MINISTRY LABOUR AND SOCIAL PROTECTION

JOB OPPORTUNITY ANALYSIS REPORT

(OCTOBER - DECEMBER 2019)

DEPARTMENT OF NATIONAL HUMAN RESOURCE PLANNING AND DEVELOPMENT

JANUARY, 2020

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ACRONYMS / ABBREVIATIONS

ISIC - International Standard Industrial Classification of All Economic Activities

ISCED - International Standard Classification of Education

ILO- International Labour Organization

JOI- Job Opportunity Index

JOA- Job Opportunity Analysis

KNOCS - Kenya National Occupational Classification Standard

FUNCTIONAL DEFINITION OF TERMS

Award- is a certificate granted on the basis of a formal educational assessment that is regulated and has external quality assurance.

Basic General Programmes- This defines a broad group/field of education which includes the following: pre-primary, elementary, primary and secondary school.

Decent Work- Entails opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for personal development and social integration, freedom of people to express their views, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men (ILO).

Field of Education- defined in International Standard Classification of Education (ISCED) as the subject matter taught in an education programme.

ISIC – This is an international standard for industrial classification that classifies data according to kind of economic activity in the fields of production, employment, gross domestic product and other statistical areas

ISCED – This is an International Standard Classification of Education that classifies education programmes by their content using two main cross-classification variables: levels of education and fields of education.

Job - defined as a set of tasks or duties executed or meant to be executed by one person.

Kenya National Occupational Classification Standard- This is a Kenyan Standard that is used to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data modelled on the International Standard Classification of Occupations (ISCO).

Major Occupational Groups- Occupations are classified into 10 major groups, based on their similarity in terms of the skill levels and areas of specialization required for the jobs.

Minor Occupational Groups – this is a more detailed level of the classification structure within major occupational groups where occupations are aggregated into 225 minor groups. The jobs are more closely related in terms of skills and tasks.

Occupation - defined as a set of jobs which have the same main tasks and duties.

Precarious Work- Refers to work that is permanent but employees are denied permanent employee rights. These workers are subject to unstable employment, lower wages and more dangerous working conditions. They rarely receive social benefits and are often denied the right to join a union (ILO).

Skill –knowhow that gives a person the ability to carry out the tasks and duties of a given job.

Mainstream Print Media- refers to the daily and weekly newspapers that have a nationwide circulation and have the widest reach.

1.0 INTRODUCTION

The Job Opportunity Analysis (JOA) report covers the period October to December 2019 and presents an analysis of job opportunities advertised in the mainstream media during the reference period. This was for the purpose of credibility of data sources.

The findings presented include vacancies by economic sectors, occupational categories, skills requirements and regional distribution of the vacancies advertised.

2.0 OBJECTIVES AND USES OF JOA

The Job Opportunity Analysis (JOA) has a general objective of monitoring vacancies that occur in the economy and presenting that information in terms of the skills and other aspects pertaining to the vacancies reported. These include location (where the vacancy occurred), terms of service and economic sectors.

Job Opportunity Analysis involves the calculation of Job Opportunity Indices for various economic sectors and occupations. This will give an indication on the economic sectors and occupations where opportunities for jobs occurred within the period under review and the skills required. It will also provide trends in skill demands within the economy over time.

3.0 METHODOLOGY

This job opportunities Analysis report for the months of October to December 2019 was done by recording job vacancies advertised daily in the mainstream print media namely the Daily Nation and the Standard. The vacancies that were not considered for this JOA were:

- Vacancies declared exclusively online
- Vacancies that were declared at the Public and Private Employment Bureaus

For the purpose of this report, independent analysis was undertaken for each occupational category and economic activity bearing in mind the regional distribution of the vacancies advertised.

3.1 Computation of Job Opportunity Index (JOI)

The JOI was computed using unweighted simple index method with data between January and March 2015 taken as the baseline.

3.2 Uses of Classification Standards in Job Opportunities Analysis

In the analysis of the advertised jobs, the following classification standards have been used: Kenya National Occupational Classification Standard (KNOCS) International Standard of Industrial Classification (ISIC) and International Standard Classification of Education (ISCED).

3.2.1 Use of Kenya National Occupational Classification Standard (KNOCS)

The allocation of an occupational code using the Kenya National Occupational Classification Standard (KNOCS) was done on the basis of the job title.

In Kenya, occupations are classified in a framework called Kenya National Occupational Classification Standard (KNOCS) which is designed mainly to

facilitate statistical description and analysis of labour market information and other socio-economic activities. KNOCS is structured on a 5-digit coding system. The 5-digit coding system is such that the first and second digits of the code refer to the major and sub-major occupational group respectively. The third digit refers to the minor group, while the fourth and fifth digits refer to occupational titles. The document is categorized into 10 major groups, 54 sub-major groups, 225 minor groups and 1192 occupational titles. For Job Opportunity Index, KNOCS was used at major occupational and minor occupational groups.

3.2.2 Use of International Standard of Industrial Classification (ISIC)

International Standard of Industrial Classification (ISIC Rev 4) is an ILO classification standard that disaggregates the economy into the more detailed levels of industries and industry groups, as well as the more aggregated levels of divisions and sections. It is used to examine particular industries or industry groups or to analyze the economy as a whole by disaggregating it to different levels of detail. For JOA, ISIC level 1 and 2 was adopted to classify economic activities as follows:

Level 1 – Broadly groups the economy into nine major activities and Level 2 further breaks the nine activities into 21 sub-groups.

3.2.3 Use of International Standard Classification of Education (ISCED)

UNESCO developed and maintains an International Standard Classification of Education (ISCED) which is a statistical framework belonging to family of Economic and Social Classifications. This is a reference classification for organizing education programmes and related qualifications by levels and fields of education. ISCED categorizes field of education into Broad, Narrow and

Detailed categories. For JOA, ISCED has been used at Broad and Narrow categories.

3.3   Best practices applied

In coming up with this report, the following best practices were adopted:

- Job opportunities were grouped using the national occupational classification Framework (KNOCS).
- Only vacancies declared in the mainstream newspapers were considered, for credibility
- For comparability, International Classification Standards were used

4.0   ANALYSIS OF JOB VACANCIE

This section presents summaries on job vacancies in the period October to December, 2019 The summaries cover vacancies advertised by economic activity, major occupational group, terms of service, skill area, level of education and by county. During the reference period, a total of **11355** job openings were advertised.

4.1. Vacancies by Economic Activity

Job opportunities occur within certain economic activities1. Therefore, job openings within the respective economic activities must be monitored for employment creation and potential forecasting. In the analysis of vacancies by economic sectors, vacancies were grouped into 21 economic categories as per ISIC classification (rev4). Table 1 shows that Education had highest number of job vacancies with about 92 percent followed by Public Administration and Defense; Compulsory Social Security that recorded the 3 percent of the jobs

advertised while the rest of the economic activities contributed to less than 4 percent of the jobs advertised.

Table 1: Distribution of Vacancies by Economic Activity

Economic sectors	Vacancies	%
Agriculture, Forestry and Fishing	19	0.17
Manufacturing	15	0.13
Water supply,Sewarage,Waste management and Remediation activities	4	0.04
Construction	2	0.02
Wholesale and retail trade; Repairs of motor Vehicles and motorcycles	2	0.02
Transportation and storage	1	0.01
Accommodation and food service activities	3	0.03
Information and communication	23	0.20
Financial and Insurance activities	67	0.59
Professional, scientific and technical activities	6	0.05
Administrative and Support Service activities	229	2.02
Public Administration and Defense;Compulsory social security	377	3.32
Arts,Entertainment and Recreation	8	0.07
Education	10464	92.15
Human health and Social work activities	76	0.67
Other service activities	40	0.35
Activities of extraterritorial organizations and bodies	19	0.17
Grand Total	11355	100.00

4.2. Vacancies by Major Occupational Group

Table 2 presents number of vacancies by major occupational group. It can be observed that 56 percent of the job openings were in the Major Occupational Group of Professionals Occupational Major Group followed by Technicians and Associate Professionals major group with 41 percent of all vacancies advertised respectively. The rest of the occupations constituted to less than 3 percent of the advertised jobs. For detailed analysis of job openings by minor occupational groups (See appendix 1)

Table 2: Vacancies by Major Occupational Group

occupational major group	Vacancies	%
Legislators, administrators and managers	278	2.45
Professionals	6384	56.22
Technicians and associate professionals	4646	40.92
Secretarial, clerical services and related workers	13	0.11
Service workers , shop and market sales workers	28	0.25
Plant and machine operators and assemblers	5	0.04
Elementary occupations	1	0.01
Grand Total	11355	100.00

4.3 Vacancies by Terms of Service

One of the characteristics of decent work is sustainability and security of work. ILO identifies precarious work (casual, seasonal and temporary work) as percentage for all paid workers and an indicator in monitoring decent work. Monitoring terms of service is one of the major steps towards promoting decent work in Kenya. During the reference period, 90 percent of the advertised jobs were on temporary terms while 4 percent were on contract. Of all jobs advertised 3.3 percent of the jobs advertised were silent on the terms of engagement.

Figure 3: Distribution of Vacancies by Terms of Service

Terms	Total	%
Contract	451	4.0
Not Stated	378	3.3
Permanent	23	2.0
Temporary	10300	90.7
Grand Total	**11355**	**100.0**

4.4. Vacancies by Skill Area and Level

Table 4 provides information on skills levels demanded by employers. Out of the total jobs advertised, 57 percent required Bachelors level of Education while 38 percent required applicants with certificate degree level of Education. It's also important to note that 1 percent of all the advertisement did not indicate the skill level required.

Table 4 Distribution of Vacancies by Skill Level

skill level	Vacancies	%
Bachelors	6507	57.31
Certificate	4352	38.33
Diploma	319	2.81
Doctorate(Phd)	15	0.13
Higher Diploma	2	0.02
Masters	36	0.32
Not Stated	123	1.08
Post Graduate Diploma	1	0.01
Grand Total	11355	100.00

4.5 Vacancies by Skill area

Table 5 Vacancies by Skill area

Skill Area	Total	%
Agriculture, Forestry and Fishery	55	0.48
Architecture and Building	9	0.08
Arts	11	0.10
Basic general programmes	3	0.03
Business Administration	43	0.38
Business and Administration	120	1.06
Computing	39	0.34
Craft/Vocational Trades	8	0.07
Education	10353	91.18
Engineering and Engineering Trades	38	0.33
Environmental Protection	4	0.04
Health	259	2.28
Humanities	126	1.11
Hummanities	1	0.01
Journalism and information	8	0.07
Law	20	0.18
Life sciences	2	0.02
Manufacturing and Processing	15	0.13
Mathematics and Statistics	6	0.05
Personal services	9	0.08
Physical sciences	20	0.18
Security services	9	0.08
Social sciences	117	1.03
Social services	15	0.13
Transport services	2	0.01
Veterinary	63	0.55
Grand Total	11355	100.00
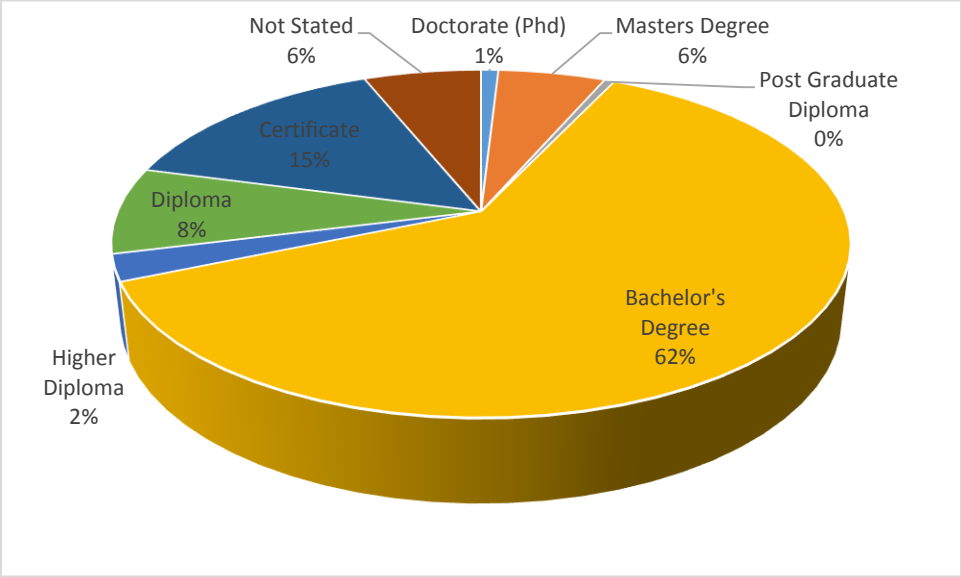
Figure 3: Vacancies by skill level

4.6 vacancies by skill area and level

Table 3: Number of vacancies by skill area and level

Economic sub-sector	Bachelors	cert	Dip	PHD	H. Dip	Masters	Not Stated	PGD	Grand Total	%
Agriculture,Forestry and Fishing	5				1	6	7		19	0.17
Manufacturing	8						7		15	0.13
Water supply,Sewarage,Waste management and Remediation activities	2		1		1				4	0.04
Construction	1						1		2	0.02
Wholesale and retail trade;Repairs of motor Vehicles and motocycles	1		1						2	0.02
Transportation and storage	1								1	0.01
Accomodation and food service activities	2		1						3	0.03
Information and communication	18		2				3		23	0.20
Financial and Insurance activities	51	10	2			3	1		67	0.59
Professional, scientific and technical activities	3					3			6	0.05
Administrative and Support Service activities	129		92			1	7		229	2.02
Public Administration and Defense;Compulsory social security	152	30	184			5	6		375	3.30
Arts,Entertainment and Recreation	6					2			8	0.07
Education	6051	4312	15	14		7	65		10464	92.15
Human health and Social work activities	51		20	1		1	3		76	0.67
Other service activities	19		1			5	14	1	40	0.35
Activities of extraterritorial organizations and bodies	7					3	9		19	0.17
Grand Total	6507	4352	319	15	2	36	123	1	11355	100.00

4.7. Vacancies by County and Major Occupational Group

In this part of the report, vacancies advertised were analyzed on the basis of the County where the vacancy arose and the major occupation into which the job belongs. From the analysis, there were 11355 vacancies advertised in all Counties. Nairobi County had the highest number of advertised vacancies at 96 percent out of which Legislators, Administrators and Managers were the majority

registering 93 percent while Professionals major group followed at 3 percent. N/B: Jobs captured under Nairobi county also included adverts from the national government, multinational agencies and organizations with headquarters in Nairobi. Other counties accounted for 6 per cent of the job advertisements. For detailed analysis on vacancies by Counties and Major **Occupational Group see Appendix 2**

5.0. JOB OPPORTUNITY INDEX (JOI).

A job opportunity index is a statistical value that indicates a change in number of jobs advertised in a given period of time in reference to an established baseline. When the number is below the baseline, it implies that the jobs advertised were fewer while when the index is above the baseline, it implies that jobs advertised were more.

5.1. Job Opportunity Indices in all Economic Activities

Table 4 presents job opportunity indices for the period October to December, 2019.Administrative and Support Service Activities sector recorded the highest job creation with an index of 996 followed by Public Administration and Defence; Compulsory Social Security sector with an index of 406 and Arts, Entertainment and Recreation sub sector with an index of 80.

Overall there was a general growth in the number of vacancies reported with Job Opportunity Index in all Economic Activities with the quarter reporting an index of 199 as compared to the previous quarter that had an index of 26.

It's also important to note that a number of economic sectors reported no growth recording a zero index. These were: Mining and Quarrying, Electricity, Gas, Steam and Air Conditioning Supply, Real Estate Activities and Activities of Households as Employers.

Table 4: Job Opportunity Indices by Economic Activity

ISIC Code	Economic Activity	Sept 2018	Dec 2018	March 2019	Sept 2019	DEC,2019
A	Agriculture, Forestry and Fishing	2	0	60	4	42
B	Mining and Quarrying	0	0	50	200	0
C	Manufacturing	12	288	22	1	17
D	Electricity, Gas, Steam and Air Conditioning Supply	38	0	0	75	0
E	Water Supply; Sewerage, Waste Management and Remediation	35	100	83	50	15
F	Construction	48	0	18	4	9
G	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	30	35	9	17	9
H	Transportation and Storage	0	2	3	15	1
I	Accommodation and Food Service Activities	85	75	0	5	15
J	Information and Communication	41	36	62	79	59
K	Financial and Insurance Activities	20	9	8	4	30
L	Real Estate Activities	0	25	0	0	0
M	Professional, Scientific and Technical Activities	8	10	8	21	5
N	Administrative and Support Service Activities	0	116	62	31	996
O	Public Administration and Defence; Compulsory Social Security	30	38	9	30	406
P	Education	9	8	732	31	24
Q	Human Health and Social Work Activities	20	2	6	37	42
R	Arts, Entertainment and Recreation	0	0	10	10	80
S	Other Service Activities	0	2	11	19	77
T	Activities of Households as Employers;	0	0	0	0	0
U	Activities of Extraterritorial Organizations and Bodies	20	5	7	11	5
	Total	23	31	142	26	199

5.2. Job Opportunity Indices by Occupation

Table 5 shows that the highest growth in the reference period was reported in Legislators, Administrators And Managers Major Occupational group which had the highest number of jobs demanded with an index of 696 for the period October to December, 2019 followed by Technicians and Associate Professionals with an index of 46 while Craft And Related Trades Workers occupational group registered no growth. Skilled Farm, Fishery, Wildlife and Related Workers, Plant and Craft and Related Trades Workers Major occupational groups registered no growth with an index of zero. On overall there was a general increase in the number of jobs advertised.

Table 5: Job Opportunity Indices by Occupation

Major Occupational Group	Sep 2018	Dec 2018	March 2019	Sep 2019	DEC, 2019
Legislators, Administrators And Managers	22	8	12	15	696
Professionals	24	6	301	24	23
Technicians and Associate Professionals	31	114	6	69	46
Secretarial, Clerical Services and Related Workers	48	62	18	16	14
Service Workers , Shop and Market Sales Workers	6	10	1	4	7
Skilled Farm, Fishery, Wildlife and Related Workers	0	0	0	0	0
Craft and Related Trades Workers	28	533	0	100	0
Plant and Machine Operators and Assemblers	164	44	28	56	20
Elementary Occupations	5	115	4	16	1
Occupations Groups Not Classified Elsewhere	12	0	0	0	0
Grand Total	**23**	**31**	**114**	**26**	**241**

N/B- The indices were calculated using January to March 2015 quarter whose base was 100

6.0. LABOUR MARKET ANALYSIS

Job Opportunity Index avail signals that can help identify structure and dynamics of the labour market in a short interval of time. During this period the following were the key signals;

- Education sector had a high potential for job openings accounting for 92 % of total jobs advertised.
- The labour market required occupations with high level of skill and training at the level of bachelors degree at 57 percent

Appendix 1: vacancies by sub major occupational group and skill level

Sub major occupational group	Bachelors	Phd	Masters	Pgd	HDip	Cert	Dip	Not Stated	Other	Grand Total	%
Administrators and senior officials of special-interest organizations	1									1	0.01
Armed forces						1			1	2	0.02
Business professionals	5							1		6	0.05
Corporate managers	24							3		27	0.24
Drivers and mobile machinery operators	0								1	1	0.01
Health and life science professionals	7							2		9	0.08
Legal professionals	9		2							11	0.10
Mathematicians, statisticians and computing professionals	1									1	0.01
Medical and health science associate professionals	1						7			8	0.07
Personal and protective services workers	1									1	0.01
Sanitarians	2									2	0.02
Social science and related professionals	5									5	0.04
Accountants, auditors and tax assessors	1							1		2	0.02
Administration middle level personnel	0				1		26	26	2	55	0.48
Administration middle level personnel	98		3			27	68	3		199	1.75
Administrators and senior officials of special-interest organizations	70	3	11	1			1	10		96	0.85
Business and social services associate professionals	1						1			2	0.02
Business professionals	14							3		17	0.15
Client oriented clerks	1							2		3	0.03
Computing professionals	1	1								2	0.02
Corporate managers	45	3	9				7	11		75	0.66
Decorators and commercial designers	0							1		1	0.01
Dministration middle level personnel 36	0						10			10	0.09
Drivers and mobile machinery operators	0							1	1	2	0.02
Drivers and mobile machinery operators	0								1	1	0.01
Engineering science professionals	27					3	3	1		34	0.30
Engineering technicians	2				1		5	3		11	0.10
Government administrators	0							4		4	0.04
Health and life science professinals	0							2		2	0.02
Health and life science professionals	48		1				13	1		63	0.55

Occupation								Total	%
Health professionals	1							1	0.01
House stewards, caterers, waiters and related workers	0			10	2	1		13	0.11
Labourers in mining, construction, manufacturing and transport	1							1	0.01
Lawyers						1		1	0.01
Legal professionals	5		1			1		7	0.06
Legislators and constitutional officials	1							1	0.01
Mathematicians, statisticians and computing professionals	7					2		9	0.08
Medical and health science associate professionals	15				1	1		17	0.15
Medical assistants and clinical officers	2							2	0.02
Models, shop assistants and demonstrators	1				1			2	0.02
Models, shop assistants and demonstrators						4		4	0.04
Non-departmental managers	12		1		1	2		16	0.14
Nursing and mid-wifery professionals					144			144	1.27
Other administrators and managers						1		1	0.01
Other administrators and managers	11			10300		10		10321	90.90
Other business, social services, athletics, sports and related workers	1				1	1		3	0.03
Other departmental managers	1		1					2	0.02
Other professionals	9				3			12	0.11
Personal and protective services workers	7				1			8	0.07
Physical and life science associate professionals	3				2	3		8	0.07
Physical science professionals	1							1	0.01
Physiotherapists and related associate professionals	2				10			12	0.11
Primary and pre-primary education and other teachers	5					2		7	0.06
Primary education teachers	6				1			7	0.06
Psychologists	1							1	0.01
Railway engine drivers and related workers							1	1	0.01
Secretaries and office clerks	4		4			2		10	0.09
Senior officials of special interest organizations	4		1	1		4		10	0.09
Social science and related professionals	1				1			2	0.02
Specialised departmental managers	14			10		1		25	0.22
Teaching professionals	24	8	2			12	5	51	0.45
Technicians and associate professionals	1							1	0.01

Grand Total		504	1 5	36	1	2	10 35 3	3 0 8	123	12	11354	100 .00

Appendix 2: Vacancies by County and Occupational Major Group

Occ.major group / County	Legislators, administrators and managers	Professionals	Technicians and associate professionals	Secretarial, clerical services and related workers	Service workers, shop and market sales workers	Grand Total	%
Baringo			1			1	0.01
Bungoma	24	30	104	2		160	1.41
Embu	4					4	0.04
Kajiado		4				4	0.04
Kakamega	1	145	13		1	160	1.41
Kiambu	3	11	1			15	0.13
Kirinyaga		1	1		2	4	0.04
Kisumu	1		2			3	0.03
Kwale		1				1	0.01
Laikipia		4	2			6	0.05
Marsabit	2					2	0.02
Meru	3	1				4	0.04
Mombasa	1	4	1			6	0.05
Muranga		1				1	0.01
Nairobi	10503	158	216	11	13	10908	96.07
Nakuru	19	11	3		11	44	0.39
Nyandarua		1				1	0.01
Nyeri	2	4				9	0.08
Taita Taveta	7					7	0.06
Turkana	3	1				4	0.04
Uasin Gishu	1	6				7	0.06
Vihiga	1	1	2		1	5	0.04

Grand Total	10575	384	346	13	28	11355	100
	93.1	3.4	3	0.2	0.3	100	

Appendix 3:Vancancies by county and skill level

Sum of Vancansies		Column Labels							

Row Labels	Doctorate(Phd)	Bachelors	Masters	Post Graduate Diploma	Higher Diploma	Diploma	certificate	Not Stated	Grand Total	%
Baringo						1			1	0.01
Bungoma		85	1			44	30		160	1.41
Embu		4							4	0.04
Kajiado	1		2					1	4	0.04
Kakamega		15	1			144			160	1.41
Kiambu	4	9				2			15	0.13
Kirinyaga						2	1	1	4	0.04
Kisumu		1			1	1			3	0.03
Kwale		1							1	0.01
Laikipia		5				1	4300		4306	37.92
Marsabit		2							2	0.02
Meru		4							4	0.04
Mombasa		4				1		1	6	0.05
Muranga		1							1	0.01
Nairobi	9	6336	31	1	1	116	1	112	6607	58.19
Nakuru		22				2	20		44	0.39
Nyandarua		1							1	0.01
Nyeri		4				5			9	0.08
Taita Taveta	1	6							7	0.06
Turkana		1						3	4	0.04
Uasin Gishu		6	1						7	0.06
Vihiga								5	5	0.04

Grand Total		15	6507	36		1	2	319	4352	123	11355	100.00