewerage	42-43
	Beach	Sea Water	44
15-2 Kenyatta Beach	Hotel	Drinking Water/Sewerage	45-46
	Beach	Sea Water	47
15-3 Diani Beach	Hotel	Drinking Water/Sewerage	48-49
	Beach	Sea Water	50
15-4 Shimoni	Lodge	Drinking Water/Sewerage	51-52
	Beach	Sea Water	53
16. Malindi Town	Hotel	Drinking Water/Sewerage	54-55
	Local People's House	Drinking Water/Sewerage	56-57
	Beach	Sea Water	58
	Sabaki River	River Water	59
17. Lamu Island	Hotel	Drinking Water/Sewerage	60-61
	Local People's House	Drinking Water/Sewerage	62-63
	Beach	Sea Water	64
18. Garsen Town	Tana River	River Water	65
19. Shimba Hills N.R.	Lodge	Drinking Water/Sewerage	66-67
Others			
20. Garissa Town	Tana River	River Water	68
21. Kailembwa Village	Athi River	River Water	69
22. Mzima Springs	Tsavo River	River Water	70

Source: "Water Quality Survey," JICA Study Team

Figure A. 4 Survey Points of Water Quality Survey



Source: "Water Quality Survey," JICA Study Team

2.4. Methodology

2.4.1. Microbiological Analysis

- Escherichia coli (E. Coli) and Coliform Count: The universal spread plate count method.

2.4.2. Chemical Analysis

- pH: Using a portale electric pH probe.
- Dissolved Oxyhen (DO): A portable oxygen meter.
- Chloride Ion (Cl): Standard chloride electrode method.
- Total Hardness (T-H): Titrimetric method using Erichrome Black - T Indicator and titrating with EDTA.
- Total Phosphorus (T-P): Standard method as explained in Water Analysis, A practical Guide to Physico-Chemical, Chemical and Microbiological Water Examination and quality Assurance by W. Fresenius K.E. Quentin, W. Schineider (Eds).
- Total Nitrogen (T-N): Kjeldahl distillation. The organic nitrogen is digested and converted to amino nitrogen while is further converted to ammonim bisulphate. This is decomposed and distilled as ammonia from the alkaline solution into Boric acid and then titrated. The whole process was carried out in Kjeltac Electronic Equipment which does distillation and titration simultaneously using NaOH and H_2SO_4 and the end-point titre recorded.
- Chemical Oxygen Demand (COD): Standard 2-hour refluxing method using mercuric sulphate, silver sulphate, H_2SO_4, potassium dichromate and titrating with ferroul sulphate with a ferroin indicator.
- Suspended Solids (SS): This was calculated from the difference of the weights of the total solids and total dissolved solids (TDS). The water is evaporated at 105 °C and both residues cooled and weighed.
- Biological Oxygen Demand (BOD): The standard 5-day innocubation period was applied in 300 ml BOD bottles. The difference dilution factors were applied depending on the level of contamination of the water sample.

3. Analytical Results and Remarks

The sample collected during the WQS comprised three different types, namely :

- Drinking water samples,
- Surface water samples (Rivers, Lakes and the Sea), and
- Sewage samples.

The analytical results are grouped in this report into three categories:

- Physico-Chemical quality,
- Organic pollution, and
- Bacteriological quality.

For each of the sample type physico-chemical, organic pollution and bacteriological quality are presented in the following tables.

The notations used for the presentation of the results are:

NWMP:	National Water Master Plan,
ND:	Not Detected,
Present:	E. Coli were detected in the sample, and
NIL:	Less than 1 mg/l.

The results of water quality survey are shown in Table A.36 - Table A.42.

Table A. 36 Drinking Water - Physico-Chemical Quality

Sample No.	Source and Kind of Water	pH	DO mg/ l	Temp °C	T-H mg/lCaCO3	Cl mg/l	Remarks
1	Nairobi Hotel	7.8	5.0	24.0	37.0	22.4	A slightly alkaline water. The water is fresh and soft and meets the WHO guidelines for drinking water.
3	Nairobi Local People's House	9.3	4.2	24.0	36.0	11.2	An alkaline, poorly aerated water. The water is fresh and soft pH needs to be adjusted to conform with WHO guidelines.
5	Nakuru Hotel	8.0	5.8	29.0	ND	100.0	A slightly alkaline fresh, soft water which conforms with WHO guidelines for drinking water.
7	Nakuru Local People's House	6.8	2.3	24.5	24.0	8.0	A slightly acidic, poorly aerated fresh and soft water. Meets WHO guidelines for drinking water
10	Embu Hotel	6.2	6.2	22.0	15.0	5.0	A slightly acidic well aerated water. The water is soft and fresh. Requires pH adjustment to conform with WHO guidelines.
12	Embu Local People's House	7.5	5.2	22.0	16.0	8.0	A slightly alkaline soft fresh water which meets the WHO guideline for drinking water.
16a	Aberdare Country Club	5.3	5.0	20 0	29.0	2.0	An acidic fresh soft water which requires pH adjustments to bring to the neutral range.
16b	The Ark	7.0	5.6	23.0	500.0	4.0	A neutral, moderately aerated hard fresh water. Will require dilution with soft water to improve its quality.
18	Mt. Kenya Lodge (Nanyuk i Municipal Water)	7.0	4.6	26.0	4.0	4.5	A neutral, fresh and very soft water which meets the WHO guidelines for drinking water.
20	Kericho Town Hotel	6.7	6.8	18.0	18.0	4.0	A slightly acidic, fresh, soft well aerated water. Meets the WHO guideline values for physico-chemical quality.
22	Kericho Local People's House	6.3	6.8	28.0	14.0	3.2	A slightly acidic, well aerated fresh water. Requires pH adjustment to conform with the WHO guideline values.
24	Kisumu Sunset Hotel	7.0	6.9	26.5	42.0	10.0	A neutral well aerated fresh water. Meets the WHO guidelines for the tested parameters.
26	Kisumu Local People's House	6.7	7.6	27.0	44.0	8.0	A slightly acidic well aerated fresh and soft water. Meets the WHO guideline values.
29	Kisii Hotel	6.3	7.3	20.0	18.0	2.0	A fresh well aerated slightly acidic soft water. Requires the pH to be adjusted to between 6.5 and 8.5.
31	Kisii Local People's House	6.3	7.3	24.5	18.0	3.2	A fresh well aerated slightly acidic soft water. Requires upward pH adjustments to be in the range 6.5 - 8.5.
34	Kakamega Lodge	6.3	6.0	26.0	32.0	1.1	A fresh well aerated, slightly acidic soft water. Needs pH adjustment to the range 6.5 - 8.5.
36	Mt. Elgon Lodge	7.0	4.0	17.0	58.0	1.3	A neutral, fresh averagely aerated moderately soft water. Meets WHO guidelines for the tested parameters.
40	Mombasa Splendid Hotel	7.0	6.7	30.0	426.0	11.2	A neutral well aerated fresh but hard water. Will require dilution with soft water to improve its quality.
42	Mombasa Local People's House	7.0	5.2	32.0	424.0	13.0	A neutral, moderately aerated fresh but hard water. Will requires dilution with fresh water to improve quality.
45	Kenyatta Beach Hotel	7.0	5.1	29.0	114.0	11.2	A neutral, moderately soft fresh water. Meets WHO guideline values.
48	Diani Beach Diani Sea Lodge	7.0	5.2	32.0	1100.0	1100.0	A neutral, moderately aerated slightly saline, very hard water. Does meet WHO values for chloride and total hardness.
51	Shimoni Lodge	6.5	1.5	32.0	ND	13.0	A slightly acidic, poorly aerated fresh and soft water. Meets WHO values for those tested parameters.
54	Malindi Hotel	7.0	8.1	30.0	118.0	7.1	A neutral, well aerated moderately soft, fresh water. Meets WHO guideline values for drinking water.
56	Malindi Local People's House	7.0	6.2	30.0	260.0	100.0	A neutral, well aerated moderately soft, fresh water. Requires mixing with soft water to improve its quality.
60	Lamu Palace Hotel	8.3	4.4	28.0	156.0	18.0	A slightly alkaline, moderately aerated soft fresh water. Meets WHO guideline values.
62	Lamu Local People's House	7.9	4.0	29.0	150.0	17.9	A slightly alkaline, poorly aerated, moderately soft, fresh water. Meets WHO guideline values.
66	Shimba Hills Lodge	7.0	8.5	22.0	1750.0	794.0	A neutral, well aerated slightly saline, very hard water. Does not meet WHO guideline values for chloride and hardness.

Source: JICA Study Team

Table A. 37 Drinking Water - Organic Pollution

Sample No.	Source and Kind of Water	SS mg/l	BOD mg/l	COD mg/l	T-N mg/l	T-P mg/l	Remarks
1	Nairobi Hotel	NIL	1.6	148.0	6.2	0.9	A clear colourless water, free from excessive organic pollution.
3	Nairobi Local People's House	11.0	1.3	400.0	6.2	0.9	A slightly turbid water. There is evidence of slight organic and inorganic contamination.
5	Nakuru Hotel	NIL	4.0	16.0	6.0	0.8	Free from suspended matter with little or no organic pollution.
7	Nakuru Local People's House	2.0	2.0	32.0	5.0	0.8	Slightly turbid. No evidence of serious organic contamination.
10	Embu Hotel	NIL	1.3	ND	5.0	0.7	Free from suspended matter and free from any contamination.
12	Embu Local People's House	24.0	1.9	48.0	4.3	24.2	Suspended solids present. Evidence of slight organic contamination with phosphates.
16a	Aberdare Country Club	9.0	1.1	ND	4.0	0.5	Evidence of suspended matter, however there is little or no organic pollution.
16b	The Ark	13.0	1.5	24.0	4.8	0.1	There is no evidence of organic contamination.
18	Mt. Kenya Lodge (Nanyuki Municipal Water)	25.0	1.4	ND	4.4	0.6	Apart from the presence of suspended matter there is no evidence of organic pollution.
20	Kericho Town Hotel	5.0	2.3	20.0	4.3	1.0	There is no evidence of organic pollution.
22	Kericho Local People's House	6.0	2.0	ND	4.4	1.0	Slight suspended material present but no evidence or organic pollution.
24	Kisumu sunset Hotel	NIL	0.7	32.0	4.0	1.0	Clear water free from organic pollution.
26	Kisumu Local People's House	NIL	1.1	28.0	7.0	1.0	Clear water free from organic pollution.
29	Kisii Hotel	NIL	2.0	4.0	4.0	1.0	Clear water free from organic pollution.
31	Kisii Local People's House	350.0	1.0	12.0	3.8	1.0	Excessive amounts of suspended matter present. No evidence of organic pollution.
34	Kakamega Lodge	65.0	1.0	ND	4.0	1.0	Suspended matter present, but no evidence of organic pollution.
36	Mt. Elgon Lodge	70.0	1.0	8.0	4.0	12	Rather high suspended matter, but no evidence of gross organic contamination.
40	Mombasa Splendid Hotel	12.0	0.5	12.0	4.3	0.5	No evidence of gross organic contamination.
42	Mombasa Local People's House	177.0	NIL	184.0	7.1	1.0	Excessive amounts of suspended solids present. The COD and T-N levels indicate some organic contamination present.
45	Kenyatta Beach Hotel	115.0	2.8	24.0	4.3	0.2	Suspended solids are high, however there is no evidence of organic pollution.
48	Diani Beach Diani Sea Lodge	112.0	3.6	76.0	3.8	0.1	High suspended solids, there is evidence of slight organic contamination.
51	Shimoni Lodge	649.0	50.4	192.0	7.1	10.0	Grossly contaminated with suspended material with evidence of organic pollution.
54	Malindi Hotel	186.0	2.6	124.0	4.3	0.4	High suspended solids. There is evidence of slight organic pollution.
56	Malindi Local People's House	112.0	2.2	4.0	4.3	0.4	High suspended solids. There is evidence of organic pollution.
60	Lamu Palace Hotel	107.0	1.8	28.0	4.3	0.4	There is no evidence of organic pollution. However, suspendied solids are high.
62	Lamu Local People's House	135.0	1.8	36.0	4.3	0.4	There is evidence of organic pollution. However, suspendied solids are high.
66	Shimba Hills Lodge	109.0	2.0	ND	3.8	0.4	There is evidence of organic pollution. However, suspendied solids are high.

Source: JICA Study Team

Table A. 38 Drinking Water - Bacteriological Quality

Sample No.	Source and Kind of Water	Coliform Count	E.Coli	Remarks
1	Nairobi Hotel	NIL	NIL	Excellent bacteriological quality.
3	Nairobi Local People's House	NIL	Present	Suspicious bacteriological quality.
5	Nakuru Hotel	NIL	NIL	Excellent bacteriological quality.
7	Nakuru Local People's House	NIL	NIL	Excellent bacteriological quality.
10	Embu Hotel	1/100	NIL	Satisfactory bacteriological quality.
12	Embu Local People's House	Over 300	Present	Unsatisfactory bacteriological quality.
16a	Aberdare Country Club	NIL	NIL	Excellent quality.
16b	The Ark	34.0	NIL	Unsatisfactory. Chlorine dosage to be raised.
18	Mt. Kenya Lodge (Nanyuki Municipal Water)	33.0	NIL	Unsatisfactory quality. Needs further chlorinatioN.
20	Kericho Town Hotel	NIL	NIL	Exellent quality.
22	Kericho Local People's House	Over 300	NIL	Unsatisfactory. Needs chlorination.
24	Kisumu sunset Hotel	10.0	Present	Unsatisfacory Quality.
26	Kisumu Local People's House	Over 300	Present	Unsatisfactory quality. Proper treatment and chlorination needed.
29	Kisii Hotel	Over 300	NIL	Unsatisfactory quality. Chlorination needed.
31	Kisii Local People's House	NIL	NIL	Excellent quality.
34	Kakamega Lodge	100×10^2	Present	Unsatisfactory. Proper treatment and chlorination required.
36	Mt. Elgon Lodge	NIL	NIL	Excellent quality.
40	Mombasa Splendid Hotel	6.0	Present	Poor bacteriological quality. Further chlorination needed.
42	Mombasa Local People's House	Over 300	NIL	Unsatisfactory quality. Further chlorination needed.
45	Kenyatta Beach Hotel	9.0	NIL	Intermediate bacteriological quality. Chlorination needed.
48	Diani Beach Diani Sea Lodge	Over 300	NIL	Poor bacteriological quality. Proper treatment nad further chlorination needed.
51	Shimoni Lodge	Over 300	Present	Unsatisfactory quality. Proper treatment nad further chlorination needed.
54	Malindi Hotel	Over 300	Present	Unsatisfactory quality. Chlorination needed.
56	Malindi Local People's House	Over 300	Present	Unsatisfactory quality. Chlorination needed.
60	Lamu Palace Hotel	1.0	NIL	Satisfactory quality.
62	Lamu Local People's House	Over 300	Present	Poor bacteriological quality. Chlorination needed.
66	Shimba Hills Lodge	Over 300	NIL	Poor bacteriological quality. Chlorination needed.

Source: JICA Study Team

Table A.39 Surface Water - Physico-Chemical Quality

Sample No.	Source and Kind of Water	pH	DO mg/l	Temp °C	T-H mg/l CaCO3	Cl mg/l	Remarks
9	Lake Nakuru Water	10.6	7.5	30.0	ND	178.0	An alkaline well aerated soft water. However past results indicate that the water quality depends on the points of sampling and the time of sampling.
14	Ena River-Embu	6.8	6.8	26.0	10.0	6.3	An almost neutral well aerated water. Soft and fresh water. Meets WHO guidelines for the tested parameters for water source.
15	Lake Naivasha Water	7.1	4.3	17.5	76.0	6.3	A neutral moderately aerated water. A moderately soft fresh water.
28	Lake Victoria Water at Dunga - Kisumu	7.0	7.0	22.0	38.0	1.0	A neutral well aerated water. The water is both soft and fresh.
33	Lake Victoria at Homa Bay	7.0	6.9	30.0	50.0	112.0	A neutral well aerated fresh, soft water that can be exploited for many uses.
38	Lake Bogoria Water	11.3	1.0	31.0	ND	3981.0	A very alkaline poorly aerated water. The water is saline, but exhibits no hardness. Cannot be exploited as a raw water source.
39	Lake Baringo Water	8.6	6.0	27.5	42.0	18.0	Alkaline well aerated water. The water is both soft and fresh and has thus unlimited potential for various uses.
44	Mombasa Likoni Beach Water	7.0	6.7	32.0	825.0	8913.0	A neutral well aerated, hard and saline water. Unsuitable for many uses unless treated.
47	Kenyatta Beach Water	7.2	7.5	32.0	7250.0	8913.0	A neutral well aerated water. However the water is too hard and too saline to be of any practical use in its raw state.
50	Diani Beach Water	7.0	6.3	33.0	9750.0	8913.0	A neutral well aerated water. However the water is too hard and saline for demestic use.
53	Shimoni Sea Water	7.0	5.8	33.0	7000.0	8913.0	A neutral well aerated saline and hard water. May be suitable for recreation and navigation.
58	Malindi Beach Water	7.0	6.8	32.0	6750.0	8913.0	A neutral sell aerated, saline and hard water unsuitable for domestic purposes.
59	Sabaki River Water -Malindi	7.0	8.4	27.0	1.9	1.9	A neutral well aerated, soft and fresh water with good physico-chemical characteristics.
64	Lamu -Beach Water	8.2	6.0	31.0	11250.0	8913.0	A slightly alkaline well aerated but saline and very hard water unsuitable for domestic purposes.
65	Tana River at Garsen	-	-	-	-	-	No sample.
68	Tana River At Garissa	7.8	5.2	26.0	ND	3.2	A slightly alkaline, well aerated soft fresh water with good physico-chemical characteristics.
69	Athi River at Kalembwa	7.0	6.9	21.0	ND	3.2	A neutral well aerated fresh and soft water with good physico-chemical characteristics.
70	Tsavo River at Mzima Springs	7.0	9.1	26.0	164.0	3.2	A neutral well aerated moderately hard fresh water with good physico-chemical characteristics.

Source: JICA Study Team

Table A. 40 Surface Water - Organic Pollution

Sample No.	Source and Kind of Water	SS mg/l	BOD mg/l	COD mg/l	T-N mg/l	T-P mg/l	Remarks
9	Lake Nakuru Water	54.0	20.0	48.0	4.3	1.4	Suspended matter present. There is evidence of slight organic pollution.
14	Ena River-Embu	269.0	3.2	ND	6.0	10.0	A lot of suspended matter present. Apart from the presence of the nutrients, Nitrogen and phosphorous compounds there is no evidence or organic pollution.
15	Lake Naivasha Water	52.0	1.0	112.0	4.3	0.7	Some suspended matter present However there is no evidence of any gross organic pollution.
28	Lake Victoria Water at Dunga - Kisumu	8.0	1.7	20.0	6.0	1.0	There is no evidence of any gross organic pollution at this point of the lake.
33	Lake Victoria at Homa Bay	1,114.0	30.0	76.0	9.0	3.2	Excessive suspended matter present. There is evidence of slight organic contamination at this point of the lake.
38	Lake Bogoria Water	4,511.0	87.0	1,408.0	8.1	10.9	This lake water is rich in both nitrogen and phosphorous, necessary ingredients for eutrophication. Suspended matter is excessive, mainly blue green algae.
39	Lake Baringo Water	615.0	NIL	65.0	5.0	3.0	A very turbid water with high amounts of suspended matter. (silt) There is however slight organic contamination.
44	Mombasa Ukori Beach Water	1,380.0	2.2	108.0	3.8	1.0	Excessive amounts of suspended solids present. However there is only slight contamination with organic matter.
47	Kenyatta Beach Water	657.0	3.4	204.0	4.3	0.2	High amounts of suspended solids present. However there is only slight organic pollution.
50	Diani Beach Water	728.0	1.8	156.0	3.8	1.3	Excessive loads of suspended matter present. No evidence of any gross organic contamination.
53	Shimoni Sea Water	-	-	832.0	9.5	0.3	There is evidence of moderate organic pollution.
58	Malindi Beach Water	601.0	2.2	428.0	4.4	0.4	Excessive amounts of suspended matter present. There is evidence of moderate organic pollution. Sample not enough for SS and BOD.
59	Sabaki River Water - Malindi	1,182.0	21.9	128.0	3.8	0.4	There is evidence of slight contamination with organic matter.
64	Lamu - Beach Water	113.0	NIL	248.0	4.8	0.8	High amounts of suspended solids present. There is evidence of slight contamination with organic matter.
65	Tana River at Garsen	-	-	-	-	-	No samples. Previous results indicate satisfactory chemical quality and organic pollution.
68	Tana River At Garissa	1,040.0	7.5	ND	4.8	0.7	Excessive load of suspended matter (silt) present. There is however no evidence of gross organic pollution.
69	Athi River at Kalembwa	1,013.0	5.0	ND	4.8	0.8	Excessive quantities of suspended matter (silt) present. However there is no evidence of any gross organic pollution.
70	Tsavo River at Mzima Springs	205.0	5.0	ND	4.8	0.5	Moderate amount of suspended matter present. However there is evidence of any organic pollution.

Source: JICA Study Team

Table A. 41 Surface Water - Bacteriological Quality

Sample No.	Source and Kind of Water	Coliform Count	E. Coli	Remarks
9	Lake Nakuru Water	NIL	NIL	There is no evidence of the presence of both faecal and general coliform organisms.
14	Ena River-Embu	Over 300	Present	There is evidence of faecal and non-faecal pollution.
15	Lake Naivasha Water	4	Present	There is evidence of gross contamination of the lake water with coliform organisms.
28	Lake Victoria Water at Dunga - Kisumu	Over 300	NIL	There is evidence of gross contamination of the lake water with coliform organisms.
33	Lake Victoria at Homa Bay	Over 300	Present	There is evidence of gross contamination of the lake water with both faecal and non-faecal coliform organisms.
38	Lake Bogoria Water	NIL	NIL	There is no evidence of faecal and non-faecal coliforms contamination of this water.
39	Lake Baringo Water	NIL	NIL	There is no evidence of faecal and non-faecal coliforms contaminations of this water.
44	Mombasa Ukoni Beach Water	NIL	Present	There is evidence of faecal coliform contamination of this water.
47	Kenyatta Beach Water	2	Present	The water is contaminated with both general and faecal coliform organisms.
50	Diani Beach Water	NIL	NIL	There is no evidence of any faecal and non-faecal coliform contamination of this water.
53	Shimoni Sea Water	78	Present	There is evidence of both faecal and non-faecal coliform contamination of the water.
58	Malindi Beach Water	NIL	NIL	There is no evidence of any faecal and non-faecal coliform contamination of the water.
59	Sabaki River Water -Malindi	10×10^2	NIL	The water is contaminated with general coliform organisms.
64	Lamu -Beach Water	Over 300	NIL	The water is contaminated with general coliform organisms.
65	Tana River at Garson	-	-	Not sampled.
68	Tana River At Garissa	40×10^2	NIL	Grossly contaminated with general coliform organisms.
69	Athi River at Kaitembwa	1×10^2	Present	Grossly contaminated with both faecal and non-faecal coliforms.
70	Tsavo River at Mzima Springs	80×10^2	NIL	Grossly contaminated with general coliform organisms.

Source: JICA Study Team

Table A. 42 Analytical Results of Sewage Samples

Sample No.	Source and Kind of Water	pH	DO mg/l	Temp °C	SS mg/l	BOD°20 °C mg/l	COD mg/l	T-H mg/l $CaCO_3$	Cl mg/l	Colon Bacilli (i) Coliform count/ 100ml (ii) E. Coli	T-P mg/l	T-N mg/l
2	Nairobi Hotel	9.3	15.6	26.0	NIL	170.0	400.0	ND	159.0	(i) Over 300 (ii) Present	8.4	12.5
4	Nairobi Local People's House	7.0	1.0	22.0	114.0	130.0	128.0	77.0	56.2	(i) Over 300 (ii) Present	5.9	10.9
6	Nakuru Hotel	6.8	2.3	26.4	36.9	130.0	1024.0	19.0	199.0	(i) Over 300 (ii) Present	32.9	29.0
8	Nakuru Local People's House	7.3	0.7	22.0	100.0	100.0	800.0	39.0	112.0	(i) Over 300 (ii) Present	29.0	34.0
11	Embu Hotel	7.0	2.0	22.0	9.0	95.0	356.0	22.0	3.0	(i) Over 300 (ii) Present	0.7	31.0
13	Embu Local People's House	PIT LATRINE - NO SAMPLE TAKEN										
17a	Aberdare Country Club	7.0	0.7	20.0	111.0	305.0	960.0	110.0	1122.0	(i) Over300x10² (ii) Present	41.0	193.0
17b	The Ark	7.1	2.4	22.0	187.8	425.0	584.0	1800.0	70.8		2.6	38.1
19	Mt. Kenya Lodge	PERMISSION TO SAMPLE NOT GRANTED										
21	Kericho Town	7.0	6.4	20.0	167.0	68.0	224.0	30.0	45.0	(i) Over 300 (ii) Present	15.2	68.0
23	Kericho Local People's House	6.8	less than 1.0	18.5	956.0	123.0	380.0	240.0	36.0	(i) Over 3000 (ii) Present	12.0	8.1
25	Kisumu Sunset Hotel	7.8	2.2	25.0	571.0	OP	736.0	100.0	141.0	(i)154 0 x10² (ii) Present	32.1	90.0
27	Kisumu Local People's House	7.0	5.1	25.0	461.0	98.0	168.0	2.0	40.0	(i) NIL (ii) Present	26.0	35.0
30	Kisii Hotel	7.2	3.8	23.0	69.0	39.0	80.0	2.0	2.0	(i)Over 30,000 (ii) Present	1.7	14.5
32	Kisii Local People's House	7.0	1.0	19.0	1160.0	600.0	656.0	140.0	22.4	(i) Over300 x10² (ii) Present	14.3	57.2
35	Kakamega Lodge	7.2	3.2	26.0	942.0	165.0	376.0	48.0	5.0	(i)3000 x 10² (ii)Present	19.0	42.0
37	Mt. Elgon Lodge	7.0	6.3	18.5	248.0	80.8	40.0	54.0	1.0	(i)3000 x 10² (ii)Present	2.0	7.1
41	Mombasa Splendid Hotel	6.4	0.6	32.0	900.0	40.8	184.0	220.0	100.0	(i)Over 300 (ii) Present	12.0	16.0
43	Mombasa Local People's House	6.3	0.9	31.0	652.0	90.5	216.0	218.0	200.0	(i)Over 300 (ii) NIL	18.0	4.3
46	Kenyatta Beach Hotel	6.5	3.3	29.0	349.0	62.4	288.0	240.0	8913.0	(i)Over 300 (ii) Present	15.8	29.0
49	Diani Sea Lodge	6.7	3.7	30.0	626.0	262.4	336.0	430.0	112.0	(i)Over 300 (ii) Present	18.2	32.1
52	Shimoni Lodge	6.5	1.5	32.0	649.0	50.4	192.0	ND	13.0	(i)Over 300 (ii) Present	10.0	7.1
55	Malindi Hotel	6.5	2.4	34.0	488.0	84.0	240.0	ND	501.0	(i)Over 300 (ii) Present	14.0	18.5
57	Malindi Local People's House	6.5	1.7	32.0	605.0	81.6	376.0	ND	631.0	(i)Over 300 (ii) Present	1.0	21.8
61	Lamu -Palace Hotel	7.9	1.1	31.0	1191.0	350.0	592.0	ND	141.0	(i)Over 300 (ii) Present	0.9	75.0
63	Lamu -local People's House	PIT LATRINE - NO SMAPLE TAKEN										
67	Shimba Hills Lodge	6.8	3.5	20.0	1405.0	1000.0	656.0	ND	16.0	(i) Over 300 (ii) Present	2.7	78.3

Source: JICA Study Team

ANNEX 4 ANALYSIS OF EXISTING TOURISM POLICIES AND INSTITUTIONS

Annex 4 Analysis of Existing Tourism Policies and Institutions

1. National and Tourism Development Planning, Policies and Programmes

1.1. Development Planning at National Level

Since independence in 1963, Kenya's socio-economic development has been guided by Seven National Development Plans (NDP) outling principal development objectives, policies and programmes and covering traditionally a planning horizon of five years. The current NDP, however, was reduced to cover three years that is from 1994 to 1996. Besides the current NDP, the "Sessional Paper No. 1, 1986 on "Economic Management for Renewed Growth" outlines Kenya's principal long-term development objectives up to the year 2000.

Kenya's long-term development objectives up to the year 2010 as identified in the Sessional Paper are as follows :

- Renewal of economic growth. A real average annual GDP growth rate of 5.6% has been targeted over the period 1986 to 2000,
- Acceleration of employment creation, especially from the private sector,
- Increase of productivity in all parts of the economy,
- Provision of basic needs for all of Kenya, including food, shelter, clothing, water, education and health,
- Achievement of food security,
- Improvement of the rural-urban balance with a view to ensure that the benefits of economic growth are spread widely throughout Kenya, and
- Achievement of a gradual structural change of Kenya's economy from an agrarian into an urban based industrial economy.

The development goals in the seventh NDP are as follows :

- Renewal of economic growth with a greater level of self-reliance. However, the average annual real GDP growth rate for the planning period 1994 to 1996 has been targeted at 4.4%,
- Improvement of basic human needs including the health, income and living conditions of all Kenyans, and
- Guarantee of sustainable development.

1.2. Tourism Sector Development Planning and Its Role in National Economic Development

1.2.1. Tourism Sector Development Planning

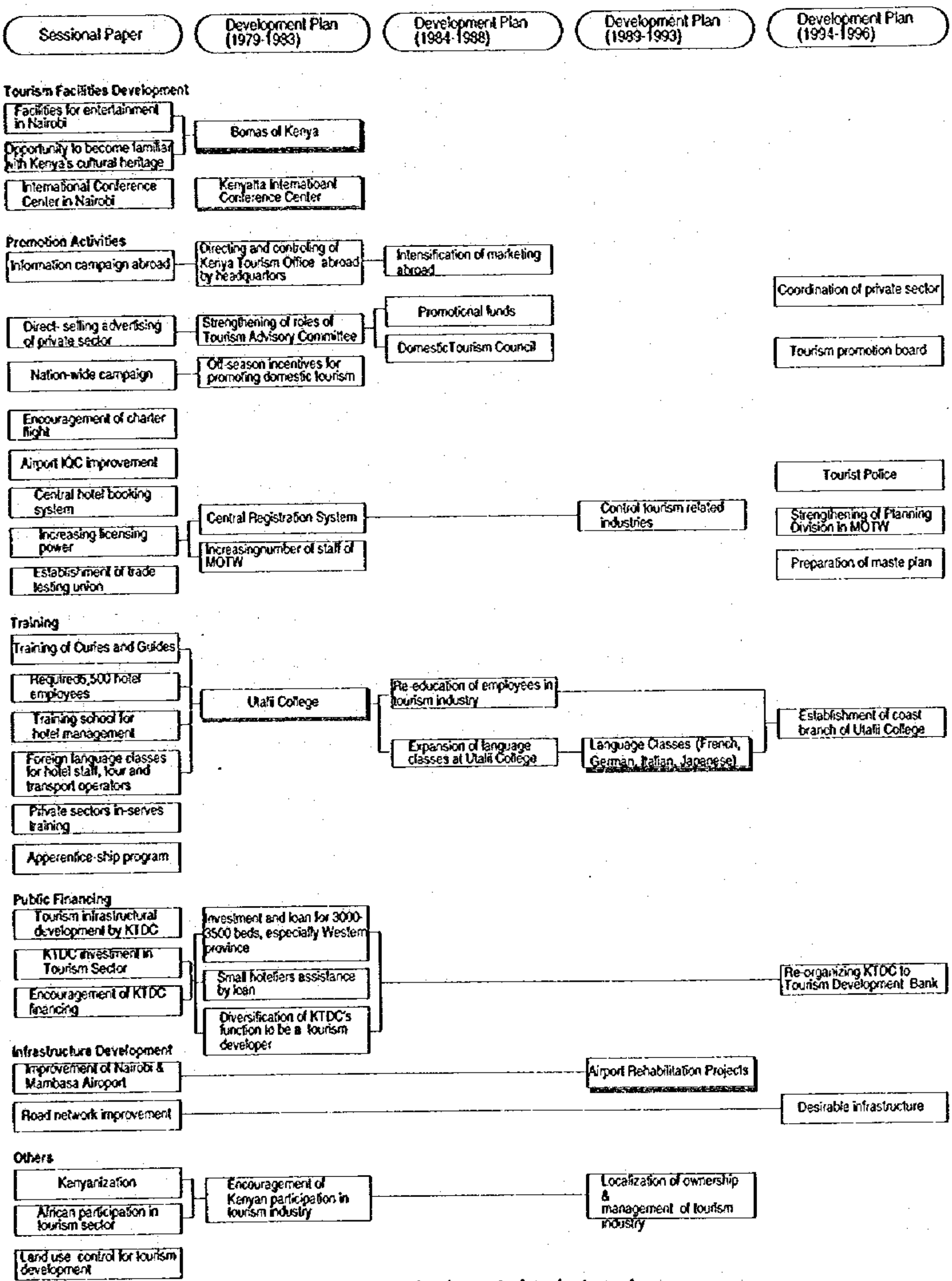
Development targets for Kenya's tourism service sector have been identified and addressed since the 1960s. A overview of the tourism development policies, programmes and projects over the period 1969 to 1996 is provided in Table A. 43 and Figure A. 5.

Table A. 43 Tourism Development Policies, Programmes and Projects 1969 to 1996

	Sessional Paper No.8 of 1969	Development Plan (1979-1983)	Development Plan (1984-1988)	Development Plan (1989-1993)	Development Plan (1994-1996)
Target number of tourists	20% yearly increase	508,000 foreign visitors in 1983 5.5 million bed-nights	6.2 million bed-nights in 1988	1,183,000 foreign tourists in 1993 7.1 million bed-nights in 1993	907,000 foreign tourists in 1996 7.5 million bed-nights in 1996
Target market	Mass tourism Local tourists Conference tourism Long-term and retirement tourists	Increase tourists from: - Well established market (North America, UK) - Growing market (Germany, France, Italy, Holland) - New market (Australia, Japan, Middle East, Spain)	Increase tourist traffic during low seasons from existing tourist generating countries Promote in North American market Local market	Less encouragement of "package tours" Domestic tourism	Eco-tourism Up-market tourism
Target tourism destination to be utilised	Coast Wildlife areas especially southern part of Kenya (Mt. Kenya, Aberdares, Lake Nakuru) Man-made entertainment	Coast Masai Mara, Amboseli, Samburu, Buffalo Springs	No description	No description	Spatial diversification of tourist destinations
Environment	Land use for tourism development	Consumptive utilisation of wildlife Maximum utilisation of natural resources	Consumptive utilisation of wildlife Environmental conservation	Damages to the parks and reserves Minimise negative impacts of tourism to environment	"Environmental consciousness has created a new and growing tourism market" Utilisation of environmental and cultural resources by local communities' participation

Source: JICA Study Team based on various sessional papers and development plans

Figure A. 5 Summary of Proposed Programmes and Projects in the Past Development Plans



Note: Shodowed boxes are implemented projects and programmes.
Source: JICA Study Team based on sessional papers and development plans

In summary, it may be stated that Kenya's general tourism development strategy over the past 30 years has been to gradually and considerably to increase the number of tourists with a strong focus on both, the mass tourism market segment and the coastal area (sun & beach holiday). However, though increasing the absolute number of tourists has remained a core element since the 1969 NDP until the current NDP, a shift in the developing focus can be observed. Since the 6th NDP (1989 to 1993), concerted development efforts have been geared more towards reducing the predominance in the spatial diversification of tourist destinations and reducing the negative impacts of tourism on the environment.

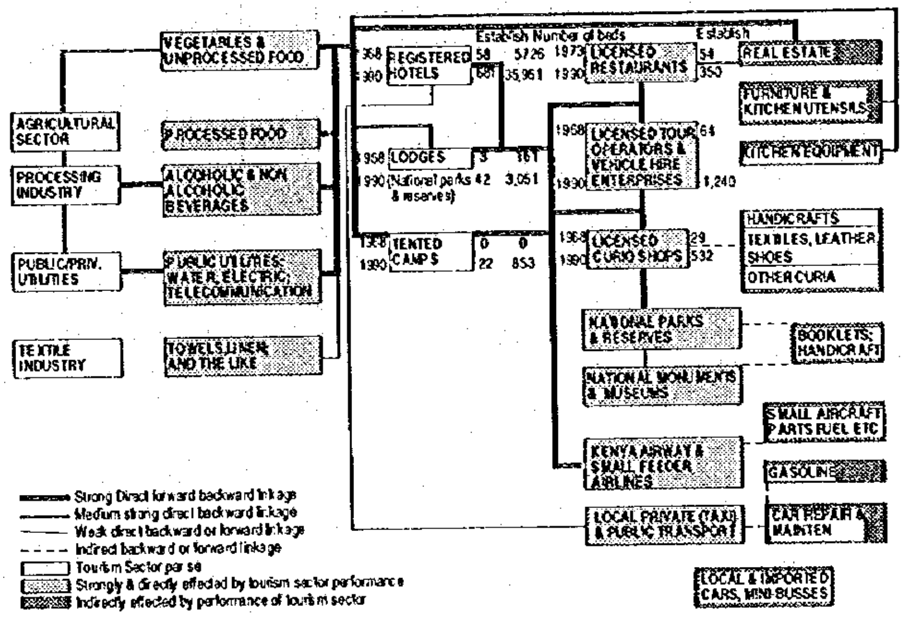
1.2.2. The Role of the Tourism Sector in the National Economic Development

Generally speaking, the tourism sector plays an important role in Kenya's national economic development, because :

- It has backward and forward linkages to the agricultural, food processing, beverage, transportation and tour operating sectors,
- It plays an important role as a generating source of foreign exchange earnings,
- It has potential for direct and indirect employment generation, and
- It has potential for improving the country's rural-urban balance.

The tourism sector, which is not separately identified as a whole in the national accounts, comprises facilities, hotels, restaurants, transport operators and retail shops, the economic activities of which are geared primarily to cater for the needs of domestic and foreign tourists. Figure A. 6 gives a heuristic overview of the tourism service sector and identifies in qualitative tems backward and forward linkage effects by type of economic sector and intensity of linkage.

Figure A. 6 Heuristic Flow Chart of the Structure of and Prevailing Linkages in the Tourism Service Sector



Source: JICA Study Team

The magnitude of some of the major linkages in terms of physical units is illustrated inTable A. 44. These data are based on an interview with a manager of one of Nairobi's five star hotels with a total capacity of 329 rooms (about 400 beds). The consumption data are based on the hotel's average over the last 25 years and an average occupancy ratio of 65 % of total capacity, translating into some 84,000 guests per year and on average.

According to these source data, 1,000 tourists/guests representing this type of tourism market segment would generate a demand for :

- Some 4,200 kg of all sorts of vegetables,
- Some 1,580 kg of fruits,
- Some 430 kg of poultry,
- Some 1,510 kg of beef and other meat,
- Some 100 kg of fish,
- About 50 liter of milk, 2,570 eggs and 230 kg of sugar,
- About 2,570 bottles of non-alcoholic beverages,
- About 1,770 bottles and 14,430 glasses of beer, and
- Some 50 bottles of Whisky, Vodka and/or Gin.

Table A. 44 Physical Linkage Effects between the Tourism and Other Sectors

LINKAGE EFFECT	AVERAGE MONTHLY CONSUMPTION	AVERAGE YEARLY CONSUMPTION	AVERAGE CONSUMPTION PER GUEST AND STAY	AVERAGE DEMAND IMPACT PER 1,000 GUESTS BY MAJOR SUBSECTOR
BACKWARD LINKAGE TO THE AGRICULTURE SECTOR				
A) VEGETABLES				
Cabbage	1,500 kg	18.00 tons	0.21 kg	
Red Cabbage	150 kg	1.80 tons	0.02 kg	
Carrots	1,600 kg	19.20 tons	0.23 kg	
Potatoes	10,000 kg	120.00 tons	1.43 kg	
Spinach	4,500 kg	54.00 tons	0.64 kg	
Tomatoes	3,600 kg	43.20 tons	0.51 kg	
Broccoli	300 kg	3.60 tons	0.04 kg	
Egg plant	150 kg	1.80 tons	0.02 kg	
French beans	360 kg	4.32 tons	0.05 kg	
Snow peas	450 kg	5.40 tons	0.06 kg	
Cauliflower	500 kg	6.00 tons	0.07 kg	
Cucumber	300 kg	3.60 tons	0.04 kg	
Onions	500 kg	6.00 tons	0.07 kg	
Mushrooms	300 kg	3.60 tons	0.05 kg	
Chablis	300 kg	6.00 tons	0.04 kg	
Fresh Maize	3,000 kg	4.32 tons	0.14 kg	
Green Pepper	600 kg	3.60 tons	0.09 kg	
Ginger (fresh)	60 kg	36,000 tons	0.01 kg	
Avocados	700 pcs	7.20 tons	0.01 kg	
Lettuce	1,400 pcs	0.72 tons	0.01 kg	
Parsley	900 punets	8,400.00 pcs	0.01 kg	
Sukuma	3,000 kg	16,800 pcs	0.43 kg	A) VEGETABLES
Leek	150 kg	10,800 punets	0.02 kg	4,200 kg
B) FRUITS				
Lemons	300 kg	3.60 tons	0.04 kg	
Mangoes	360 kg	4.32 tons	0.05 kg	
Sweet Bananas	900 dozen	10,800 dozen	0.39 kg	
Grapes	150 kg	1.80 tons	0.02 kg	
Sweet melon	500 kg	6.00 tons	0.07 kg	
Water-melon	500 kg	6.00 tons	0.07 kg	
Pineapples	2,400 kg	28.80 tons	0.34 kg	
Passion fruits	900 dozen	10,800 dozen	0.26 kg	
Strawberries	300 punets	3,600 punets	0.01 kg	
Oranges	1,500 kg	18.00 tons	0.21 kg	
Tangerines	450 kg	5.40 tons	0.06 kg	B)FRUITS
Apples	400 kg	4.80 tons	0.06 kg	1,500 kg
C) POULTRY				
Capons	2,500 kg	30.00 tons	0.36 kg	POULTRY
Spring chicken	500 kg	6.00 pcs	0.07 kg	430 kg
D) BEEF & OTHER MEAT				
Sirloin Steak	750 kg	9.00 tons	0.11 kg	
Beef fillets	1,400 kg	16.80 tons	0.20 kg	
Staffed Meat	2,790 kg	33.48 tons	0.40 kg	
Beef leg	1,600 kg	19.20 tons	0.23 kg	
Lamb legs	600 kg	7.20 tons	0.09 kg	
Lamb shoulder	300 kg	3.60 tons	0.04 kg	
Lamb saddle	600 kg	7.20 tons	0.09 kg	
Whole lamb	750 kg	9.00 tons	0.11 kg	
Veal loin	300 kg	3.60 tons	0.04 kg	
Ostrich	300 kg	3.60 tons	0.04 kg	
Impala	300 kg	3.60 tons	0.04 kg	
Ham	240 kg	2.68 tons	0.05 kg	D) BEEF & OTHER MEAT
Porkloin	600 kg	7.20 tons	0.09 kg	1,510 kg
E) FISH				
Whole Tilapia	300 kg	3.60 tons	0.04 kg	
Seafish	300 kg	3.60 tons	0.04 kg	E) FISH
Tuna fishnet	150 kg	1.80 tons	0.02 kg	100 kg
F) OTHER MAJOR ITEMS				F) OTHER MAJOR ITEMS
Milk	360 ltr	4,320 ltr	0.05 ltr	50 ltr
Eggs	1,500 dozen	18,000 dozen	2.57 dozen	2,570 pcs
Sugar	1,500 kg	19.20 tons	0.23 kg	230 kg
BACKWARD LINKAGE TO THE BEVERAGE INDUSTRY				
G)NON-ALCOHOLIC BEVERAGES				G) NON-ALCOHOLIC BEVERAGES
Assorted Sodas	18,000 Bottles	216,000 Bottles	2.57 Bottles	2,570 Bottles
H) ALCOHOLIC BEVERAGES				H) ALCOHOLIC BEVERAGES
Assorted beers	12,400 Bottles	148,800 Bottles	1.77 Bottles	1,770 bottles
Beer (draft)	101,000 Glasses	12,000 Glasses	14.43 Glasses	14,450 Glasses
Whisky (important)	96 Bottles	1,152 Bottles	0.01 Bottles	10 Bottles
Vodka	150 Bottles	1,800 Bottles	0.02 Bottles	20 Bottles
Gin	120 Bottles	1,400 Bottles	0.02 Bottles	20 Bottles

Source : Republic of Kenya, Economic Survey - Various Issues'.

2. Growth Performance of the Economy and Position of the Tourism Sector

2.1. Growth Performance and Relative Position of the Tourism Sector

The absolute size of Kenya's Gross Domestic Product (GDP) in constant 1982 prices has grown from K£ 3,077.7 million in 1982 to some K£ 4,337.6 million in 1993 (Table A. 45). This growth process implies a compound real GDP growth rate of some 3.19 % per year and over the given time frame. Intercensal population growth over the period 1979 to 1989 has been estimated at 3.7 % per year, which would translate into a negative compound real GDP/per capita growth rate of some -0.51 % per year and over the period 1982 to 1993.

Table A. 45 Past Growth Performance of Real Gross Domestic Product (GDP) by Major Subsectors and over the Period 1982 to 1993

(UNIT; K£ MILLION)

YEAR / SECTOR	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	AVERAGE 1982 to 1993
A. NON-MONETARY ECONOMY	164.6	170.4	186.7	202.4	201.7	208.8	214.9	223.4	229.6	234.5	237.4	239.6	209.4
B. MONETARY ECONOMY													
Agriculture	964.1	979.1	941.1	975.6	1,023.4	1,062.6	1,109.3	1,152.5	1,192.0	1,178.9	1,134.8	1,088.3	1,066.8
Forestry	32.8	23.7	26.4	28.0	29.4	33.7	38.1	40.6	42.7	46.2	48.2	47.6	36.5
Fishing	8.3	8.9	8.5	9.4	9.8	10.9	12.3	12.8	13.4	13.1	12.2	11.3	10.9
PRIMARY SECTOR	1,005.2	1,011.7	976.0	1,013.0	1,062.4	1,107.2	1,159.7	1,205.9	1,248.1	1,238.2	1,195.2	1,147.2	1,114.2
Mining & Quarrying	6.8	6.7	7.4	8.1	8.4	9.1	10.2	10.6	11.3	12.0	11.0	11.2	9.4
Manufacturing	372.3	389.1	405.8	424.1	448.7	474.3	502.8	532.5	560.3	581.6	588.6	599.2	489.9
Building & Construction	135.8	114.5	104.5	108.1	112.1	116.7	121.7	128.3	135.1	108.2	122.2	114.0	120.9
Electricity & Water	23.7	25.1	26.8	29.0	31.2	33.6	36.5	39.5	43.7	46.0	45.1	45.5	35.5
INDUSTRY SECTOR	538.4	535.4	544.5	569.3	600.4	633.7	671.2	710.9	750.4	777.8	766.9	769.9	655.7
Trade, Restaurants & Hotels	306.7	315.3	332.6	356.2	390.0	412.5	436.3	455.5	466.0	472.1	478.9	479.6	408.4
Transport, Storage, Communication	195.9	201.5	202.3	206.5	215.4	224.9	234.0	241.1	249.7	259.1	263.6	265.7	230.0
Finance, Insurance, Real Estate	209.7	226.0	222.5	244.5	261.0	274.5	291.3	313.1	333.2	353.5	377.9	406.3	292.8
Ownership Dwellings	187.8	187.9	184.6	190.4	196.5	205.8	212.2	220.5	229.4	235.3	239.0	239.5	210.7
Other Services	82.5	86.3	94.2	99.1	104.1	111.7	119.7	127.9	135.9	141.1	144.5	145.7	116.1
Domestic Services	32.8	34.9	37.2	39.8	44.0	49.7	55.3	62.4	70.5	78.3	85.3	93.1	56.9
Government Services	441.4	459.9	473.1	497.3	528.7	564.1	586.2	618.4	645.7	669.1	686.4	699.1	571.5
SERVICE SECTOR	1,456.8	1,511.8	1,546.5	1,632.8	1,739.7	1,832.0	1,935.0	2,039.0	2,130.4	2,208.5	2,274.6	2,329.0	1,806.3
LESS: Imputed Bank Services Charges	-87.3	-104.1	-99.4	-103.0	-105.9	-113.4	-121.8	-129.1	-134.0	-138.6	-142.0	-148.1	-118.9
C. TOTAL MONETARY ECONOMY	2,913.1	2,954.8	2,967.6	3,112.1	3,296.6	3,459.5	3,644.1	3,826.7	3,934.9	4,085.9	4,094.7	4,098.0	3,537.3
D. TOTAL ECONOMY	3,077.7	3,125.2	3,153.3	3,314.5	3,498.3	3,668.3	3,858.9	4,050.1	4,224.5	4,320.4	4,332.1	4,337.6	3,746.7

Source: Republic of Keya, Economic Surveys-Various Issues'

The total value of output of tourism related economic activities is not identified as a whole in the national accounts. However, tourism sector activities are mainly reflected in the "Trade, Restaurants & Hotels", "Transport, Storage, Communication" and "Building & Construction" chapters of the national accounting system. Secondary and tertiary effects would be reflected in the gross value of output of interlinked economic sectors as shown in the previous Figure A.2. Since available statistical data and breakdowns of data do not allow for compiling and aggregating all primary, secondary and tertiary output values of the tourism sector as a whole, the "Trade, Restaurants &

Hotels" chapter of Kenya's national accounts is being used as a proxy. This approach implies an underestimation of the actual size of Kenya's tourism sector.

The absolute size of the tourism sector in 1982 constant prices grew from some K£ 306.7 million in 1982 to about K£ 479.6 million in 1993, implying a compound real growth rate of 4.18 % per year over the reference period (Table A. 46). This growth performance was 0.99 % above the real GDP growth trend. The share of the tourism sector in GDP grew steadily from 9.97 % in 1982 to a maximum of 11.31 % in 1988 and has since slightly fluctuated. Over the whole period 1982 to 1993, the tourism sector's share in GDP averaged 10.9 % (Table A.46 refers).

Table A. 46 Performance Data of the Tourism Sector 1982 - 1993

Parameter	Unit	1982	1993	Ave. 1982-93
GDP	K£ million	3077.7	4337.6	3746.7
Trade, Rest. Average	K£ million	306.7	479.6	408.4
share GDP	Percent	9.97	11.06	10.9
Growth rate GDP	Percent	n.a.	na	3.19
Growth rate tourism	Percent	na	na	4.18

Source: JICA team computations. n.a. = not applicable.

The share of the tourism sector in the real GDP, averaged over the period 1982 to 1993, ranked fourth with 10.9 % after agriculture (28.5 %), government services (15.3 %) and manufacturing (13.1 %). However, the absolute annual real growth performance has been quite strong (Table A. 47).

Table A. 47 Absolute Growth Performance of the Tourism Sector 1982 to 1993

(UNIT ; %)

Parameter	1982	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93
GDP	BY	1.54	0.9	5.11	5.55	4.86	5.2	4.95	4.31	2.27	0.27	0.13
Service Sect.	BY	3.78	2.3	5.58	6.55	5.31	5.62	5.37	4.48	3.67	2.99	2.39
Tourism	BY	2.8	5.49	6.79	9.8	5.77	5.77	4.4	2.31	1.31	1.44	0.15

Note: (*) Numbers for 1993 are provisional. (1) BY = Base year. (2) Real growth rates based on 1982 constant prices.

Over the period 1984 to 1989, tourism sector growth has outperformed both, the service sector and GDP growth. However, from 1989 onwards the growth performance of the tourism sector has followed the general downward growth trend of the economy.

A sensitivity analysis investigating the impact of the real subsector on GDP growth, which employs weighted average real growth rates over the reference period 1982 to 1993, reveals that under the given factor endowment, tourism sector growth has accounted for 0.14 % points in 1.0 % real GDP growth. This would imply that:

- About 6.99 % real growth of the tourism sector generates about 1.0 % real GDP growth, and
- An increase or decrease of 1.0 % real growth in the tourism sector would result in an increase/decrease of 0.14 % real GDP growth.

Compared to other GDP subsectors, the tourism sector ranks the fourth position within Kenya's national economy in terms of real GDP growth generating power (Table A. 48).

Table A. 48 Subsector Growth Needed to Generate 1.0 % Real GDP Growth

(Unit; %)

GDP Subsector	Subsector Growth Needed
Government Services	4.89
Manufacturing	5.5
Finance,Insurance,RealEstate	6.55
Tourism	6.99

Source: JICA Study Team computations.

In other words, the real growth performance of Kenya's GDP is highly sensitive to the growth performance of the above mentioned four GDP subsectors. In comparison, the agricultural sector, although accounting for a fairly large share in GDP, would have to grow at about 9.59 % in real terms (1982 constant prices) in order to generate a 1.0 % real GDP growth impact.

2.2. The Tourism Sector and Foreign Exchange Earnings

Total foreign exchange receipts over the period 1979 to 1992 have increased from US$174.3 million in 1979 to an estimated US$422 million in 1993 (Table A. 50). The highest foreign exchange receipts were recorded in 1990 with a total of US$465.0 million. Average total foreign exchange receipts per person classified as holiday/business visitors have fluctuated widely over the same period. The highest per person value was recorded with US$714/person in 1980 and the lowest value with US$474 in 1984. On average and over the whole reference period US$590/person were reviewed in Kenya's domestic market.

The following past long term trends can be identified :

- Under the approximation equation that "total foreign exchange receipts" are equal to "total aggregated direct tourism sector income", the above would translate into an increase of direct and nominal private sector income from K£ 65.1 million in 1979 to about K£ 1,222.4 million in 1993,

- The average nominal income per tourist/day has increased from some KSh 241.7 in 1979 to a provisional KSh 2,711.2 in 1993, and

- The absolute number of tourist arrivals has increased considerably over the period 1979 to 1993. However, the average length of stay and the average expenditure per person/day measured in US dollars has decreased over the reference period.

Selected growth indicators would generate the following trends (Table A. 49):

Table A. 49 Growth Performance of Selected Trend Indicators

(Unit ; %)

Parameter	Compound Growth Rate	
	1979 to 1993	1982 to 1993
Total arrivals	4.91	4.92
Total tourist arrivals	6.68	6.12
Average length of stay	-2.05	-1.93
US $ Receipts	6.2	3.97
Ave. US $ receipt pers.	-0.19	-2.09
Real total K£ revenues	9.85	7
Real average K£ expenditure per day	5.73	3.67

Source: Based on Table A. 50 JICA Study Team computations

- Total tourist arrivals in the country have grown by a compound annual growth rate of 6.42 % over the period 1982 to 1993 or 6.68 % over the reference period 1979 to 1993,

- The average length of stay in the country has declined by a compound annual growth rate of -1.93 % over the period 1982 to 1993,

- While the absolute size of foreign exchange receipts derived from tourism has increased by a compound annual growth rate of 3.97 %, average foreign exchange receipts per person have declined by an annual compound growth rate of -2.09 % over the reference period 1982 to 1993, and

- Notwithstanding the above trends, total revenues measured in K£ as well as average K£ expenditures per day measured in constant 1982 prices have grown by an annual compound growth rate of 7.00 % and 3.67 % over the period 1982 to 1993, respectively.

Table A. 50 Total Foreign Exchange Receipts, Total and Average Expenditures 1979 to 1993

(Unit: as indicated)

YEAR		1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	AVERAGE PERIOD
CATEGORY	UNIT																1979 to 1993
A) TOTAL ARRIVALS	Number of people	435,230	433,672	408,340	433,250	421,664	511,900	540,600	614,200	661,300	694,900	734,640	814,400	804,600	781,500	826,200	607,774
B) HOLIDAY/BUSINESS	Number of people	330,510	335,946	322,910	341,950	333,666	442,700	477,500	542,500	586,800	616,900	695,680	769,300	750,900	716,000	777,400	536,072
C) AVERAGE SHARE (B/A)	Percent	75.9	77.5	79.1	78.9	79.1	86.5	88.3	88.3	88.7	88.8	94.7	94.5	93.3	91.6	94.1	88.2
D) AVERAGE LENGTH OF STAY	Days	16.3	17.0	18.8	16.0	15.9	15.6	17.3	17.0	17.4	14.2	12.8	13.1	12.1	13.3	11.6	15.5
E) DIRECT FOREIGN EXCHANGE RECEIPT	Mil. US$		240	212	275	196	210	248	304	356	394	420	485	432	443	413	303.0
F) AVERAGE EXCHANGE RATE	US$: KSh	7.47	7.37	9.07	10.92	13.33	14.45	15.80	16.32	16.47	17.73	20.56	22.93	27.50	32.19	67.83	n.a.
G) DIRECT REVENUES	K£	65,101,050	88,443,500	.9,818,550	122,926,650	130,016,900	151,724,900	196,680,000	248,013,000	292,108,000	349,213,150	432,106,000	533,010,800	594,101,550	712,990,700	1,222,400,000	349,004,183
PERFORMANCE INDICATORS																	
H) AVERAGE TOTAL FOREIGN FOREIGN EXCHANGE RECEIPT/PERSON	US$/Person	527	714	657	658	584	474	521	560	606	639	604	604	575	622	532	585
I) AVERAGE FOREIGN EXCHANGE EXPENDITURE PER DAY	US$/Person/Day	32.36	42	40	41	37	30	30	33	35	39	47	46	48	44	46	40
J) AVERAGE NOMINAL DOMESTIC EXPENDITURE FREE DAY	KSh/Day	241.7	308.9	358.9	449.4	489.8	439.4	476.2	537.8	572.2	698.9	970.2	1,057.8	1,307.7	1,497.4	2,711.2	607.9
K) REAL TOTAL DIRECT REVENUES	K£	85,859,276	107,122,881	106,834,756	122,926,650	117,556,968	123,453,946	147,325,843	189,639,535	189,680,520	207,836,330	207,030,262	268,664,516	269,033,741	278,276,464	307,873,112	182,587,594
L) AVERAGE REAL EXP. DAY	KSh/Day	342.4	403.5	422.2	448.4	416.1	332.4	324.8	373.7	375.7	422.7	503.1	520.1	544.6	553.1	680.9	446.3

Note: *) Deflated by using the 1982 trade weighted exchange rate index deflator
Source: JICA Study Team computations.

2.3. Past Employment Generation

Private tourism sector enterprises absorbed some 94.2 % of the direct wage labor force with the remainder of 5.8 % being employed in public sector tourism enterprises (Table A. 51 refers).

In terms of general past trends over the period 1984 to 1993, the following may be observed :

- Over the ten years of the reference period a total of 355,500 new modern sector wage employment jobs were created (this is statistically recorded), which is equivalent to a compound growth rate of 3.12 % over the period per year,
- Over the same time frame a total of 36,300 new wage employment jobs were created in the tourism sector. This is equivalent to a compound growth rate of 4.05 % per year. Hence, employment reaction in the tourism sector was 0.93 % per year above the trend in job creation within the modern wage employment sector as a whole, and
- The above indicates that in the past, out of every ten new jobs created in the modern wage sector, one was created in the tourism sector (8.8 : 1.0 ratio).

Another way of looking at the potential for new and additional employment creation generated by the labor intensive tourism sector is the correlation between output and labor force growth. The compound growth rate of the gross value of output in the tourism sector over the period 1982 to 1993 has been 4.18 % and that of employment 4.05 %. Under given factor endowment conditions, the above implies that 1.03 % real output growth are roughly equivalent with 1.0 % increase of employment in the sector. Hence, if the gross value of output in the tourism sector grows at past trends (4.18 %), that is from K£ 479.6 million in 1993 to K£ 499.6 million in 1994 (at constant 1982 prices), an additional number of 5,100 jobs would be underlying that growth performance.

Table A. 51 Past Direct Employment Generated in the Tourism Service Sector

(UNIT ; as indicated)

CATEGORY	YEAR / UNIT	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	GROWTH RATE 1984-1993
A) TOTAL POPULATION	People	19,500,000	20,200,000	21,000,000	21,800,000	22,400,000	23,200,000	24,000,000	24,800,000	25,700,000	26,500,000	
B) MODERN SECTOR EMPLOYMENT	People	1,119,400	1,174,400	1,226,700	1,274,100	1,345,900	1,368,400	1,409,300	1,441,700	1,462,600	1,474,900	3.12
C) WAGE EMPLOYMENT IN TRADE, RESTAURANTS & HOTELS												
(1) PUBLIC SECTOR	People	5,600	5,900	5,300	8,200	8,400	8,900	9,300	7,900	7,500	7,000	3.16
(2) PRIVATE SECTOR	People	79,200	83,800	88,100	92,700	98,000	101,400	104,600	108,800	110,900	114,100	4.15
TOTAL PRIVATE & PUBLIC	People	84,800	89,700	94,400	100,900	106,400	110,300	113,900	116,700	118,400	121,100	4.05
PERFORMANCE INDICATORS												
D) AVERAGE SHARE TOURISM SECTOR EMPLOYMENT	Percent	7.6	7.6	7.7	7.9	7.9	8.1	8.1	8.1	8.1	8.2	
E) PUBLIC SECTOR SHARE	Percent	6.6	6.6	6.7	8.1	7.9	9.1	9.2	6.8	6.3	5.8	
F) PRIVATE SECTOR SHARE	Percent	93.4	93.4	93.3	91.9	92.1	91.9	91.8	93.2	93.7	94.2	
G) GROWTH IN TOURISM SECTOR EMPLOYMENT	Percent	Base Year	5.78	5.24	6.89	5.45	3.67	3.26	2.45	1.46	2.28	

Source: JICA Study Team Computation

2.4. Structural Adjustment and Tourism Sector Development

The current Structural Adjustment Program (SAP) covers the period 1994 to 1996. The general goal of the current SAP in terms of economic policy is to liberalise Kenya's economy and giving a broader role to the private sector.

The current SAP covers the whole range of policy reforms and adjustments, from macroeconomic policy, to trade reform, price decontrol, financial sector and agricultural marketing reforms and public enterprise and civil service reforms. The tourism sector itself is not addressed explicitly in the SAP. However, the following issuses are of indirect importance to tourism sector development :

- Issues pertaining to the civil service reform and capacity building affect the Ministry of Tourism and Wildlife (MOTW). Likewise, the need to reduce the government budget deficit may affect ministry's recurrent and development budgets,
- As shown above, the tourism sector is overwhelmingly dominated by private sector enterprises. However, tourism related economic entities currently owned by the government may be privatised under the public enterprise reform program,
- The "National Environment Action Plan", completed in June 1994, may prescribe certain environmental protection measures to be taken into account for further tourism development, and,

- The liberalisation of the foreign exchange market will facilitate the operations of the tourism sector, which depends to some extent on imports.

2.5. Projected Socio-Economic Framework

Kenya's major development planning documents, the Sessional Paper No. 1 of 1986 and the current development plan 1994 to 1996, do not provide any comprehensive long-term GDP and/or GDP subsector growth projections beyond the year 2000. The Long Term Planning Unit of the Ministry of Planning and National Development (MOP&ND) however, has undertaken such projections up to the year 2010. The projections are based on a computerised macro model. These projections, too, are not made for each and every GDP subsector, but concentrate on major GDP subsectors.

In view of this situation, the following approach has been taken to project the future growth performance of Kenya's GDP and GDP subsectors :

- The single most important assumption of the MOP&ND is that the recession of Kenya's economy has reached bottom line and that the performance of her economy will be improving as of 1994. One of the major reasons for this outlook is that the continuing liberalisation of the economy will lead to improved confidence and therefore growth performance of the economy. This base assumption has also been assumed in the following projections,

- The projections of MOP&ND up to the year 2010 are based on estimated annually varying growth rates for the following GDP subsectors : non-monetary economy, agriculture, manufacturing services and government services. The annually varying growth rates for the non-monetary economy, agriculture, manufacturing and government services have been used in the projections up to 2010. For the period 2010 to 2015 a linear trend employing the 2010 growth rate has been assumed,

- For all those GDP subsectors, for which the MOP&ND model does not provide any growth projections, linear trend extrapolation based on past performances over the period 1982 to 1993 has been used,

- All projections are in constant 1982 prices,

- All projections are calculated using a bottom-up approach, that is the growth performance of the primary, secondary, tertiary sectors as well as the total monetary economy and GDP are resulting from individual subsector growth projections, and

- For the sake of easy understanding, all used and computed growth rates have been converted into compound growth rates using four time periods, namely 1993 to 2000, 2000 to 2005, 2005 to 2010 and 2010 to 2015.

2.6. Projected GDP and Subsector Growth Performance

It is anticipated that Kenya's GDP over the period 1993 to 2000 will grow at a compound growth rate of 4.63% per year, slightly increasing to a compound growth rate of 5.04% per year over the period 2000 to 2005. From 2005 to 2010, the GDP growth is expected to slow done somewhat to a compound growth rate of 4.88% per year and pick up again to a compound growth rate of 5.16% per year over the years 2010 to 2015 (Table A. 52 refers).

Such growth will depend strongly on the performance of the industry and services sectors. Within the industry sector, the growth performance of manufacturing will be crucial. Within the service sector, the performance of government services; finance, insurance and real estate and trade, restaurants & hotels will likewise be crucial for achieving the projected overall growth path.

The share of the primary sector in GDP is expected to decrease from some 26.45% in 1993 to about 23.53% in 2015. This decrease will be mainly caused by falling relative size of agriculture in GDP (from 25.09% in 1993 to about 22.42% in 2015).

The share of the industry sector is expected to increase from 17.75% in 1993 to some 21.12% in 2015. This increase is expected to result mainly from a strong performance of manufacturing, which is expected to increase its share in GDP from some 13.81% in 1993 to about 18.26% in 2015.

The share of the service sector is also expected to increase from 52.50% in 1993 to about 54.37% in 2015. However, this expansion is unlikely to be carried by an expansion of government services as in the past. The service sector such as "Trade, Restaurants & Hotels" and "Finance, Insurance & Real Estate" will lead that expansion process.

Table A. 52 Projected Macroeconomic Framework Up to the Year 2015 (Based on Constant 1982 Prices)

(UNIT : K£ MILLION ; PERCENT)

SECTOR	BASE YEAR	ABSOLUTE SIZE				SUBSECTOR SHARES IN GDP					IMPLICIT COMPOUND GROWTH RATE			
	1993	2000	2005	2010	2015	1993	2000	2005	2010	2015	1993/2000	2000/2005	2005/2010	2010/2015
A. NON-MONETARY ECONOMY	239.9	320.4	394.6	460.5	560.3	5.52	5.38	5.18	4.77	4.51	4.24	4.26	3.14	4.00
B. MONETARY ECONOMY														
Agriculture	1,068.3	1,539.8	1,917.0	2,289.9	2,786.0	25.09	25.85	25.18	23.70	22.42	5.09	4.48	3.62	4.00
Forestry	47.6	63.2	77.4	94.7	116.0	1.10	1.06	1.02	0.98	0.93	4.13	4.13	4.13	4.13
Fishing	11.3	14.0	16.3	19.0	22.1	0.26	0.23	0.21	0.20	0.18	3.10	3.10	3.10	3.10
PRIMARY SECTOR	1,147.2	1,617.0	2,010.6	2,403.6	2,924.1	26.45	27.14	26.41	24.88	23.53	5.03	4.45	3.64	4.00
Mining & Quarrying	11.2	15.8	20.3	26.0	33.2	0.26	0.27	0.27	0.27	0.27	5.07	5.07	5.07	5.07
Manufacturing	599.2	856.6	1,169.1	1,641.2	2,269.8	13.81	14.38	15.36	16.98	18.26	5.24	6.24	7.02	6.70
Building & Construction	114.0	124.7	133.0	141.8	151.1	2.63	2.09	1.75	1.47	1.22	1.29	1.29	1.29	1.29
Electricity & Water	45.5	69.2	93.3	125.9	169.8	1.05	1.16	1.23	1.30	1.37	6.17	6.17	6.17	6.17
INDUSTRY SECTOR	769.9	1,066.4	3,415.7	1,934.8	2,624.0	17.75	17.90	18.60	20.02	21.12	4.77	5.83	6.45	6.28
Trade, Restaurants & Hotels	479.6	638.8	784.0	962.1	1,180.7	11.06	10.73	10.30	9.96	9.50	4.18	4.18	4.18	4.18
Transport,Storage,Communication	265.7	322.8	371.0	426.3	489.9	6.13	5.42	4.87	4.41	3.94	2.82	2.82	2.82	2.82
Finance, Insurance, Real Estate	406.3	620.3	839.1	1,136.1	1,536.6	9.37	10.41	11.02	11.75	12.36	6.23	6.23	6.23	6.23
Ownership, Dwellings	239.5	279.9	312.8	343.6	390.7	5.52	4.70	4.11	3.62	3.14	2.25	2.25	2.25	2.25
Other Services	145.7	209.6	271.7	352.2	456.7	2.15	3.52	3.57	3.65	3.67	5.33	5.33	5.33	5.33
Domestic Services	93.1	181.2	291.6	469.1	754.8	2.15	3.04	3.38	4.95	8.00	9.98	9.98	9.98	9.98
Government Services	699.1	908.8	1,191.1	1,512.9	1,949.4	16.12	15.26	15.64	15.66	15.69	3.83	5.56	4.90	5.20
SERVICE SECTOR	2,329.0	3,161.3	4,061.2	5,207.4	6,757.9	52.50	53.08	53.34	53.90	54.37	4.46	5.14	5.10	5.35
LESS ;														
Imputed Bank Service Charges	-148.1	-209.2	-267.8	-342.8	-438.7	-3.41	-3.51	-3.52	-3.55	-3.53	5.06	5.06	5.06	5.06
C TOTAL MONETARY ECONOMY	4,098.0	5,635.4	7,219.7	9,203.1	11,867.3	94.48	94.62	94.82	95.23	95.49	4.66	5.08	4.57	5.22
D TOTAL ECONOMY	4,337.6	5,955.8	7,614.3	9,663.6	12,427.6	100.00	100.00	100.00	100.00	100.00	4.63	5.04	4.88	5.16

Source :

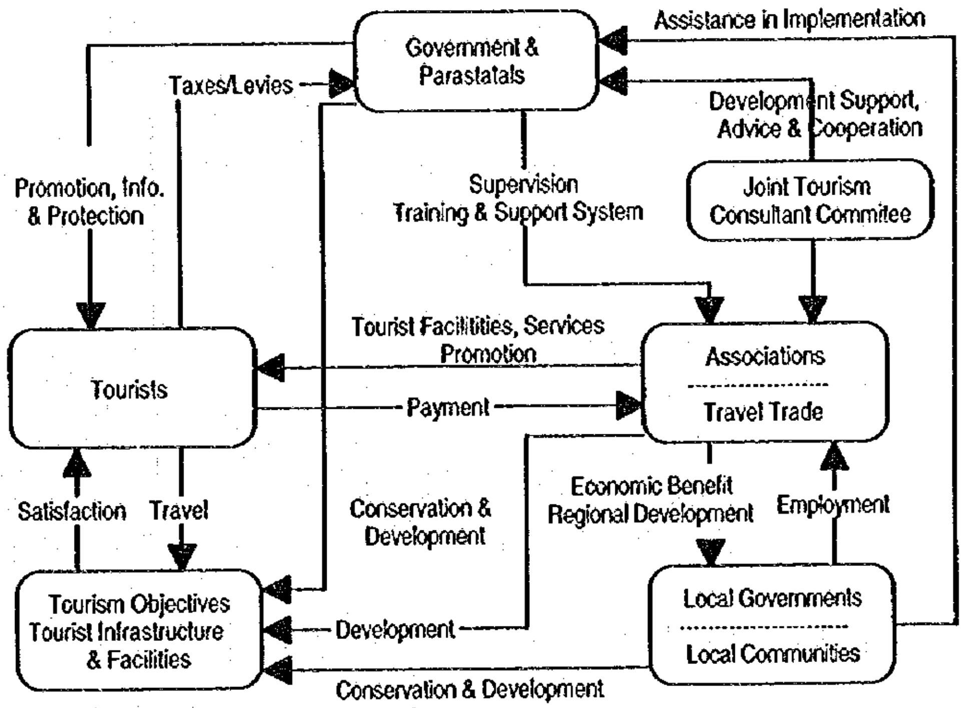
The tourism sector approximated by the "Trade, Restaurants & Hotels" sector in the national accounts is expected to perform at past trends, equivalent to a compound growth rate of 4.18% over the whole time frame 1993 to 2015. Under such a growth scenario for this and all other GDP subsectors, the share of tourism in GDP would gradually decline from some 11.06% in 1993 to about 9.50% in 2015.

3. Tourism Development Set-up

3.1. General

The interrelationship between various structural elements of tourism in Kenya is summarised in Figure A. 7. The tourism sector is supported by both, the public and private sectors.

Figure A. 7 Structure of Tourism in Kenya



Source: JICA Study Team

The private sector plays an important role by providing tourist facilities and services for the direct use of tourists. Although gaining commercial benefits for itself, the private sector is contributing to the country's economic development through improvement of the balance of payments, generation of employment and promotion of agriculture and other sectors. However, sustainable development can only be achieved through sound business practice and competition. While improving and promoting their products, the tourism sector should maintain and up-hold basic commercial ethics through self-regulation, particularly in terms of hygiene, safety, security, pricing and service.

It can also be said that the public sector plays a crucial role in tourism development. The major role of the public sector is to develop and conserve tourism resources, promote tourism, support the tourism sector's activities and maintain fair practice in businesses operating in the tourism sector. The role which the public sector plays is realised by the bodies outlined on Table A. 53.

Table A. 53 Tourism Functions

Functions	Responsible Body(s)	Enforcing Body(s)
Policy Making	MOTW	
Planning	MOTW	Planning Section
Marketing & Promotion	MOTW	Marketing Section
Ensuring the Security of Tourists	Office of the President MOTW	Office of the Commisioner of Police KWS (in national parks)
Ensuring the Safety of Tourists	Responsible Ministries	Responsible Sections
Improvement of Travel Conditions		
Infrastructure	Responsible Ministries	Responsible Sections
Tourist Facilities	MOTW	Kenya Tourism Dev. Corporation African Tours & Hotels
Transportation	Ministry of Transportation and Communication	Transport Department
Tourist Information		
Manpower and Tourism Services	MOTW	Lisensing Section Kenya Utalii College
Immigration procedure	Ministry of Finance Office of the President Ministry of Health	Customs Immigration
Supervision of the Tourism Sector	MOTW	Licensing Section
Development of the Tourism Sector	MOTW	KTDC

Source: JICA Study Team

3.2. Ministry of Tourism and Wildlife (MOTW)

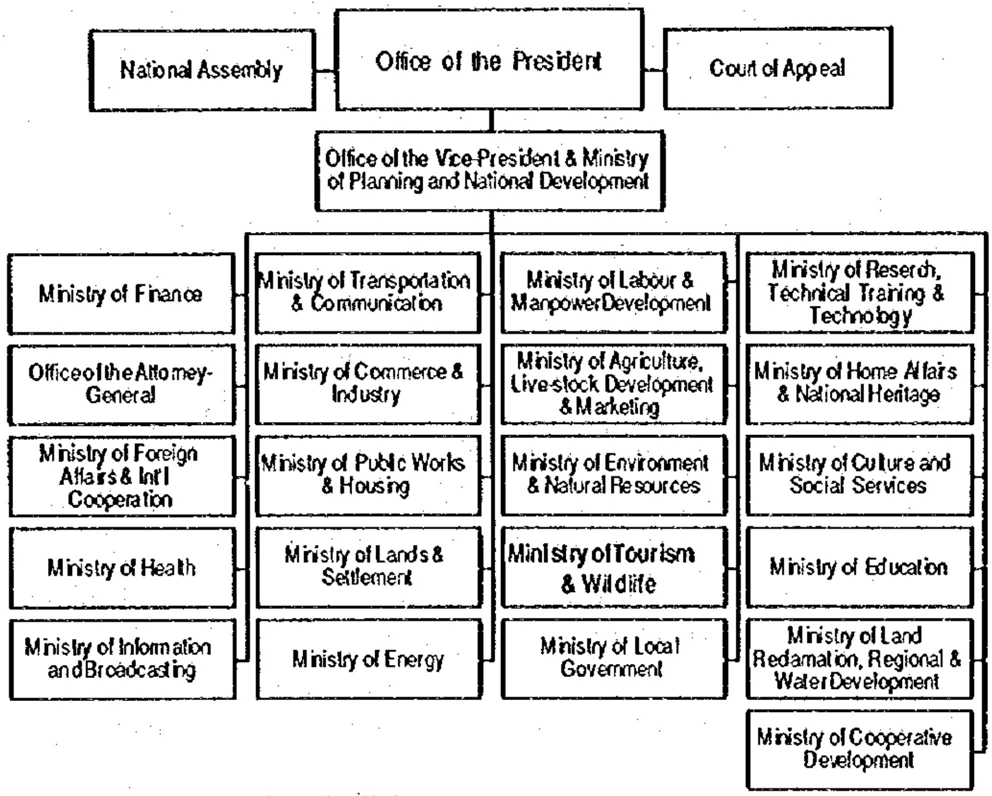
The structure of Kenya's government comprises twenty-nine organisations, of which twenty-one are technical ministries. The organisational chart of the government is shown in Figure A. 8. The ministry with jurisdiction over tourism is the Ministry of Tourism and Wildlife (MOTW).

The major functions of the ministry are as follows :

- Planning of tourism and personnel training for the tourism sector,
- Management and conservation of wildlife and cultural heritages, which form the base for tourism, and
- Promotion of international and domestic tourism aiming at earning foreign exchange and generating employment.

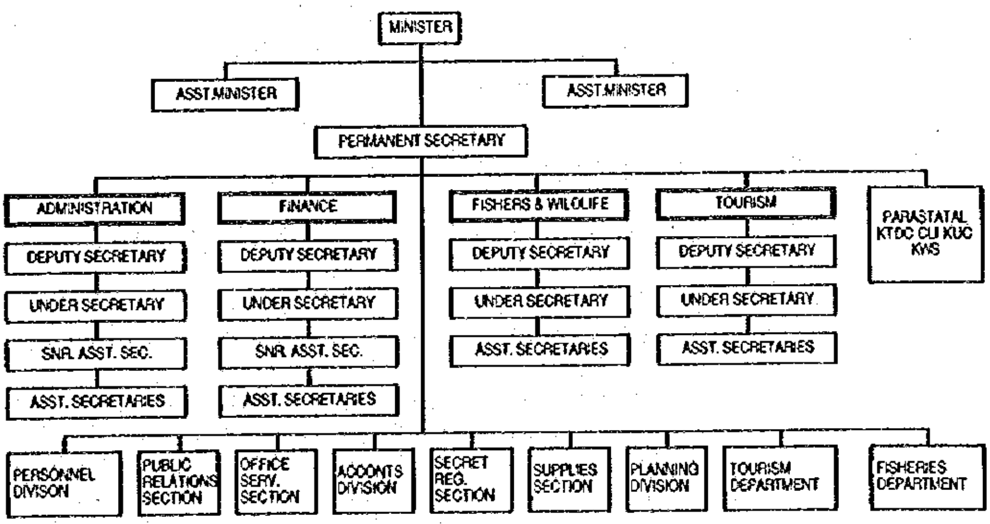
Figure A. 9 provides a sketch of MOTW's organisational divisions.

Figure A. 8 Organisation Chart of the Kenyan Government



Source: Ministry of Tourism and Wildlife

Figure A. 9 Organisation Sketch of MOTW



Source: Ministry of Tourism and Wildlife

The Tourism Department maintains two tourist offices within Kenya, that is in Mombasa and in Malindi. In addition, there are seven overseas tourist offices in London, Paris, Frankfurt, Zurich, Stockholm, New York and Los Angeles. These offices act as information centers and also promote the international markets' awareness of Kenya as a travell destination.

During interviews with hoteliers, travel agents and tour operators conducted by the study team, the following obstacles were frequently mentioned :

- Shortage of tourism marketing experts,
- Inadequate cooperation by the MOTW towards tourism promotion with the private sector,
- Inadequate of promotion funds, tourism promotion materials, and experienced personnel in tourist offices,
- Too many complex and time-consuming licensing requirements for the tourism sector in Kenya, and
- Coordination between public agencies (e.g. Investry Dept., Fisheries Dept. KWS, NMS, etc.) responsible for protection and conservation of tourism related resources.

The WTO Mission Report (January 1992) points out that tourism related infrastructure development projects tend to be granted by other ministries without consultation with the MOTW for their suitability. Likewise, the same report warns that the MOTW does not have sufficient permanent coordinating mechanism with the Ministry of Planning and National Development, in spite of the fact that tourism is the largest foreign exchange earner.

3.3. State Corporations and Parastatals

3.3.1. Kenya Tourist Development Corporation (KTDC)

The main objectives of the Corporation (as outlined in the Kenya Tourist Development Corporation Act) can be summarised as follows :

- Investigate, formulate, implement and/or finance tourist projects,
- Undertake improvements and/or expansion of new or existing tourist enterprises as well as their promotion, and

- Carry out projects or activities related to the tourism sector, which aim at that sector's improvement, including the general improvement and preservation of Kenya's wildlife and natural resources.

Initially, the KTDC was responsible for promoting construction and local ownershiop of hotel etablishments, either by joint venture tourist hotels, or through financing tourism related enterprises. Its role then developed into promoting more local ownership and participation in tourism enterprises.

The Revolving Fund Programme was set up with the primary purpose of assisting Kenyans with loans on favourable terms and conditions to set up new or acquire existing businesses in the tourist sector. As the sector grew, so did the demand for loans and the revolving fund could no longer cope with the number of applications. This was compounded by the slow recovery rate of the first loans and insufficient allocation of funds from the Treasury/Ministry of Finance.

The government is considering to transform the KTDC into the Tourism Development Bank of Kenya to meet the needs of small/medium scale owners of tourism related enterprises.

The WTO suggested that the KTDC should support small local hotels, restaurants and lodges. The KTDC, however, doesn't seem to be satisfied with that role, because the risk of retrieving money lent to these small hotels is high, as most of them are inexperienced and commercially not very viable.

3.3.2. Kenya Utalii College (KUC)

Today, the KUC has a capacity for 540 student trainees per annum and offers various courses in hotel management, front office operations, food and beverages production, travell operations and tour guide training, hotel-keeping and laundry, and other services. The college also offers refresher courses to the personnel serving various tourism related enterprises and has launched an out-reach field extension programme through the establishment of a Mobile Training Unit, where college teachers are able to train medium and small scale establishments' personnel based on their particular circumstances; that is using facilities and resources available on site.

Utalii Hotel, one of the most important training facilities, serves as an application facility with a capacity for about 650 students, who pursue various hotel courses and find here opportunities for practical training. Although the hotel is primarily a training facility, it also plays an important role in generating revenues, which contribute to the running of the college as a whole.

The training costs of Kenyan students at the college are funded in principal by the 2% training levy administered by the Catering Levy Trustees, and costs for students from various countries are funded through scholarships offered by donor governments, institutions or self sponsorship.

However, the college has been unable to cope with the excessive demand for training from school graduates and employees within the tourism sector without formal and/or relevant training in the sector on the one hand, and the very high demand from the tourism establishments for trained personnel, on the other hand. In 1992 for instance, 9,143 people applying for trainee courses competed for the 219 vacancies that were available at the college.

In addition, the college has been facing the following serious problems, which are jeopardising both, the standards and operations of the college :

- Facilities including the hotels are far from being adequate as the actual student population today exceeds the planned capacity by about 37%,
- A great number of the training equipment is obstacle,
- Classroom space is inadequate and lacks modern teaching aids,
- The model application hotel formerly classified as a five star hotel has been downgraded to a four star hotel and is badly in need of refurbishment,
- Loss of professional staff to the sector (brain drain), and
- Staff offices are inadequate and overcrowded.

In November 1991, the President directed that 85% of the total levy collected should be channelled to the college. However, this directive is yet to be implemented. When the directive is implemented, some of Utalii's problems rooted in the financing of the college may be solved.

3.3.3. The Catering Levy Trustees (CLT)

The CLT administers the catering levy, which is raised on the basis of all hotels' and restaurants' turnover, for the financing and training of Kenyan students at the college. The functions of the trustees are :

- Control and administer the fund,
- Establish, equip and control establishments, which train future hotel and restaurant staff, and

- Make payments out of the fund if necessary for the establishment, equipment and maintenance of such establishments, and the payment of training fees for persons attending for training purposes.

3.3.4. Kenya Wildlife Services (KWS)

The KWS was established in 1989 under the Wildlife Conservation and Management (Amendment) Act, 1989. The organization is a parastatal and is responsible for the conservation of Kenya's wildlife, that is plants as well as animals. The KWS is attached to the Ministry of Tourism and Wildlife, but its operations are relatively free from the constraints of a department within the civil service. The principal goals of the Kenya Wildlife Service are :

- Conservation of the natural environment of Kenya and her fauna and flora, for the benefit of present and future generations and as world heritage,
- Usage of Kenya's wildlife resources in a sustainable manner for the economic development of the nation and for the benefit of people living in wildlife areas, and
- Protection of people and property from injury or damage caused by wildlife.

The Wildlife Conservation and Management (Amendment) Act defines national parks, national reserves and other open areas as wildlife reserve areas. The KWS has eight regional offices in major regions of the country and under each regional office there are national park offices within the region. Each national park office is responsible for the conservation and management of national parks. In addition, two national reserves legally regarded as national parks are also under KWS's control.

The KWS published "A Policy Framework and Development Programme" which summarises the general policies and suggested action programmes of KWS for the period 1991 to 1996. The KWS has developed a Wildlife Conservation Plan. The programme summarises sound management of national parks and reserves and also contains tourism promotion policies for earning foreign exchange.

3.3.5. Bomas of Kenya Ltd.

Bomas of Kenya Limited, a limited liability company is a fully owned subsidiary of the Kenya Tourism Development Corporation (KTDC), which in turn is a fully owned public enterprise under the MOTW. Bomas of Kenya owns a theater with a seating capacity for 4,000 people on a 83 acre leasehold site in Langata, situated on the outskirts of Nairobi City. The company's principal activity is to perform cultural activities such as traditional dances and it displays traditional villages, arts and craft etc., as a means of entertainment for tourists and local residents and also as a means of promoting Kenyan culture. The MOTW is considering to establish of a tourist hotel and an amusement park, which would give more variety of entertainment to its site. It is inviting interested investors to enter a joint venture for the establishment of the project.

3.4. Public Enterprises and Private Organisations

3.4.1. Kenya Airways

Kenya Airways, established after the collapse of the East Africa Community in 1877 is wholly-owned by the Government of Kenya. Today, all owns three A-310 airbuses, two Boeing 737-200 and three Fokker 50s' Prop Jets in its fleet. It has 4 branch offices in Kenya and 23 overseas, operates 36 international routes to/from 22 cities and 4 domestic to/from 4 cities, and makes a profit of 450 million Kenyan Shillings by carrying 805,000 passengers in fiscal year 1993. The airline, however, has continued to face many difficulties in its management and operations and has not quite succeeded in achieving most of the objectives for which it was established. The Government of Kenya is addressing this issue. In June 1992, it awarded a contract to Speedwing Consultants of the UK to streamline the airline into an economically viable business entity. The airline is now under privatisation and makes efforts to strengthen its core. Therefore, Kenya Airways is presently not undertaking further steps either to expand its routes or to improve flight connections through joint flight and/or other arrangements.

Easy access is a crucial factor for inducing tourists to visit Kenya, so the airline will be expected to play a more positive role in the tourism development of the country.

3.4.2. The Kenyan Association of Tour Operators (KATO)

KATO is an association that represents the interests of tour operators in Kenya. It comprises some 250 member companies. The main objectives of the association are to:

- Provide a forum for government licensed tour operators in Kenya,
- Act as a representative for tour operators when dealing with other bodies,
- Promote tourism in Kenya and to improve service standards by tour operators,
- Uphold the business ethics of members, and to
- Negotiate and enter into agreements that will improve the tourism sector.

KATO is managed by an executive committee comprised of 10 board members, who are elected annually. It has 10 subcommittees whose activities are as shown in Table A. 54.

Table A. 54 Sub-committees of KATO

Name of Sub-committee	Main Activities and Discussed Issues
Marketing	Promotion and marketing Preparation of promotion videos and participation in travel fairs Issues on National Tourism Board
Security	Establishment of tourist police
Ethics and Standard	Improvement of tourist facilities and services Licensing procedure to maintain a service level
Transport	Request for the improvement of road conditions Request for the Improvement of Taxation and insurance cost
Education, Environment and Eco-Tourism	Promotion of tourism to local people as a part of education Courses and programmes in Utalii College
Regional Facilitation and Airport	Strengthening the role of Kenya Airport Authorities and improvement of formalities at the international airports
Tented Safari Operators	Standardisation of facilities and services in conjunction with pricing Taxation and security Provision of information
Hotel and Lodge	Method of payment and cancellation
Coast Branch	Environmental problems Beach boys and employment
Domestic Tourism	Provision of budget hotels Discount of transportation

Source: Kenyan Association of Tour Operators, JICA Study Team

3.4.3. The Kenya Association of Travell Agents (KATA)

KATA has presently 78 members and 13 affiliated members nationwide, which are licensed IATA approved travell agencies. As a national association, KATA is a full member of the Universal Federation of Travell Agents Association (UFTAA) which represents 84 countries at its headquarters in Monaco. KATA is managed by an executive committee made up of senior employees of travell agencies, who are elected annually. Their participation is on a voluntary basis. KATA is represented in committees in the MOTW, the Central Bank of Kenya, The Civil Aviation Board, the Board of Airline Representatives, the Kenya Association of Tour Operators and the Kenya Hotelkeeper and Caterer Association.

At present, KATA works in close cooperation with Kenya Airways.

3.4.4. The Kenya Association of Hotelkeepers and Caterers (KAHC)

KAHC is the principal umbrella organisation representing the interests of the hotel and catering industry in Kenya. It is a limited company by guarantee and has no share capital. The main objective for which the association was established is to encourage, promote and protect the interests of proprietors and other persons interested or concerned in hotels, restaurants and other allied trades. In pursuant to these broad objectives, the association undertakes such functions and responsibilities as :

- Being the principal spokesman for the sector nationally and internationally,
- Providing a principal information exchange network for its members and the sector,
- Promoting and protecting good industrial relations and interests of its members, and
- Fostering good industrial relations between the association and the workers' unions.

3.4.5. Other Related Organisations

(1) Local Authorities

Local authorities, such as country/urban councils, do not have tourism sections, to deal with tourism matters and resource management, even when national parks and/or tourism-oriented facilities fall under their direct authority and responsibility.

(2) Investment Promotion Centre (IPC)

The IPC's primary objective is to promote growth through private investment. The IPC gives both, local and foreign investors advice and guidance on existing and new projects in Kenya, as well as recommending necessary policies and legal reforms to improve the investment climate.

The IPC may be called upon to provide the following :

- Basic information on Kenya's investment climate,
- Detailed information on investment rules and procedures,
- Information on major investment opportunities,
- Advice on how to obtain financing,
- Suggestions on how to succeed in the Kenyan environment, and
- Assistance in arranging site visits.

The government introduced a one-stop approval system through the IPC with a view to expediting investment procedures. Thus, the centre is described as a "one stop-shop" where potential investors can obtain information, put forward proposals and obtain all the clearances and licences required to proceed with the investment. Regular meetings and discussions are held through the Joint Industrial and Commercial Consultative Council, between government ministries, the IPC and the Kenya Chamber of Commerce and Industry on matters of interest and importance to the government and the private sector.

4. The Tourism Sector and Tourism Marketing

4.1. Tour Operators and Travell Agents

4.1.1. Tour Operators

The total number of tour operators in Kenya is estimated to be about 2,240, concentrating mainly in Nairobi and Mombasa. Otherwise, they are distributed through Kenya as shown in Table A. 55. These numbers include travel agents. It is difficult to separate tour operators and travel agents, because tour operators manage tour agencies as annexes at the same time in many cases. The reason for this is that the inbound tours, which are connected with tour operators, play a leading role in foreign exchange earnings. The outbound and domestic tours, which are connected with the tour agents, though much less than the inbound tours, should however not be ignored. The leading Kenyan tour operators are organised in KATO (Kenyan Association of Tour Operators), about which some details were provided in the previous section.

Standard Kenyan tour operators arrange all kinds of reservations for tours, actually acting for overseas travel agents, which originally plan and sell the tours. They also possess their own vehicles for safari, drivers, guides who speak foreign languages, and in some of cases, even hotels, lodges and tents.

They have various characteristics and range in scales from an office with five or six staff members up to offices with many branches and approximately 500 staff members. In terms of market characteristics, they range from only one specific foreign travel agent up to multilateral ones, targeting their operations towards mass tourism to the Coast, towards tented safaris, the Lake Turkana or towards Kenyan tribes' folklore and so forth, respectively. They have, of course, been quite involved in the growth of Kenya's tourism. The members of KATO have confirmed the following:

- Tourism is a complex trade,
- The tourism product or holiday is a combination of visible and invisible elements,
- The visitor buys a 'dream' and the only proof that this dream exists is the attractive brochure and videos in the market place, and
- Once they have sold the dream to the visitor, they have to live up to their promises and deliver a quality product.

Table A. 55 The Number of Tour Operators (May 1994)

Tourism Region	Province	No. of tour Operator	Shair (%)
NAIROBI	Nairobi	1,113	49.7%
CENTRAL	Nakuru	27	1.2%
	Laikipia	25	1.1%
	Samburu	3	0.1%
	Nyeri	10	0.4%
	Muranga	1	0.0%
	Kiambu	9	0.4%
	Machakos	2	0.1%
	Meru	5	0.2%
	Isioro	2	0.1%
WESTERN	Baringo	3	0.1%
	Uasin Gishu	6	0.3%
	Trans-Nzoia	7	0.3%
	Kericho	1	0.0%
	Kisumu	16	0.7%
	Kakamega	2	0.1%
EASTERN	Taita Tavela	321	14.3%
MASAILAND	Kajiado	10	0.4%
	Narok	21	0.9%
COASTEL T.R	Mombasa	489	21.8%
	Kwale	66	2.9%
	Kilifi	90	4.0%
	Lamu	7	0.3%
TURKANA	Turkana	2	0.1%
WHOLE COUNTRY		2,238	100.0%

Source: MOTW, 1994

4.1.2. Travell Agents

The accurate number of travel agents in Kenya is not available, because many companies concerned with tourism manage both, travell agents and tour operators. However, there is a small number of pure travel agents. They never do tour operator business, but concentrate entirely on ticketing business and sell made-to-order trips for outbound and domestic travel. The ratio between outbound and domestic travel is different for every agent. On average, the ratio seems to be 80% to 20% on the base of their profits according to the Kenya Association of Travel Agents (KATA), which consists of 85 members nationwide.

With regard to basic tour-sale tools, almost all Kenyan travel agents do not have their own tourist information books composed of main tourist elements like accommodations, restaurants, transportation, tourist spots, souvenir shops and so forth. Therefore, their operations turn inefficient requiring a lot of communication by telephone, telex, facsimile and so on. The preparation of handmade information books has first priority; the automation of the information system has been planned by the MOTW, though. Their major concerns about Kenyan tourism promotion are as follows :

- They are supporting the establishment of proposed Tourism Marketing Board in MOTW, which would be in charge of statistics, information management, promotion and so on and be managed by professionals,
- Development of new circuits for tourists required to increase the capacity utilisation of existing destinations, and
- In accordance with the diversification of destinations, tourists' products should be diversified. 'Specialised Safari', 'Activity Holiday' and so on are examples. Activity Holidays include canoeing, rafting, horse-back riding, cycling, bird-watching, butterfly-watching, tourism horticulture.

4.1.3. Transporters

Transporters in Kenya are outlined in Table A. 56.

Table A. 56 Outlines of Transporters in Kenya

	Outline
Air	A Nairobi-centered network is regularly connected to main cities, smaller towns and certain national parks. Chartered flights by small planes are available for air safari.
Railway	Daily but only one night train with sleeping and dining cars runs between Nairobi and Mombasa, and Nairobi and Kisumu. Also Nairobi-Malaba (Uganda border) night trains run three times par week. All trains run very slowly and take a long time up to their destination.
Car Hire	Car hire is the most popular transport method for Safari. 4WD vehicles are suitable, as they often get stuck during safari. Customers can hire vehicles like land rovers not only from tour operators but from full- time dealers.
Bus	Kenya has a network of regular buses, but they are not suitable for tourists, because they are very crowded. There is no regular sightseeing bus in Kenya, but hire buses are available for group tours.

Source: JICA Study Team

4.2. Hotels and Restaurants

4.2.1. Hotels

- The total number of classified hotels is 240, but they are concentrated in the Coast Province (84, equivalent to 50%) and Nairobi (43, equivalent to 25.6%).
- Most of the "High" classified hotels are mostly foreign affiliated.

4.2.2. Restaurants and Other Entertainment

- Kenya's registered restaurants, which total 736, are concentrated in Nairobi (45.3%) and at the Coast (35.1%).
- In general, hospitality to the guests by restaurants' waiters is technically not satisfactory.
- In some restaurants, the payment system is not transparent to a foreign tourist.

- Foreign tourists have only a little chance to enjoy authentic Kenyan traditional culture.

4.3. Tourism Marketing

Marketing activities for Kenyan tourism by the MOTW are summarised in Table A. 57. The MOTW's total budget for tourism promotional activities in 1993/94 was approximately K£1.8 million.

Table A. 57 Recurrent Expenditure Estimates 1993/94 on Tourism Promotion

HEADS		TITLE and ITEM	Production of Films & Brochures	Advertising and Publicity	Trade Fairs and Exhibitions	Show Expences	Total
Headquarters Administrative Services			-	7,000	-	Official Calendar 100,000	107,000
Tourism Services	Headquarters Administration and Planing		40,000	45,000	-	15,000	100,000
Tourism Services	Overseas Tourism Promotion (by each Office)	New York	15,000	35,000	20,000	-	70,000
Tourism Services	Overseas Tourism Promotion (by each Office)	London	15,000	35,000	20,000	-	70,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Frankfurt	15,000	35,000	20,000	-	70,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Stockholm	15,000	35,000	20,000	-	70,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Paris	15,000	35,000	20,000	-	70,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Lusaka	-	10,000	-	-	10,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Hong Kong	-	20,000	-	-	20,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Zurich	15,000	35,000	20,000	-	70,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Cairo	-	5,000	-	-	5,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Lagos	-	5,000	-	-	5,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Tokyo	-	40,000	-	-	40,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Ottwa	-	30,000	-	-	30,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Jeddah	-	5,000	-	-	5,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Harare	-	5,000	-	-	5,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Abu-Dhabi	-	10,000	-	-	10,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Dubi	-	10,000	-	-	10,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Canberra	-	40,000	-	-	40,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Washington	-	10,000	-	-	10,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Rome	-	30,000	-	-	30,000
Tourism Services	Overseas Tourism Promotion (by each Office)	The Hague	-	10,000	-	-	10,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Brussels	-	20,000	-	-	20,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Vienna	-	5,000	-	-	5,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Tehran	-	5,000	-	-	5,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Windhoek	-	15,000	-	-	15,000
Tourism Services	Overseas Tourism Promotion (by each Office)	Johannesburg	-	30,000	-	-	30,000
Tourism Services	Overseas Tourism Promotion (by each Office)	SUBTOTAL	90,000	515,000	120,000	-	725,000
Tourism Services	Tourism Services		-	745,615	70,000	-	815,615
Tourism Services	Domestic Tourism Services	Malindi Tourist Office	7,000	10,000	-	6,000	23,000
Tourism Services	Domestic Tourism Services	Mombasa Tourist Office	8,000	10,000	-	8,000	26,000
Tourism Services	Domestic Tourism Services	SUBTOTAL	15,000	20,000	-	14,000	49,000
THE SUM TOTAL			145,000	1,332,615	190,000	129,000	1,796,615

Source: 1993/94 Estimates of Recurrent Expenditure of the Government of Kenya

Promotional activities undertaken in cooperation with the private sector are as follows :

Headquarters Administrative Services issues an official calendar of KENYA, introducing typical Kenyan tourist spots. This is done in cooperation with Kenya Airways that deliveries them world-wide, Tourism Services issues brochures such as 'KENYA HOLIDAY MAP AND GUIDE'. In many cases the brochures were produced by means of adding up several budgets for each section or office,

Budgets for participation in trade fairs and exhibitions were allocated for the following activities abroad in 1993 :

- Holiday and Travel shows in Australia and New Zealand,
- Matka'93- Finnish International Exhibition in Helsinki,
- Tur-Swedish (International Tourism Exhibition in Gothenburg),
- B.I.T. 1993 Milan-Italy,
- I.T.B. Berlin-Germany,
- B.T.F. Fair,
- Flen-Sweden (as Kenya Information Seminar),
- Kenya Food Festival in Johannesburg - South Africa (as Kenya Information Seminar), and
- Kenya Tourism Day at Great George Street, London (as Kenya Information Seminar).

For domestic tourism promotion the following activities were undertaken in 1993 :

- Participation in all major Agricultural Society of Kenya Shows held at Kisumu, Embu, Mombasa, Nyeri, Garissa, Nairobi, Kitale and Kakamega, and
- Organisation and participation in the Kenyan International Tourism Exhibition (KITE).

5. Public and Private Investment

5.1. Introduction

The major objectives of this section are:

- Identify investment requirements in the study and classify them into public and private investment projects/programmes,
- Make projections on availability of public and private fund sources to meet the investment requirements, and
- Present external fund requirements and financing conditions, thereto for implementation of investment requirements in this study.

The present section rewievs the historical trend of investments in the tourism sector. The current Public Investment Programme (PIP), covering the period from FY 1994 to FY 1996 was reviewed as well.

5.2. Capital Formation in GDP

All investment at the national economy level is aggregated in "Gross Fixed Capital Formation (GFCF)". GFCF includes the investment of all sectors including economic and social sectors and public administration. It covers investments in the public private sectors. The historical trend of the GFCF since 1980 is shown in Table A. 58. As shown in this table, the share of GFCF in GDP (1982 prices, at factor cost) varies from 16% to 29% for the five years between 1980 and 1992 for which data were available, with an average of 19%. Compared to other African countries, this percentage is not that low, but is lower than that of developing countries in Asia.

The trend of the GFCF with a breakdown of public and private sectors is shown on Table A. 59 for the five years since 1985 for which data were available. As shown in the table, the ratio of the public sector to the total GFCF varies from 37% to 49% with the average of 42%. The majority of the investment in the national economy is carried out by the private sector.

Table A. 58 Trend of Gross Fixed Capital Formation in GDP

Unit: K£ million

	1980	1985	1990	1991	1992	Average
1) GDP at market prices	3,337.3	3,781.0	4,971.7	5,043.2	5,065.2	22,198.4
	(100)	(100)	(100)	(100)	(100)	(100)
2) GDP at factor cost	2,768.2	3,314.5	4,223.6	4,311.5	4,327.4	18,945.2
3) Imports	1,524.1	901.7	1,476.7	1,412.4	1,475.5	6,790.4
	(45.7)	(23.8)	(29.7)	(28.0)	(29.1)	(30.6)
4) Exports	887.7	923.2	1,378.3	1,365.1	1,322.5	5,876.8
	(26.6)	(24.4)	(27.7)	(27.1)	(26.1)	(26.5)
5) Gross Fixed Capital Formation	807.3	597.2	786.5	762.2	691.3	3,644.5
(% of GDP at market prices)	(24.2)	(15.8)	(15.8)	(15.1)	(13.6)	(16.4)
(% of GDP at factor cost)	(29.2)	(18.0)	(18.6)	(17.7)	(16.0)	(19.2)
6) Change in Stocks	223.7	279.5	169.4	89.9	23.4	785.9
	(6.7)	(7.4)	(3.4)	(1.8)	(0.5)	(3.5)
6) Public Consumption	694.7	710.0	848.7	898.0	980.0	4,131.4
	(20.8)	(18.8)	(17.1)	(17.8)	(19.3)	(18.6)
7) Private Consumption	2,247.9	2,173.0	3,265.5	3,340.3	3,623.4	14,650.1
	(67.4)	(57.5)	(65.7)	(66.2)	(71.5)	(66.0)

Note: 1) At 1982 constant prices
2) Figures in parentheses show percentage of GDP at market prices except those of lower column for GFCF which show percentage of GDP at factor cost.
3) "Average" is the column for obtaining the averaged percentage computed based on the data available on this table.

Source: Historical Economic Data for Kenya 1972-92, MPND (Statistical Abstract 1991)

Table A. 59 Trend of GFCF by Public and Private Sectors

Unit : K£ million

	1985	1986	1987	1988	1989	1990	Average
1) Total GFCF	597.2	668.1	707.9	766.7	760	760.8	4260.7
2) Private	363.3	387.4	446.2	446.7	434.2	390.7	2468.5
-Non-Monetary	56.4	56.7	55.5	53.4	53.9	47.7	323.6
-Modem	306.9	330.7	390.7	393.3	380.3	343	2144.9
3) Public	233.9	280.7	261.8	320.1	325.8	370.1	1792.4
4) Ratio of Public to Total GCFC (%)	39.2	42	37	41.8	42.9	48.7	42.1

Note: (1) GFCF at 1982 constant prices
(2)"Average" is the column for obtaining percentages computed based on the data available on the table.
(3) Figures of 1990 are provisional.

Source: Statistical Abstract, 1991

The past trend of GFCF with a breakdown of major sectors including the sector "Trade, Restaurants and Hotels (TRH)" is shown in Table A. 60. The share of the TRH sector in the GFCF ranges between 2% and 6% with an average of 4%. Among economic sectors, many investments were made in sectors such as transportation and communication, manufacturing and electricity and water.

Table A. 60 Trend of Gross Fixed Capital Formation (GFCF) by Sector

Unit: K£ million

	1980	1985	1990	1991	Average
1) Total GFCF	807.3	597.2	786.5	764	738.75
2) Traditional Economy	54.4	56.4	49.9	45.1	51.45
3) Monetary Economy	752.9	540.8	736.6	718.9	687.3
-Agriculture	61.9	50.8	55.1	51.2	54.75
-Manufacturing	110.1	65.2	130.9	111.5	104.425
-Transport & Comm.	127.8	106.6	113.6	137.5	121.375
-Trade,Rest. & Hotels	39.5	24.2	14.7	47.2	31.4
	(4.9)	(4.1)	(1.9)	(6.2)	(4.3)
-Other Sectors	413.6	294	422.3	371.5	375.35

Note: (1) GFCF at 1982 constant prices
(2)"Average" is the computed average of the data on the table.
(3) Figures in the parentheses show the percentage of the total GFCF.
Source: Historical Economic Data for Kenya 1972-92, MPND (Wilson1992)

No direct statistics on national income exist individually on the tourism sector including, output, value added, employment and investment. The data of the tourism sector is scattered in a few sectors such as "Trade, Restaurants and Hotels", "Transport and Communications" and "Community, Social and Personal Services". In this section, data of the following subsectors were used to aggregate the data for the tourism sector.

a. Trade, Restaurants and Hotels

- Restaurants, cafes and other eating and drinking places, and
- Hotels, rooming houses, camps and other lodging places.

b. Transport and Communication

- Supporting services to land transport,
- Air transport carriers including aircraft rental,
- Supporting services to air transport, and
- Booking and travell agencies.

c. **Community, Social and Personal Services**

- Libraries, museums, botanical and zoological gardens and other cultural services,
- Pleasure boats for hire,
- Other amusement and recreational services, and
- Hunting and tourist guide services.

These aggregated data were compared to the total figures of the TRH sector, in order to obtain a hypothetical ratio of the tourism sector in the TRH sector. The data of the tourism sector were estimated based on the total TRH data multiplied by the above mentioned ratio. Due to a limited availability of a detailed subsector breakdown, the data of "Wage Employment by Industry" and "Earnings by Industry and Major Towns" both for the period from 1984 to 1990 were used to obtain the above mentioned hypothetical ratio, which was computed at 50.5% for the total TRH sector. In other words, in this section, the data of the tourism sector were estimated on investment at a half of the whole TRH sector figures.

The above mentioned ratio will be applied for estimating the availability of the fund for investment in further stages of this study.

5.3. Central Government's Budget and PIP

The source of public investment is the annual budget of the central government. The public investment is funded by the "capital expenditure" of the central government's development budget. The trend of the capital expenditure for the recent years, is shown in Table A. 61. As shown in this table, the amount of capital expenditure has been increasing and its ratio to the total expenditure including the recurrent and development expenditures was 19.1% in 1992/93.

Table A. 61 Trend of Central Government Finance

Unit : K£ million

	1980/81	1985/86	1990/91	1991/92	1992/93
1) Current Revenue	701.5	1205.6	2420.6	2852.3	3262.1
2) Current Expenditure	685.1	1250.8	2723	2793.8	3504.7
3) Development Expenditure	205.2	173.2	538.7	453.4	828.3
-Capital Revenue		3.8	16.2	0.7	1.3
-Capital Expenditure		177	554.9	454.1	829.6
-% of Total Expenditure	23	12.4	17	14	19.1
4) Net Lending	81.8	50.5	79.3	24.1	78.8
5) External Grants	19.6	54.8	208.3	232.4	513.4
6) Overall Deficit	-251	-214.1	-712.1	-186.6	-636.3
-% of current GDP	10.9	4.8	8.5	2	5.7
7) Deficit Financing					
-External Loans	126.8	-95	206.5	11.5	177.3
-Domestic Borrowing	67.5	204.2	530.1	344.9	795
-Long Term(net)	66.4	36.3	248.8	346.5	414.4
-Short Term(net)	1.1	167.9	281.3	-1.6	380.6
-Change in Cash Balance	-56.7	-105.1	24.5	169.6	336
-Total	251	214.3	712.1	186.8	636.3

Source: Historical Economic Data for Kenya 1972-92, MPND (Economic Survey, 1993)

The central government's budget has shown a big deficit every year. The deficit represented to 5.7% of the current GDP in 1992/93. The deficit has been financed mainly by domestic borrowings and by external loans . It is to be noted that external grants have become a significant revenue source in the central government's budget (Table A. 61).

The government's annual capital expenditure is compiled based on the Public Investment Programme (PIP), which is prepared by each line Ministry reflecting the development policies and strategies stipulated in the Mid-term National Development Plan (MNDP). The current PIP 1994/95-1996/97 is shown in Table A. 62. The public investment of 1,226 projects in total, including 1,039 ongoing and 187 new projects, are listed in the current PIP for the period from 1994/95 until 1996/97. The total estimated costs amount to K£11,937 million, of which K£7,104 million (value reviewed on June 30,1994) are required for completion. In the fiscal year of 1994/95, the investment of K£1,656 million, of which 86% are for ongoing projects, are proposed for investment. The ongoing projects have a priority in funding. For the proposed investment in 1994/95, 85% of the total investment requirement are planned to be financed from external funds.

Table A. 62 Public Investment Programme 1994/95 - 1996/97

Sector	Category	Projects		Total Estimated Costs		Balanced Required to Complete		Proposed in 94/95	
		Number	% Total	K£ mil.	% Total	K£ mil.	% Total	K£ mil.	% Total
Economic Sector	Ongoing	595	89	4,379	88	2,545	83	803	81
	New	64	10	546	11	522	17	184	19
	Total	659	100	4,959	100	3,067	100	988	100
	GOK Funded	393	59	1,250	25	682	22	134	14
	Ext. Funded	266	40	3,710	75	2,385	78	854	86
Social Sector	Ongoing	238	91	1,326	98	760	96	246	95
	New	24	9	32	2	32	4	13	5
	Total	262	100	1,358	100	792	100	259	100
	GOK Funded	191	73	467	34	348	44	29	11
	Ext. Funded	71	27	891	66	443	56	230	89
Public Administration	Ongoing	206	68	4,546	81	2,179	67	377	92
	New	99	32	1,074	19	1,066	33	33	8
	Total	305	100	5,620	100	3,245	100	410	100
	GOK Funded	212	70	1,911	34	1,527	47	92	22
	Ext. Funded	93	30	3,709	66	1,717	53	318	78
Total PIP	Ongoing	1,039	85	10,250	86	5,483	77	1,427	86
	New	187	15	1,652	14	1,620	23	230	14
	Total	1,226	100	11,937	100	7,104	100	1,656	100
	GOK Funded	796	65	3,628	30	2,557	36	254	15
	Ext. Funded	430	35	8,310	70	4,546	64	1,402	85

Source: Public Investment Programme 1994/95 - 1996/97

The PIP of the tourism sector is shown in Table A. 63. Forty-nine projects in total with the total estimated costs of K£525 million are listed. Some investments have been already done and the remaining balance required for completion is estimated at K£343 million, of which K£107 million are proposed for fiscal year of 1994/95. The whole investment proposed for 1994/95 is programmed to be allotted for ongoing projects. As shown in the same table, 19 projects are core projects and the remaining 30 out of 49 in total are high priority projects. These are defined in the PIP as follows:

a. "Core Projects"

Projects which will be accorded first priority for funding allocations in the budget exercises are development activities that are absolutely central and critical for carrying out the functions of the ministries .

b. "High Priority Projects"

Projects which will be given second priority for funding towards implement action of national and sectoral policies in the 7th National Development Plan.

Table A. 63 Public Investment Programme of Tourism Sector

Category	Project No.	Project % Total	Total Estimated Cost K£ mil.	Total Estimated Cost % Total	Ballance to Complete K£ mil.	Ballance to Complete % Total	Proposed in 94/95 K£ mil.	Proposed in 94/95 % Ballance
Ongoing	35	71	470	90	287	84	107	100
New	14	29	55	10	55	16	0	0
Total	49	100	525	100	343	100	107	100
GOK funded	31	63	42	9	40	12	1	1
Ext. funded	18	37	483	91	302	88	106	99

Category	Project No.	Project % Total	Total Estimated Cost K£ mil.	Total Estimated Cost % Total	Ballance to complete K£ mil.	Ballance to complete % TEC	Proposed in 94/95 K£ mil.	Proposed in 94/95 % Ballance
Core	19	39	307	58	239	78	95	40
High Priority	30	61	218	42	104	48	13	12
Total	49	100	525	100	343	65	107	31

Source: Public Investment Programme 1994/95 - 1996/97

Core projects in the current PIP of the tourism sector of the Ministry of Tourism and Wildlife (MOTW) comprise the following:

- Tourist Circuit Roads Programme,
- National Tourism Development Master Plan,
- Tourism Marketing and Promotion,
- Kenya/Seychelles Joint Tourism Promotion,
- Research Services and Design,
- Wildlife and Protected Area Management,
- Protected Area and Wildlife Services Project,
- Elephant Conservation and Community Wildlife Programme,
- Purchase of Residential Houses Abroad,
- Masai Mara Conservation Project, and
- Assistance for the KWS, PAWS Wetlands Programme.

In Table A. 64, the current PIP is compared to the historical PIPs since 1992/93. The table shows a significant decline in the number of projects included in the PIP, from 2,119 in 1992/93 to 897 in 1996/97, which represents 60% reduction over the five years. There are differences in the rate of decline among sectors. As shown on the table, the tourism sector does not show a decline but an increase in terms of the number of projects and amounts of allocations in the PIP.

Table A. 64 Projects and Allocations of Tourism Sector in PIP for 1992/93 - 1996/97

Unit: K£ million

		1992/93	1993/94	1994/95	1995/96	1996/97
PIP Total	No.Project	2119	1823	1177	1032	897
	Allocations	1160	1026	1656	1522	1086
	FB ceiling			1354	1489	1638
Tourism & Wildlife	No.Project	19	24	49	45	45
	Allocations	25	62	107	107	99
	FB ceiling			102	112	123

Note: "FB ceiling" means Forward Budget expenditure ceiling.
Source: Public Investment Programme 1994/95 - 1996/97

ANNEX 5 ANALYSIS OF EXISTING TOURISM RESOURCES

Annex 5 Analysis of Existing Tourism Resources

1. Tourism Regions and Destinations

1.1. Profile of Tourism Regions

The Central Tourism Region is a highland and mountain area, which includes Nairobi, the Central Province and part of the Eastern and Rift Valley Provinces. This tourism region is the gateway to Kenya and East Africa.

The Masailand Tourism Region is semi-arid land in the southern part of the Rift Valley Province. The national reserve and national park in this region are famous destinations for wildlife safaris.

The Western Tourism Region is a highland and mountain area, which includes Nyanza, the Western and a middle part of the Rift Valley Province. The region has highland natural resources and potential cultural resources.

The Turkana Tourism Region is a dessert and arid area, surrounding Lake Turkana in the Rift Valley Province. Currently, this region is one of the attractive destinations for tented safaris.

The Northern Tourism Region is a desert and arid area, which includes the northern part of the North Eastern and Eastern Provinces.

The Tana Basin Tourism Region is a semi-arid and arid area along the Tana River, which includes a Northern part of the Coastal Province and a Southern part of the North Eastern Province.

The Coastal Tourism Region is the area along the coast of the Indian Ocean, which is a major part of the Coastal Province. This region has been well developed and is one of the famous beach resorts in Africa.

The Eastern Tourism Region is an arid and semi-arid land, which includes a Southern part of the Eastern Province and a Western part of the Coastal Province. The biggest national park of the country, which is much in resources, is located in the region.

1.2. Distribution of Tourism Destinations

Among the tourism regions, 120 tourism destinations are presently identified as major tourism destinations and spots. As shown in Table A. 65 the characteristics of the presently identified tourism destinations are summarised as follows:

- Identified tourist resorts are located mainly in the Central, Western and Coastal Tourism Regions,
- Identified tourist resorts resources are not equally developed and utilized, and,
- Other tourism resources, such as cultural and historical resources are not adequately identified.

Table A. 65 Major Tourism Destinations Presently Identified

	National Parks & Reserves				Others	Total
	Developed	Developing	Under-developed	Total		
Central	5	3	9	17	12	29
Masailand	2	0	0	2	5	7
Western	0	1	9	10	8	18
Turkana	0	0	3	3	4	7
Northern	0	0	4	4	0	4
Tana Basin	0	1	6	7	2	9
Coastal	0	5	8	13	24	37
Eastern	2	0	2	4	5	9
Total	9	10	41	60	60	120

Source: Ministry of Tourism and Wildlife

2. Tourism Resources

2.1. Natural Resources

Abundant and characteristic natural resources in Kenya are located in the mountain and highland, arid/semi-arid land and coastal areas. Potential natural resources for tourism in those areas are geographic features for scenery and tourism activities, attractive and interesting flora and a well diversified fauna. Twenty-two national parks, 23 national reserves, 1 national sanctuary, local sanctuary, 4 national marine parks and 5 national marine reserves have been gazetted as a protected areas in which tourism is a major economic activity. The flora, fauna and ecological systems in the national parks, national sanctuaries and national marine parks are conserved and managed by KWS. Designated national reserves and national marine reserves are conserved and managed by the county councils.

Tourism resource analyses in the study could be assessed based on the data of designated national parks, national reserves, national sanctuaries, local sanctuaries marine parks and marine reserves.

2.1.1. Major Natural Tourism Resources

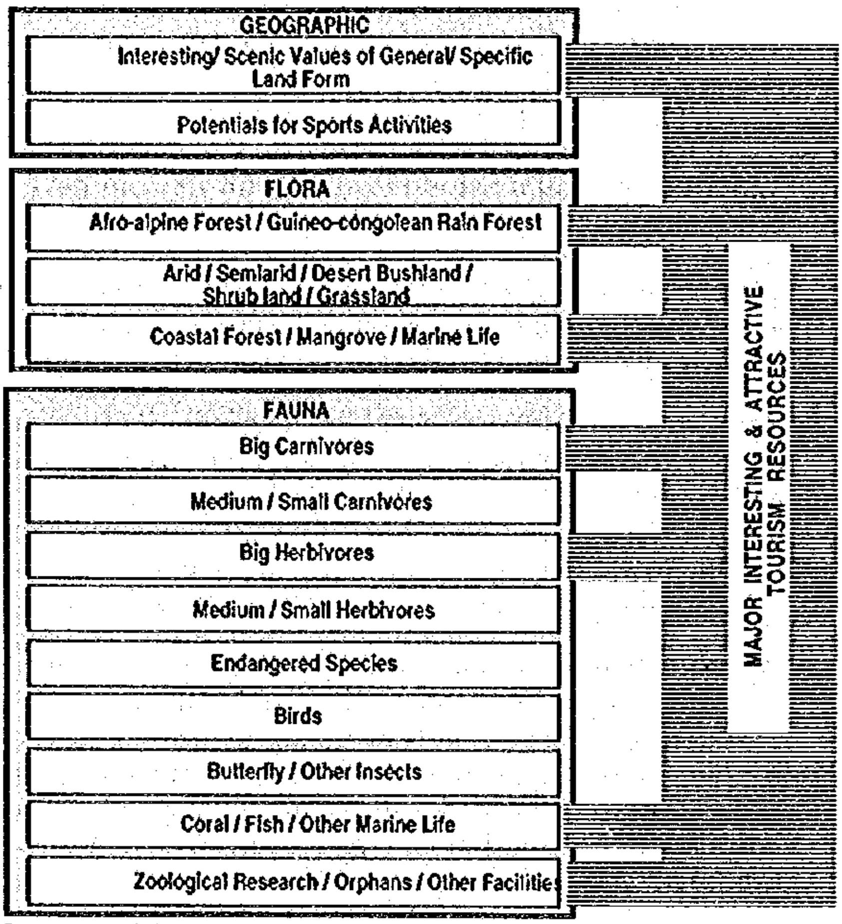
The major potential natural resources for tourism development can be categorised into the following three groups :

Geographic features, general and specific land forms, which present an attractive scenery; interesting scenic spots and places, which create an opportunity for sports and recreational activity for tourists,

The flora, general vegetation features in Kenya, can be roughly categorised into 8 regions. Bushland and shrubland on arid, semiarid and desert land represent the majority of Kenya's vegetation regions. On the other hand, afro-alpine forest, Guineo-congolean rain forest, coastal forest, mangrove and marine life are rare and interesting vegetation and resources attracting tourism to Kenya.

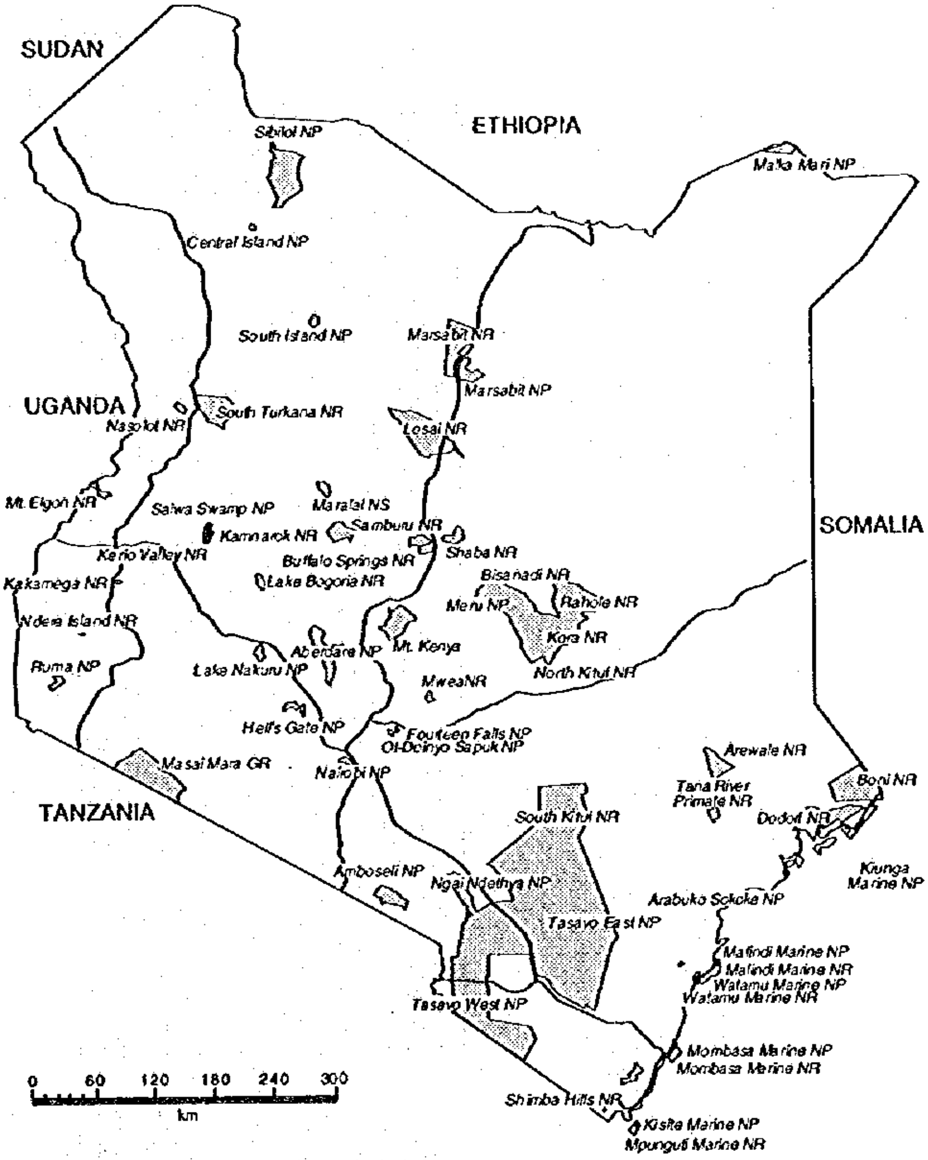
Wildlife (fauna) resources are widely spread in major tourism resources. Especially, big carnivore and herbivore species of mammals are the most attractive and interesting to tourists. Large herds of other medium and small mammals are also an attractive tourism resource. Other wildlife, birds and insects and endangered species of mammals are also important tourism resources, which attract tourists with special interest.

Figure A. 10 Major Natural Tourism Resources in Kenya



Source: JICA Study Team

Figure A. 11 Location of National Parks, Reserves and Others Natural Resources



Source: JICA Study Team, MOTW, KWS

Table A. 66 List of National Park, Reserve and Others

T. Region Code No.	Name	T. Area Code No.	Name	National Park/ Reserve/ Sanctuary and Marine National Park/Reserve	Established Year	Area (sqKm)
1	Central Tourism Region	11	Nairobi	Nairobi N.P.	1946	117.21
	7 National Parks	12	Lake Nakuru/Naivasha	Hells Gate N.P.	1984	68
	5 National Reserves	12	Lake Nakuru/Naivasha	Lake Nakuru N.P.	1967	188
	1 National Sanctuary	12	Lake Nakuru/Naivasha	Longonot N.P.	1983	52
		13	Mt. Aberdare	Aberdare N.P.	1950	766.19
		14	West Sambur	Lakipia N.R.	1991	165
		14	West Sambur	Maralal N.S.	1968	5
		15	East Samburu/Somali	Buffalo Springs N.R.	1985	131
		15	East Samburu/Somali	Samburu N.R.	1985	165
		15	East Samburu/Somali	Shaba N.R.	1974	239.1
		16	Mt. Kenya	Mount Kenya N.P.	1949	717.59
		17	Embu/Muranga	Ol-Doinyo Sabuk N.P.	1967	18.42
		17	Embu/Muranga	Mwea N.R.	1976	68.03
2	Masailand Tourism Region	21	Ambose	Amboseli N.P.	1974	392.06
	1 National Park/ 1 N. Reserve	23	Masai Mara	Masai Mara N.R.	1974	1,510.00
3	Western Tourism Region	32	Southern Victoria	Ruma N.P.	1983	120
	4 National Parks	33	Northern Victoria	Kisumu Impala L.S.	1986	4.2
	6 National Reserves	33	Northern Victoria	Kakamega N.R.	1985	44.68
		34	Mt. Elgon	Mount Elgon N.P.	1968	169.23
		34	Mt. Elgon	Saiwa Swamp N.P.	1974	5.5
		35	Pokot	Nasolot N.R.	1979	92
		36	Rift Valley Lakes	Kamnarok N.R.	1983	87.74
		36	Rift Valley Lakes	Rimoi N.R.	1983	65.7
		36	Rift Valley Lakes	Lake Bogoria N.R.	1970	107.05
		36	Rift Valley Lakes	South Turkana N.R.	1979	1,091.00
4	Turkana Tourism Region	41	Northern Turkana	Sibiloi N.P.	1973	1,570.85
	3 National Parks	42	Mid Turkana	Central Island N.P.	1983	5
		43	Southern Turkana	South Island N.P.	1983	38.8
5	Northern Tourism Region	51	Marsabit	Marsabit N.R.	1949	2,088.00
	1 National Park	52	Losai	Losai N.R.	1976	1,806.80
	3 National Reserves	53	Malka	Malka Mari N.P.	1989	876
6	Tana Basin Tourism Region	61	Western Tana Basin	Kora N.P.	1989	1,787.80
	2 National Parks	61	Western Tana Basin	Meru N.P.	1966	870.44
	5 National Reserves	61	Western Tana Basin	Bisanadi N.R.	1979	606
		61	Western Tana Basin	North Kitsui N.R.	1979	745
		61	Western Tana Basin	Rahole N.R.	1976	1,270.00
		63	Eastern Tana Basin	Arawale N.R.	1974	533.24
		63	Eastern Tana Basin	Tana River Primate N.R.	1976	169
7	Coastal Tourism Region	71	South Mombasa Coast	Shimba Hills N.R.	1968	192.51
	1 National Park	71	South Mombasa Coast	Kisite Marine N.P.	1978	39
	3 National Reserves	71	South Mombasa Coast	Mpunguti Marine N.R.	1978	11
	4 National Marine Parks	72	Mombasa Coast	Mombasa Marine N.P.	1986	10
	5 National Marine Reserves	72	Mombasa Coast	Mombasa Marine N.R.	1986	200
		73	Malindi Coast	Arabuko Skoke N.P.	1990	6
		73	Malindi Coast	Malindi Marine N.P.	1968	6
		73	Malindi Coast	Watamu Marine N.P.	1968	32
		73	Malindi Coast	Malindi Marine N.R.	1968	213.09
		73	Malindi Coast	Watamu Marine N.R.	1968	32
		75	Northern Coast	Boni N.R.	1976	1,339.00
		75	Northern Coast	Dodori N.R.	1976	877.39
		75	Northern Coast	Kiunga Marine N.R.	1979	250
8	Eastern Tourism Region	81	Chyulu	Chyulu N.P.	1983	470.9
	3 National Parks	82	Eastern Tsavo	Tsavo East N.P.	1948	11,747.00
	1 National Reserve	82	Eastern Tsavo	South Kitsui N.R.	1979	1,833.00
		84	Western Tsavo	Tsavo West N.P.	1948	9,065.00

Note: N.P - National Park, N.R - National Reserve, N.S- National Sanctuary
Source: JICA Study Team, MOTW, KWS

2.1.2. Tourism Resources of Geographic Feature

General and specific geographic features are a major tourism resource. They present attractive scenery and interesting scenic spots for sightseers and create opportunities for sports and recreational activities for tourists.

A typical scenery in Kenya could be represented by the panoramic view of the Rift Valley, the view of mount Kenya, Kilimanjaro and Mt. Elgon and the contrasting view of white coral sandy beaches/green coastal forests/blue skies and the sea.

Rock towers, small craters and crater lakes, caves, island geysers, glaciers and other land forms are interesting scenic spots.

Opportunities for sports and recreational activities for tourists are based on geographic features. For example, Mt. Kenya offers opportunities for climbing, rock climbing and trekking. The Indian Ocean provides attractive fishing and marine sports opportunities. The coastal area and coral reefs provide snorkelling and scuba diving opportunities. The Tana River provides opportunities for rafting and river safaris.

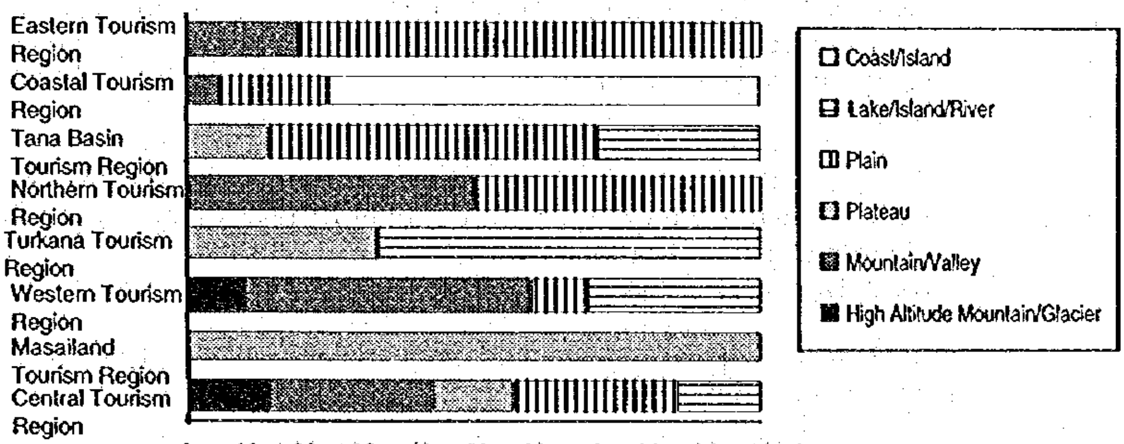
The Coastal Tourism Region has a beautiful coastal scenery and attractive scenic spots. Compared to other regions, it provides many opportunities for marine and coastal sports and recreational activities.

The Central Tourism Region has also a good scenery (Rift Valley/Mt. Kenya), a variety of scenic spots and potential for highland sports and recreational activities, which are based on the variety of land forms (mountain and highland).

The Western Tourism Region has a good scenery and scenic spots and offers opportunities for highland sports.

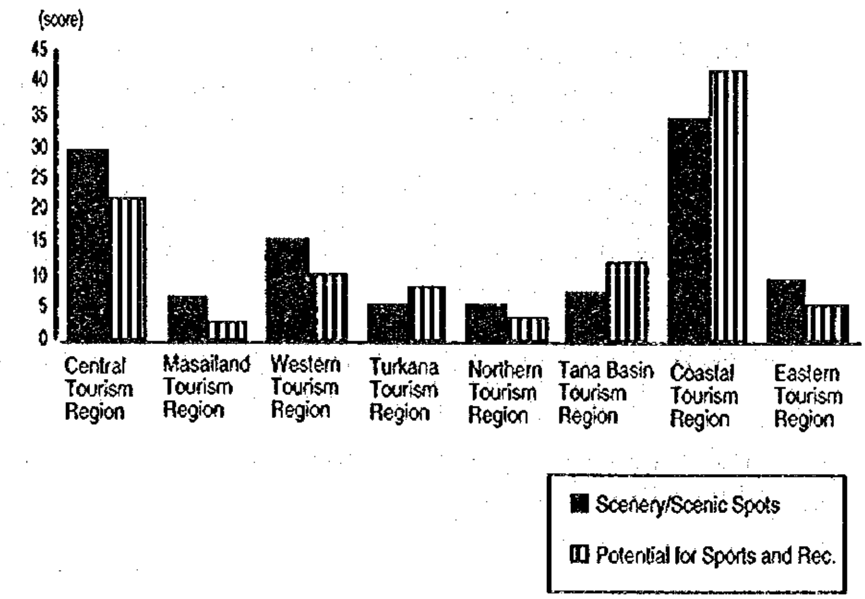
The Tana Basin Tourism Region provides opportunities for attractive river rafting and river safaris for tourists with special interest.

Figure A. 12 Major Geographical Feature



Source: JICA Study Team

Figure A. 13 Scenery, Scenic Spots and Potentials of Sports and Recreational Activities



Source: JICA Study Team

Table A. 67 List of Tourism Resources (Geographic Features)

General Feature
◎ Obviously Major
● Major
○ Specific

Tourism Area		Name of Park and Reserve	GEOGRAPHIC FEATURE		General Feature						
code No.	Name		General Land Form	Potential Activities of Sports and Recreation	High Altitude Mountain/Glacier	Mountain/Valley	Plateau	Plain	Lake/Island/River	Coast/Island	Specific Landform(Caves/other)
11	Nairobi	Nairobi N.P..	Plateau	Safari			●		○		
12	Lake Nakuru/Naivasha	Hells Gate N.P..	Narrow Gorge/Rock Pinnacle	Rock Climb/Observation Deck		●					○
12	Lake Nakuru/Naivasha	Lake Nakuru N.P..	Shallow alkaline lake/Rocky	hillside/Lift Valley					●		
12	Lake Nakuru/Naivasha	Longonot N.P..	Volcanic Crater	Safari/Trekking		●					
13	Mt. Aberdare	Aberdare N.P..	Mountain/Waterfalls	Safari/Night Animal Watch	●		○				○
14	West Sambur	Laikipia N.R..	Plateau	Safari			●				
14	West Sambur	Maralal N.S..	Mountain	Safari		●	◎				
15	East Samburu/Somalia	Buffalo Spring N.R..	Riverine plain	Safari				●	○		
15	East Samburu/Somalia	Samburu N.R..	Riverine plain	Safari				●	○		
15	East Samburu/Somalia	Shaba N.R..	Riverine plain	Safari				●	○		
16	Mt. Kenya	Mount Kenya N.P..	Rocky mountain View/Glacier	Climb/Safari/Horse Raidin	●	◎	○		○		
17	Embu/Muranga	Fourteen Falls N.P..	Waterfall/Riverine swamp	Safari					●		○
17	Embu/Muranga	Ol Donyo Sabuk N.P..	Mountain	Climbing/Safari/		●					○
17	Embu/Muranga	Mwea N.R..	Riverine plain	Safari				●	◎		
21	Ambosen	Amboseli N.P..	Plateau/Dry lake bed	View-Mt. Kilimanjaro			●		○		
23	Masai Mara	Masai Mara N.R..	Plateau	Safari			●		○		
32	Southern Victoria	Ruma N.P..	Hillside	Safari		●	◎				
33	Northern Victoria	Ndere Island N.P..	Island at lake victoria						●		
33	Northern Victoria	Kakamega N.R..	Mountain	Trekking Safari		●	◎				
34	Mt. Elgon	Mount Elgon N.P..	Volcanic mt. /Caves/Glacier	Safari/Caving	●	◎	○				●
34	Mt. Elgon	Saiwa Swamp N.P..	Riverine	Trekking Safari					●		
35	Pokot	Nasolot N.R..	Mountain skirt/riverine	Safari		●	◎				
35	Rift Valley Lakes	South Turkana N.R..	Mountain	Safari				●			
36	Rift Valley Lakes	Kamnarok N.R..	Valley	Safari		●			○		
36	Rift Valley Lakes	Kerio Valley N.R..	Valley	Safari		●			○		
36	Rift Valley Lakes	Lake Bogoria N.R..	Alkaline Lake/Hot Spring	Safari					●		◎
41	Northern Turkana	Sibiloi N.P..	Lakeside	Safari/Fishing/Water Sports			●		○		
42	Mid Turkana	Central Island N.P..	Island at lake/3 crater lake	Safari/Fishing/Water Sports					●		◎
43	Southern Turkana	South Island N.P..	Mountain Island at the lake	Safari/Climb/Water Sports		○			●		
51	Marsabit	Marsabit N.P..	Mountain	Safari		●	○				
51	Marsabit	Marsabit N.R..	Mountain/Volcanic Craters	Safari		●	○				◎
52	Losai	Losai N.R..	Plain	Safari				●			
53	Malka	Malka Mari N.P..	Mandera plateau	Safari				●			
61	Western Tana Basin	Kora N.P..	Riverine plain	River Rafter/Safari					●		○
61	Western Tana Basin	Meru N.P..	Foothill	River Rafter/Safari			●	○	○		
61	Western Tana Basin	Bisanadi N.R..	Riverine plain	River Rafter/Safari				●	○		
61	Western Tana Basin	North Kitsui N.R..	Riverine plain	Safari				●	○		
61	Western Tana Basin	Rahole N.R..	Riverine plain	River Rafter/Safari				●	○		
63	Eastern Tana Basin	Arawale N.R..	Riverine plain	River Rafter/Safari				●	○		
63	Eastern Tana Basin	Tana River Primate N.R..	Riverine plain	River Rafter/Safari				◎	●		
71	South Mombasa Coast	Shimba Hills N.R..	Coastal mountain	Safari		●					
71	South Mombasa Coast	Kisite Marine N.P..	Coral reef	Beach/Marine Sports						●	◎
71	South Mombasa Coast	Mpunguti Marine N.R..	Coral reef	Beach/Marine Sports						●	◎
72	Mombasa Coast	Mombasa Marine N.P..	Coral reef	Beach/Marine Sports						●	○
72	Mombasa Coast	Mombasa Marine N.R..	Coral reef	Beach/Marine Sports						●	○
73	Malindi Coast	Arabuko Sokoke N.P..	Coastal delta	Safari				●			
73	Malindi Coast	Malindi Marine N.P..	Coral reef/islands	Beach/Marine Sports						●	◎
73	Malindi Coast	Watamu Marine N.P..	Coral reef	Beach/Marine Sports						●	◎
73	Malindi Coast	Malindi Marine N.R..	Coral reef	Beach/Marine Sports						●	◎
73	Malindi Coast	Watamu Marine N.R..	Coral reef	Beach/Marine Sports						●	◎
74	Lamu Coast	Ras Tenewi Marine N.P..	Coral reef	Beach/Marine Sports						●	◎
75	Northern Coast	Boni N.R..	Coastal plain	Safari				●		◎	
75	Northern Coast	Dodori N.R..	Coastal Riverine plain	Safari				◎		●	
75	Northern Coast	Kiunga Marine N.R..	Coral reef	Beach/Marine Sports						●	◎
81	Chyulu	Chyulu N.P..	Volcanic Origin	Safari		●					
82	Eastern Tsavo	Tsavo East N.P..	Seasonal flood plain/delta	Safari(Mudanda Rock)				●	○		◎
82	Eastern Tsavo	South Kitsui N.R..	Seasonal flood plain/delta	Safari				●	○		
82	Eastern Tsavo	Ngai Ndethya N.R..	Seasonal flood plain/delta	Safari				●	○		
84	Western Tsavo	Tsavo West N.P..	Volcanic Origin Mountain	Spring/Safari				●			◎

Source: JICA Study Team

2.1.3. Tourism Resources of Flora

Grassland, bushland and shrubland represent the majority of vegetation in Kenya. Other vegetation types create rare vegetation zones and attractive and interesting forests, trees and flowers for tourists with special interests.

The Central, Western and Coastal Tourism Regions offer a variety of vegetation and attractive and interesting species to tourists.

The other five tourism regions have mostly of arid and semiarid vegetation zones of grassland, bushland and shrubland areas. Compared to the above mentioned three tourism regions, this vegetation is vast.

The coastal forest and the guineo-congolean rain forest in the Coastal and Western Tourism Regions are the habitats for endangered species. These areas have interesting resources for tourists with special interests.

Figure A. 14 General Vegetation in National Parks/ Others

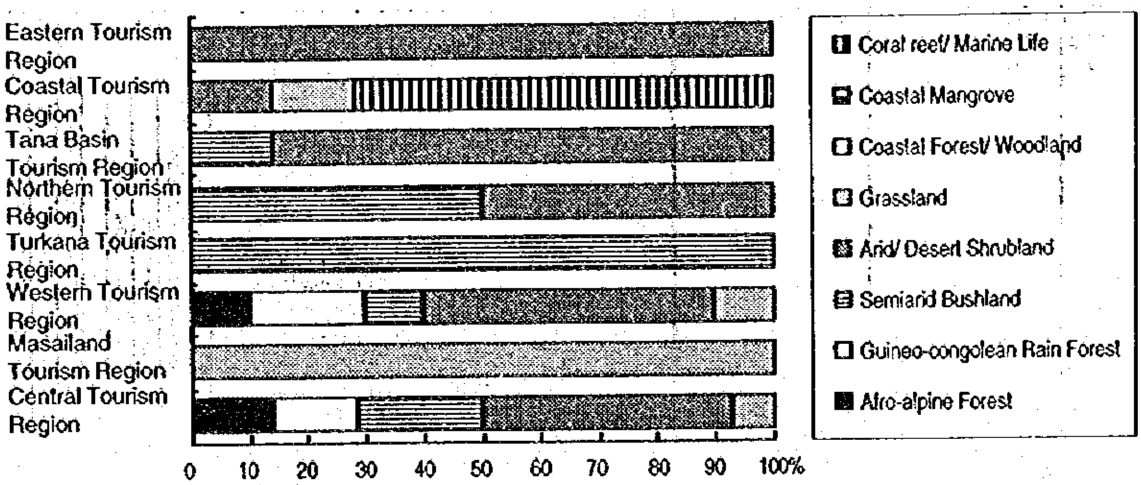
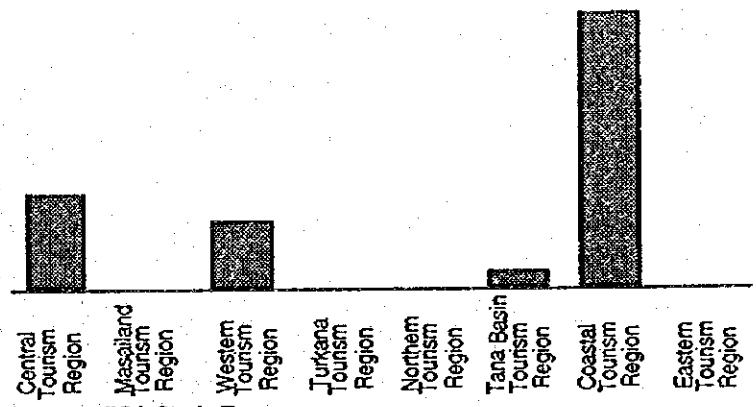


Figure A. 15 Attractive and Interesting Resources of Flora



Source: JICA Study Team

Table A. 68 List of Tourism Resources (Flora)

General Feature
◎ Obviously Major
● Major
○ Specific

Tourism Area code No.	Tourism Area Name	Name of Park and Reserve	FLORA General Feature of Vegetation	Afro-alpine Forest	Guinea-congolean Rain Forest	Semi-arid Bush Land	Arid / Dessert Shrub Land	Grassland	Coastal Forest/Woodland	Coastal Mangrove	Coral Reef/Marine Life
11	Nairobi	Nairobi N.P..	Highland dev't forest/Fire induced habitat			◎		●			
12	Lake Nakuru/Naivasha	Hells Gate N.P..	Evergreen/semi-evergreen bush land			●					
12	Lake Nakuru/Naivasha	Lake Nakuru N.P..	Marsh/Grassland/Acacia woodland				●	◎			
12	Lake Nakuru/Naivasha	Longonot N.P..	Woodland in the Craters			●					
13	Mt. Aberdare	Aberdare N.P..	Afro-alpine moorland/Forest	●	◎						
14	West Samburu	Laikipia N.R..					●				
14	West Samburu	Maralal N.S..	Arid thorn bush land/woodland				●				
15	East Samburu/Somalia	Buffalo Spring N.R..	Arid thorn bush land/woodland				●				
15	East Samburu/Somalia	Samburu N.R..	Arid thorn bush land/woodland				●				
15	East Samburu/Somalia	Shaba N.R..	Arid thorn bush land/woodland				●				
16	Mt. Kenya	Mount Kenya N.P..	Afro-Alpine woodland/moorland	●		◎					
17	Embu/Muranga	Fourteen Falls N.P..	Riverine vegetation		●	◎					
17	Embu/Muranga	Ol-Donyo Sabuk N.P..	Highland dry forest		●						
17	Embu/Muranga	Mwea N.R..	Semi-arid wood/bush land/Arid thorn wood/bush/grassland			●	◎				
21	Amboseli	Amboseli N.P..	Grassland/alkaline ash/arid thorn bush/Acacia/Swamp			◎		●			
23	Masai Mara	Masai Mara N.R..	Semi/evergreen bush land/semi-arid wood/bush/grassland			◎		●			
32	Southern Victoria	Ruma N.P..	Grassland fire-induced			◎		●			
33	Northern Victoria	Ndere Island N.P..				●		◎			
33	Northern Victoria	Kakamega N.R..	Highland moist forest		●	◎					
34	Mt. Elgon	Mount Elgon N.P..	Afro-alpine moorland/Highland moist forest/Botanical Interest	●	◎						
34	Mt. Elgon	Saiwa Swamp N.P..	Permanent swamp/Tropical rain forest		●						
35	Pokot	Nasolot N.R..	Arid thorn bush land/woodland				●				
35	Rift Valley Lakes	South Turkana N.R..					●				
36	Rift Valley Lakes	Kamnarok N.R..	Arid thorn bush land/woodland				●				
36	Rift Valley Lakes	Kerio Valley N.R..	Arid thorn bush land/woodland				●				
36	Rift Valley Lakes	Lake Bogoria N.R..	Alkaline ecosystem/Arid thorn bush land/woodland				●				
41	Northern Turkana	Sibiloi N.P..	Dry semi-desert bush/near desert			●	◎				
42	Mid Turkana	Central Island N.P..				●					
43	Southern Turkana	South Island N.P..				●					
51	Marsabit	Marsabit N.P..	Highland dry forest evergreen/semi-evergreen bush land/semi-arid bush land			●	◎				
51	Marsabit	Marsabit N.R..	Highland dry forest evergreen/semi-evergreen bush land/semi-arid bush land			●	◎				
52	Losai	Losai N.R..				◎	●				
53	Malka	Malka Mari N.P..	Semi-desert/Arid thorn bush land/woodland				●	◎			
61	Western Tana Basin	Kora N.P..	Arid thorn bush land/woodland			◎	●				
61	Western Tana Basin	Meru N.P..	Bush/Riverine forest/Ngaia forest		◎	●					
61	Western Tana Basin	Bisanadi N.R..	Arid thorn bush land/woodland			◎	●				
61	Western Tana Basin	North Kitsui N.R..	Arid thorn bush land/woodland			◎	●				
61	Western Tana Basin	Rahole N.R..	Arid thorn bush land/woodland			◎	●				
63	Eastern Tana Basin	Arawale N.R..	Arid thorn bush land/woodland			◎	●				
63	Eastern Tana Basin	Tana River Primate N.R..	Arid thorn bush land/woodland				●	◎			
71	South Mombasa Coast	Shimba Hills N.R..	Coastal forest/woodland/Fire induced habitat					◎	●		
71	South Mombasa Coast	Kisite Marine N.P..	Marine ecosystem								●
71	South Mombasa Coast	Mpunguti Marine N.R..	Marine ecosystem								●
72	Mombasa Coast	Mombasa Marine N.P..	Marine ecosystem								●
72	Mombasa Coast	Mombasa Marine N.R..	Marine ecosystem								●
73	Malindi Coast	Arabuko Sokoke N.P..	Coastal region tropical forest(Forest Concervation Project)					◎	●		
73	Malindi Coast	Malindi Marine N.P..	Marine ecosystem								●
73	Malindi Coast	Watamu Marine N.P..	Mangroves/marine ecosystem							◎	●
73	Malindi Coast	Malindi Marine N.R..	Marine ecosystem								●
73	Malindi Coast	Watamu Marine N.R..	Marine ecosystem								●
74	Lamu Coast	Ras Tenenwi Marine N.P.	Marine ecosystem							◎	●
75	Northern Coast	Boni N.R..	Groundwater/riverine forest/fire induced habitat				●		◎		
75	Northern Coast	Dodori N.R..	Fire induced habitat/riverine forest/Arid thorn bush land/woodland/Grou				●		◎		
75	Northern Coast	Kiunga Marine N.R..	Mangroves/marine ecosystem							◎	●
81	Chyulu	Chyulu N.P..	Arid thorn bush land/woodland/mt. forest				●				
82	Eastern Tsavo	Tsavo East N.P..	Arid thorn bush land/woodland				●	◎			
82	Eastern Tsavo	South Kitsui N.R..	Arid thorn bush land/woodland				●	◎			
82	Eastern Tsavo	Ngai Ndethya N.R..	Arid thorn bush land/woodland				●	◎			
84	Western Tsavo	Tsavo West N.P..	Arid thorn bush land/woodland				●	◎			

Source: JICA Study Team

2.1.4. Tourism Resources of Fauna

The wildlife fauna in Kenya is well known to be one of most attractive and famous tourism assets in the world. Especially, big wildlife mammals are the most important tourism resource for international tourists coming to Kenya.

Among wildlife mammals, big carnivores and herbivores are the most interesting and attractive species for international tourists.

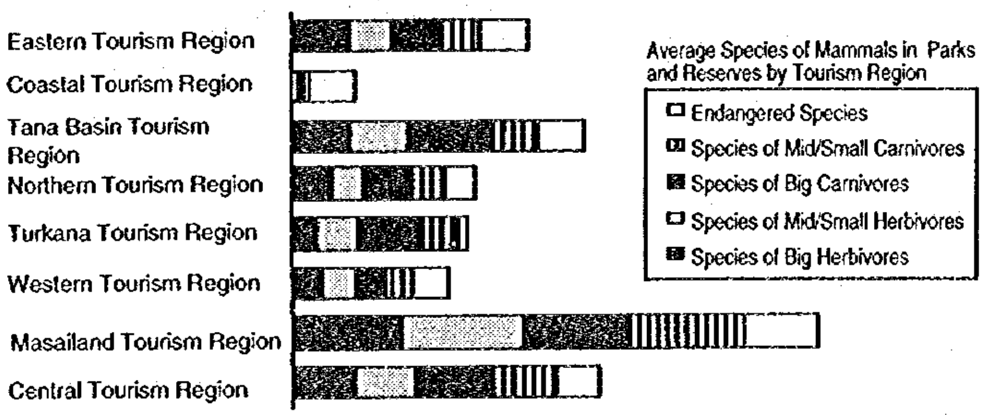
Elephant orphanages, observation decks, huts for night-time mammal watching and research centres are also interesting facilities for tourists.

Endangered species among mammals, birds and other insects are interesting resources of fauna for tourists with special interest, i.e. bird watchers and researchers.

Masai Mara, Tsavo East, Nairobi and Meru National Reserves and National Parks are assessed to offer the most attractive, interesting and diversified species of attractive fauna for international tourists.

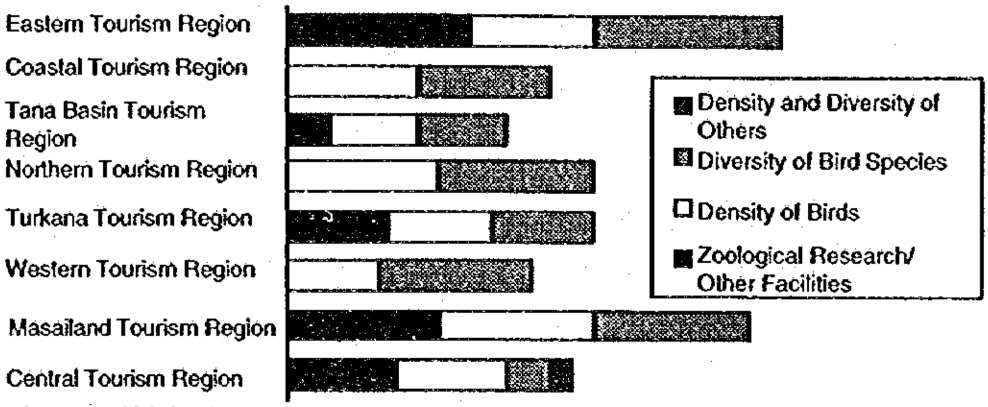
The most attractive fauna resources in the tourism regions are to be found in the Masailand Tourism Region. The Central and Tana Basin Tourism Regions are assessed to have the second most attractive fauna resources.

Figure A. 16 Diversity of Mammal Species



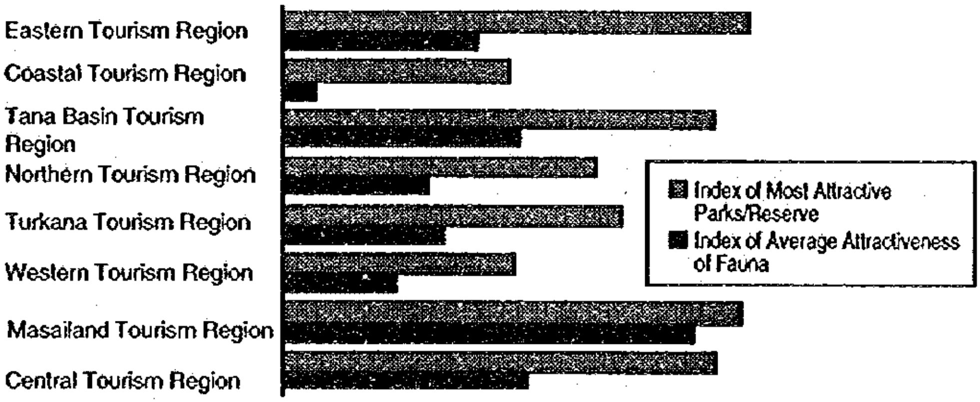
Source: JICA Study Team

Figure A. 17 Diversity of Other Fauna Species



Source: JICA Study Team

Figure A. 18 Average and Most Attractive Resources of Fauna by Tourism Region



Source: JICA Study Team

Table A. 69 List of Tourism Resources of Fauna

Tourism Area code No	Tourism Area Name	Name of Park and Reserve	FAUNA: Characterized Species/Facilities	Species of Big Herbivores	Species of Mid/Small Herbivores	Species of Big Carnivores	Species of Mid/Small Carnivores	Total Mammal Species	Endangered Species	Index of Interesting Mammals Species	Zoological Research/Other Facilities	Density of Birds	Diversity of Bird Species	Density and Diversity of others	Index of Attractiveness of Fauna
				General Conditions: Mammals								Bird			
11	Nairobi	Nairobi N.P..	Birds/Black Rhinoceros/Chanler's Mountain Reedback	3	4	4	4	4	2	3	2	1			4
12	Lake Nakuru/Naivasha	Hells Gate N.P..	Birds (Laemergeyer)	3	2	3	1	2	1	2		1	1		2
12	Lake Nakuru/Naivasha	Lake Nakuru N.P..	Flamingo-Sanctuary/Rothschild's Giraffe introduced (Black Rhinoceros)	3	3	3	3	3	1	3	1	2			3
12	Lake Nakuru/Naivasha	Longonot N.P..		3	2	3	1	2		2					2
13	Mt. Aberdare	Aberdare N.P..	Observation lodges;Elephant/Black Rhinoceros/Eastern Bongo/Mole-shrew)	2	2	2	3	3	4	2	2				3
14	West Samburu	Laikipia N.R..	(Elephant/Gravy's Zebra)	1	0	0	0	0	2	0					0
14	West Samburu	Maralal N.S..		0	0	0	0	0		0					0
15	East Samburu/Somalia	Buffalo Spring N.R..	Oryx (Elephant/Gravy's Zebra)	3	3	4	4	4	2	3					3
15	East Samburu/Somalia	Samburu N.R..	Oryx/Cheetah/Crocodile (Elephant/Gravy's Zebra)	3	3	4	4	4	2	4					3
15	East Samburu/Somalia	Shaba N.R..	Oryx/Cheetah/Leopard (Elephant/Gravy's Zebra)	3	3	4	4	4	2	4					3
16	Mt. Kenya	Mount Kenya N.P..	Reptiles (Elephant/Mole-shrew/Eastern Bongo)	2	2	2	3	3	3	2					2
17	Embu/Muranga	Fourteen Falls N.P..		0	0	0	0	0		0					0
17	Embu/Muranga	Ol Donyo Sabuk N.P..	Leopard/Butterfly (Black Rhinoceros)	3	1	2	1	2	1	2				1	2
17	Embu/Muranga	Mwea N.R..	Buffalo (Elephant)	2	1	3	0	1	1	2		1	1		2
21	Amboseli	Amboseli N.P..	(Elephant) The Amboseli Baboon Research Project(NMK)	3	4	3	4	4	1	3		1	1		3
23	Masai Mara	Masai Mara N.R..	Wild Dog/Cheetah-Great migration (White Black Rhinoceros/Elephant/Chanler's Mountain Reedback)	4	4	4	4	4	4	4	1				4
32	Southern Victoria	Ruma N.P..	Leopard/Buffalo/Rothschild's Giraffe introduced (Roan antelope)	2	1	1	1	1	1	1					1
33	Northern Victoria	Ndere Island N.P..	Impalas-introduced	0	0	0	0	0		0					0
33	Northern Victoria	Kakamega N.R..	Birds (De Brazza's Monkey)	1	1	2	1	1	1	1		1	2		1
34	Mt. Elgon	Mount Elgon N.P..	Leopard/Birds (Elephant/African Golden Cat/Golden Mole)	1	2	1	2	2	3	2			1		1
34	Mt. Elgon	Saiwa Swamp N.P..	Birds (Sitatunga/De Brazza's Monkey)	0	1	0	1	1	2	1			1		1
35	Pokot	Nasolot N.R..	Rothschild's Giraffe (Elephant/Black Rhinoceros/Lesser Kudu)	3	2	2	0	1	3	2					2
35	Rift Valley Lakes	South Turkana N.R..		0	0	0	0	0		0					0
36	Rift Valley Lakes	Kamnarok N.R..	(Golden Mole)	1	1	2	1	1	1	1					1
36	Rift Valley Lakes	Kerio Valley N.R..	(Golden Mole)	0	0	0	0	0	1	0					0
36	Rift Valley Lakes	Lake Bogoria N.R..	Flamingo/Greater Kudu	1	2	2	3	3		2		2	1		2
41	Northern Turkana	Sibiloi N.P..	Greater Kudu/ Cheetah/Crocodile/Bird-Skimmer/Archeological/prehistoric Heritage (Grevy's Zebra)	2	3	4	3	3	1	3		1	1		3
42	Mid Turkana	Central Island N.P..	Crocodiles-Breeding colonies	0	0	1	0	0		0	1				1
43	Southern Turkana	South Island N.P..	Crocodile	1	1	1	1	1		1					1
51	Marsabit	Marsabit N.P..	Greater Kudu/Lammergeyer/Bird (Gravy's Zebra)	3	3	3	3	3	1	3		1	1		3
51	Marsabit	Marsabit N.R..	Greater Kudu/Lammergeyer/Bird (Gravy's Zebra)	3	2	3	1	2	1	2		1	1		2
52	Losai	Losai N.R..	(Gravy's Zebra)	0	0	0	0	0	1	0					0
53	Malka	Malka Mari N.P..	(Gravy's Zebra)	0	0	0	0	0	1	0					0
61	Western Tana Basin	Kora N.P..	Birds	3	2	4	1	2		3		1	1		3
61	Western Tana Basin	Meru N.P..	Leopard/Cheetah-Elsa's Camp (Black Rhinoceros/Gravy's Zebra/Elephant)	3	4	4	4	4	3	4	1				4
61	Western Tana Basin	Bisanadi N.R..		3	2	4	1	2		3					2
61	Western Tana Basin	North Kitui N.R..	Crocodile/Hippopotamus	1	0	1	0	0		1					0
61	Western Tana Basin	Rahole N.R..	Oryx (Gravy's Zebra)	0	0	0	0	0	1	0					0
63	Eastern Tana Basin	Arawale N.R..	Hunters hartebeest (Elephant/Grevy's Zebra/Hilora)The Tana River Project(NMK)	2	2	3	1	2	3	2					2
63	Eastern Tana Basin	Tana River Primate N.R..	Birds (Tana River Colobus/Tana River Mongabey/De Brazza's Monkey/Zanzibar Galago)	3	3	3	3	3	4	3		1	1		3
71	South Mombasa Coast	Shimba Hills N.R..	(Elephant/Sable antelope/Zanzibar Galago/Eastern Tree Hyrax)	1	2	2	3	2	4	2					2
71	South Mombasa Coast	Kisite Marine N.P..	Dolphins/Sea Bird/Marine Aquatics	0	0	0	0	0	1	0		1	1		0
71	South Mombasa Coast	Mpunguti Marine N.R..	Sea Bird/Marine Aquatics	0	0	0	0	0		0		1	1		0
72	Mombasa Coast	Mombasa Marine N.P..	Marine Aquatics	0	0	0	0	0		0					0
72	Mombasa Coast	Mombasa Marine N.R..	Marine Aquatics	0	0	0	0	0		0					0
73	Malindi Coast	Arabuko Skoke N.P..	Birds (Sokoke Bushy Tailed Mongoose/Ader's Duckier/Golden Elephant Shrew/Sokoke Scops Owl)	1	0	0	0	0	4	0		1	1		1
73	Malindi Coast	Malindi Marine N.P..	Marine Aquatics	0	0	0	0	0		0					0
73	Malindi Coast	Watamu Marine N.P..	Marine Aquatics (Dugong)	0	0	0	0	0	1	0					0
73	Malindi Coast	Malindi Marine N.R..	Marine Aquatics	0	0	0	0	0		0					0
73	Malindi Coast	Watamu Marine N.R..	Marine Aquatics	0	0	0	0	0		0					0
74	Lamu Coast	Ras Tenenwi Marine N.P.	Sea Birds/Marine Aquatics (Dugong/Green Turtle/Elephant)	0	0	0	0	0	3	0		1	1		0
75	Northern Coast	Boni N.R..	(Syke's Monkey/Ader's Duckier/Golden Elephant Shrew)	1	0	0	0	0	3	0					0
75	Northern Coast	Dodori N.R..	Birds (Syke's Monkey/Topi/Elephant/lesser Kudu)	1	0	0	0	0	4	1		1	1		1
75	Northern Coast	Kiunga Marine N.R..	Sea Birds/Marine Aquatics (Dugong/Green Turtle)	0	0	0	0	0	2	0		1	1		0
81	Chyulu	Chyulu N.P..	Buffalo/Eland/Greater Kudu/Birds (Elephant/Black Rhinoceros)	3	0	0	0	0	2	1		1	1		1
82	Eastern Tsavo	Tsavo East N.P..	Buffalo/Cheetah/Birds/Elephant Orphans/wildlife R. Center(Wild Dog/Elephant/Hirola)	3	4	4	4	4	3	4	2		1		4
82	Eastern Tsavo	South Kitui N.R..	(Elephant)	1	0	0	0	0	1	0					0
82	Eastern Tsavo	Ngai Ndethya N.R..		0	0	0	0	0		0					0
83	Western Tsavo	Tsavo West N.P.	Buffalo/Cheetah/Hippopotamus in Mzima spring/Birds/Wild	3	3	4	2	3	2	2	1	1	1		3

Source: JICA Study Team

2.1.5. Natural Tourism Resources

The potential natural resources for attracting international tourists to a defined tourism region are assessed relative to attractive sceneries and scenic spots, opportunities for sports and recreational activities, attractive and interesting vegetation and attractiveness of wildlife.

The Central, Masailand and Coastal Tourism Regions are assessed to be the most resourceful tourism regions. The Western, Turkana, Tana Basin and Eastern Tourism Regions are assessed to be the second most resourceful tourism regions.

The Central Tourism Region offers a variety of attractive and interesting sceneries, scenic spots for sightseers, and a variety of sports/recreational opportunities. These resources will be a potential for establishing a gateway to East Africa.

The Masailand Tourism Region offers a variety of densely populated wildlife resources. It is a most attractive wildlife safari destination for international tourists. The balance and harmony between the natural ecosystem, the local community and tourism are a big issue for tourism development in this region.

The Coastal Tourism Region has a variety of attractive and interesting sceneries, scenic spots on the coast and in the hinterland for sightseers, a variety of sports and recreational opportunities on the Indian Ocean beach and a variety of flowers and trees. These flora and fauna resources in the Eastern Tourism Region could be utilised to improve and expand beach resort tourism.

The Western Tourism Region has a tourism potential on a highland resort.

The Turkana Tourism Region has attractive lake and island resources for tourists with special interests .

The Northern Tourism Region has an arid and desert ecological zone, which is a resource for tourists with special interests. Improvement of accessibility and security are issues for tourism development in this region.

The Tana Basin Tourism Region has a potential for river sports, interesting vegetation and attractive wildlife for special interests tourists. Improvement of accessibility and security are also issues for tourism development in this region.

The Eastern Tourism Region has a variety of wildlife resources, which could be utilised to support the Coastal and Central Tourism Regions. The balance and harmony between the ecosystem and tourism are issues for tourism development in the region.

Figure A. 19 Potential Natural Resources

	Attractive Scenery / Scenic Spots	Potential Activities of Spots / Recreation on Coast and Inland	Attractive and Interesting Vegetation	Attractiveness of Wildlife (Mammals)	Attractiveness of Wildlife (Others)	Potentials of Natural Resources	Remarks:
1 CENTRAL TOURISM REGION	Most Potential	Most Potential	Potential	Potential	Potential	Most Potential	Variety of Sceneries and Parks/ Reserves
2 MASAILAND TOURISM REGION	Other	Other	Other	Most Potential	Most Potential	Most Potential	Most Attractive Safari Destination
3 WESTERN TOURISM REGION	Other	Potential	Potential	Potential	Other	Potential	Highland/Mountain Resort
4 TURKANA TOURISM REGION	Other	Other	Other	Other	Most Potential	Potential	Attractive Lake/Island Resources for Special Interest Groups
5 NORTHERN TOURISM REGION	Other	Other	Other	Other	Other	Other	Arid/ Desert Climate and Ecology for Special Interest Groups
6 TANA BASIN TOURISM REGION	Other	Potential	Potential	Potential	Other	Potential	Potential for River Rafting/ River Safari for Special Interest Groups
7 COASTAL TOURISM REGION	Most Potential	Most Potential	Most Potential	Other	Other	Most Potential	Variety of Marine/Coast/Inland Resources for Beach Resort
8 EASTERN TOURISM REGION	Other	Other	Other	Potential	Potential	Potential	Potential Resources for Safari

Most Potential Tourism Region / Potential Tourism Region / Other Tourism Region

Source: JICA Study Team

2.2. Historical and Cultural Tourism Resources

Cultural and historical resources in Kenya are represented by a variety of prehistoric, archaeological, historical heritage, culture and traditional arts and folklore.

Currently, 71 national museums and monuments are gazetted for preservation in Kenya. However, only 16 museums and monuments are utilised on a limited scale for tourism. The utilised facilities are distributed in the Central Tourism Region (7), Coastal Tourism Region (6), Western Tourism Region (2) and Masailand Tourism Region (1), as shown in Table A. 70 and Figure A. 19.

There are 141 major cultural and historical resources mainly located in the Coastal Tourism Region (52), Western Tourism Region (36) and Central Tourism Region (35).

The diversification of cultural and historical tourism resources is one of the most important measures to attract and develop international tourism in Kenya.

The improvement of historical and cultural resources could contribute to the diversification of Kenya's tourist assets.

The enhancement and upgrading of traditional dances, music, handicrafts are also important factors to diversify tourism activities in Kenya and attract more tourists.

Table A.70 Major Cultural and Historical Tourism Resources by Tourism Region

Tourism Region		No. of Spots of Resources	No. of Museum/ National Monument	No. of Utilized Resources
1	CENTRAL T.R.	35	8	7
2	MASAILAND T.R.	4	3	1
3	WESTERN T.R.	36	14	2
4	TURKANA T.R.	10	1	0
6	TANA BASIN T.R.	1	0	0
7	COASTAL T.R.	52	45	6
8	EASTERN T.R.	3	0	0
	TOTAL	141	71	16

Source: JICA Study Team

Figure A. 20 Major Cultural and Historical Tourism Resources (1/3)

Tourism Area/Region	Name	National Monument	Prehistoric Site	Condition of Utilization	Category	Period
11 Nairobi	Italian Church -Kijabe	●			2: Architectural	
	Lukenya Hill				Archeology	Stone/Neolithic age
	National Museum(main)			●		
	National Botanical Garden					
	Children's Museum Nairobi					
	National Museum(snake)			●		
	N.M. for Science & Technology					
	National Art Gallery					
	Karen Blixan			●	History of Agriculteral Dev't	
	Bomas of Kenya			●		
	6	1		4		
12 Lake Nakuru/Naivasha	Gamble's Cave	●			3: Archaeology	
	Kariandusi	●		●	3: Archaeology	
	Lanet	●			3: Archaeology	
	Hyrax Hill	●		●	3: Archaeology	Neolithic/Iron Age
	Cartwright's Site				Archeology	Stone age
	Weatherth's Site				Archeology	Stone age
	Naivasha Railway Rock Shelter				Archeology	Stone age
	Rock Shelter				Archeology	Stone age
	Crescent Island				Archeology	Neolithic
	Enkapune ya Muto				Archeology	Stone age
	Prospect Farm				Archeology	Stone/Neolithic
	Ilkek				Archeology	Neolithic
	Gambe's Cave				Archeology	Stone age
	Noerit Drift				Archeology	Stone age
	Prolonged Drift				Archeology	Neolithic
	Njoro River Cave				Archeology	Neolithic
	Nakuru Burial Sha				Archeology	Neolithic
	Lanet				Archeology	Iron Age
	Lion Hill Cave				Archeology	Stone age
	Kariandusi			●	Archeology	Acheulean Archeology
	20	4		2		
13 Mt. Aberdare	Gatara Forest				Archaeology	Iron Age
	Gatungange				Archaeology	Iron Age
	Nyeri District Museum					
	2	0		0		
14 West Sambur	Kenyatta House	●			3: Archaeology	
	Kisima Farm				Archeology	Neolithic
	Jomo Kenyatta Memorial Museum					
	2	1		0		
15 East Samburu/Somali	Fock's Farm				Archeology	Rock Art/Stone Alignment
	Lewo				Archeology	Stone age
	2	0		0		
16 Mt. Kenya	Grand Halls				Archeology	Iron age
	1	0		0		
17 Embu/Muranga	Kwamboo				Archaeology	Iron Age
	Meru Museum			●	Historical Architecture/	
	Njuri Ncheke Museum					
	Embu District Museum					
	Machakos District Museum					
	2	0		1		
1 CENTRAL T.R.	35	6		7		
21 Amboseli	Wells and Stones- Serengel	●			2: Architectural	Iron Age
	Kajiado District Museum					
	1	1		0		
22 Mid Msaland	Olorgesailie	●		●	3: Archaeology	Prehistoric(600,000ys)
	1	1		1		
23 Masai Mara	Ngamuriak				Archeology	Neolithic
	Namsura				Archeology	Neolithic
	2	0		0		
2 MASAILAND T.R.	4	2		1		
31 Kericho	Fort Ternan	●			4: Palaeontology	
	Brocks Quarry	●			4: Palaeontology	
	Chemogoch	●			4: Palaeontology	
	Songhor	●			4: Paleontology	
	Kapurtay	●			4: Palaeontology	
	Keringt Cave				Archeology	Neolithic
	Kapkures				Archaeology	Iron Age
	Tunnel Rockshelter				Archeology	Neolithic
	Chemangal				Archaeology	Iron Age
	Kericho District Museum					
	9	5		0		

Source: JICA Study Team

Figure A. 20 Major Cultural and Historical Tourism Resources (2/3)

Tourism Area/Region	Name	National Monument	Prehistoric Site	Condition of Utilization	Category	Period
32 Southern Victoria	Thimlich Ohinga	●			2: Architectural	Iron Age
	Kanam	●			4: Palaeontology	Stone age
	Kanjera	●			4: Palaeontology	Stone age
	Goli Chaki				Archeology	Rock Art/Stone Alignment
	Gogo Falls				Archaeology	Iron Age
	Mwarachi Hill				Archaeology	Iron Age
	Mangano Island				Archeology	Rock Art/Stone Alignment
	7	3		0		
33 Northern Victoria	Muguruk	●			3: Archaeology	Stone Age
	Songhor				Archeology	Stone Age
	Yala Ale				Archeology	Stone/Iron Age
	Urewe				Archeology	Stone/Iron Age
	Kisumu Museum			●	History/Traditions/Snake Park	
	Kakamega District Museum					
	Rusinga Site Museum(Island)					
	5	1		1		
34 Mt. Elgon	Chetambe's Fort	●			2: Architectural	Iron Age
	Muthanda Fort	●			2: Architectural	Iron Age
	Tambach				Archeology	Iron Age
	Ndalat Hills				Archeology	Rock Art/Stone Alignment
	Kakapel				Archeology	Iron Age
	Kimothon				Archeology	Rock Art/Stone Alignment
	Chabinyiny Rockshelter				Archeology	Stone Age
	Murnga Rockshelter				Archeology	Stone Age
	Melban				Archeology	Iron Age
	Kitale Museum			●	Culture/Tradition of Western Kenyan people	
	10	2		1		
36 Lift Valley Lakes	Kilombo	●			3: Archaeology	Stone Age
	Kapthurin				Archeology	Stone Age
	Ngaenyu				Archeology	Neolithic
	Chesowanja				Archeology	Stone Age
	Delorain's Farm				Archeology	Iron Age
	Baringo District Museum					
	5	1		0		
3 WESTERN T.R.	36	12		2		
41 Northern Turkana	Sibiloi	●		●	4: Palaeontology	
	Koobi Fora				Archeology	Stone/Neolithic Age
	Beret				Archeology	Neolithic
	Karari				Archeology	Stone Age
	4	1		0		
42 Mid Turkana	Kalokal				Archeology	Rock Art/Stone Alignment
	Apeget				Archeology	Neolithic
	Lopoy				Archeology	Neolithic
	Lothagam				Archeology	Stone Age
	Turkana District Museum					
	4	0		0		
43 Southern Turkana	Lowasera				Archeology	Stone Age
	Surima Waterfall				Archeology	Rock Art/Stone Alignment
	2	0		0		
4 TURKANA T.R	10	1				
5 NORTHE EASTERN T.R	Mararal					
				0		
61 Western Tana Basin	Meru					
62 Mid Tana Basin	Garissa District Museum				Archeology	Iron Age
63 Eastern Tana Basin	Wanie				Archeology	Iron Age
	1	0		0		
6 TANA BASIN T.R	1	0		0		
71 South Mombasa Coast	Shirazi	●			1: Monumental	
	Tumbe	●			1: Monumental	
	Mswambweni	●			1: Monumental	
	Diani Mosque	●			1: Monumental	
	Kongo	●			1: Monumental	
	Twi	●			1: Monumental	
	Kwale				Archeology	Iron Age
	7	6		0		

Source: JICA Study Team

Figure A. 20 Major Cultural and Historical Tourism Resources (3/3)

Tourism Area/Region	Name	National Monument	Prehistoric Site	Condition of Utilization	Category	Period
72 Mombasa Coast	Fort Jesus	●		●	1: Monumental	13-19th Century-Portugue
	N.Marine Aquarium/Science C					
	Mbaraki Pillar	●			3: Archaeology	
	Nossa Donhora Watch Tower	●			1: Monumental	
	Portuguese Shipwreck	●			1: Monumental	
	Kisauni Bell Tower	●			1: Monumental	
	Kilifi Mwarani			●		
	Juma Mtwapa Mtwa	●			1: Monumental	
	Jumba La Mtwana	●		●	1: Monumental	Iron Age(Swahili)
	Kinuni	●			1: Monumental	
	Takaungu	●			1: Monumental	
	Mearani	●			1: Monumental	
	Takaungu North	●			1: Monumental	
	Mtongwe				Archeology	Stone Age
	Santo Antonio de Tanna				Archeology	Iron Age
	14	11		3		
73 Malindi Coast	Mugangani(mosque)	●			1: Monumental	
	Kilulepwa Island(mosque)	●			1: Monumental	
	Sheikh Othman	●			1: Monumental	
	Watamu	●			1: Monumental	
	Sheikh Said	●			1: Monumental	
	Gedi	●		●	1: Monumental	Islamic
	Vasco da Gama's Pillar	●		●	1: Monumental	
	Portuguese Church	●			1: Monumental	
	Jamadari Mosque	●			1: Monumental	
	Juma Mosque	●			1: Monumental	
	Mambrui	●			1: Monumental	
	Old DO's Office(Malindi)	●				
	11	11		2		
74 Lamu Coast	Shaka	●			1: Monumental	
	Waungwana	●			1: Monumental	
	Mwana	●			1: Monumental	
	Ras Ya Mwana Mwali Sabaa	●			1: Monumental	
	Luziwa	●			1: Monumental	
	Risdho Pillar	●			1: Monumental	
	Luma House	●			1: Monumental	
	Lamu Museum			●	Swahili Cultura	
	Manda	●			1: Monumental	Iron Age
	Takwa and Siyu	●		●	1: Monumental	Iron Age
	Ungwana				Archeology	Iron Age
	11	9		1		
75 Northern Coast	Pate	●			1: Monumental	
	Siyu	●			1: Monumental	
	Faza	●			1: Monumental	
	Ras Uwani	●			1: Monumental	
	Omwa	●			1: Monumental	
	Mambore	●			1: Monumental	
	Kiunga	●			1: Monumental	
	Ishakani	●			1: Monumental	
	Shanga				Archeology	Iron Age
	9	8		0		
7 COASTAL T. REGION	52	45		6		
81 Chyulu	Ngurgani				Archeology	Iron Age
	1	0		0		
83 Southern Tsavo	Aruba Dam				Archeology	Stone Age
	1	0		0		
84 Western Tsavo	Saghasao				Archeology	Iron Age
	1	0		0		
8 WESTERN T. REGION	3	0		0		
NATIONAL TOTAL	131	65		16		

Note: Âú shows respective tourism resources fall under column categories. Numbers in the same columns show the subtotals and total of resources that fall under the categories.

Source: JICA Study Team