



MINISTRY LABOUR AND SOCIAL PROTECTION

JOB OPPORTUNITY ANALYSIS REPORT

(October – December, 2020)

**DEPARTMENT OF NATIONAL HUMAN RESOURCE
PLANNING AND DEVELOPMENT**

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TABLE OF CONTENTS

TABLE OF CONTENTS	ii
LIST OF TABLES	iii
LIST OF FIGURES.....	Error! Bookmark not defined.
ACRONYMS / ABBREVIATIONS	iv
FUNCTIONAL DEFINITION OF TERMS	v
1.0 INTRODUCTION	1
2.0 OBJECTIVES AND USES OF JOA.....	1
3.0 METHODOLOGY	2
3.1 Computation of Job Opportunity Index (JOI)	2
3.2 Classification Standards used in the Job Opportunities Analysis	2
3.2.1 Kenya National Occupational Classification Standard (KNOCS)	2
3.2.2 International Standard of Industrial Classification (ISIC)	3
3.2.3 International Standard Classification of Education (ISCED).....	3
4.0 ANALYSIS OF JOB VACANCIES.....	4
4.1. Vacancies by Economic Activity	4
4.2. Vacancies by Major Occupational Group.....	5
4.3 Vacancies by Terms of Service.....	5
4.4. Vacancies by Skill area	6
4.5 Vacancies by Skill Level.....	7
4.6 Vacancies by county and major occupational group	7
5.0. JOB OPPORTUNITY INDEX (JOI)	10
5.1. Job Opportunity Indices in all Economic Activities.....	10
5.2. Job Opportunity Indices by Occupation	11
6.0. LABOUR MARKET ANALYSIS	12

LIST OF TABLES

TABLE 1: DISTRIBUTION OF VACANCIES BY ECONOMIC ACTIVITY.....	ERROR! BOOKMARK NOT DEFINED.
TABLE 2: VACANCIES BY MAJOR OCCUPATIONAL GROUP.....	ERROR! BOOKMARK NOT DEFINED.
TABLE 3: DISTRIBUTION OF VACANCIES BY TERMS OF SERVICE	6
TABLE 4: VACANCIES BY SKILL AREA	ERROR! BOOKMARK NOT DEFINED.
TABLE 5: DISTRIBUTION OF VACANCIES BY SKILL LEVEL	7
TABLE 6: VACANCIES BY COUNTY AND OCCUPATIONAL MAJOR GROUP.....	ERROR! BOOKMARK NOT DEFINED.
TABLE 7: JOB OPPORTUNITY INDICES BY ECONOMIC ACTIVITY	10
TABLE 8: JOB OPPORTUNITY INDICES BY OCCUPATION	11

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 2020 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 gives an indication on the economic sectors and occupations where opportunities for jobs occurred within the period under review and the skills required. It provides trends in skill demands within the economy over time.

3.0 METHODOLOGY

The job opportunities analysis report for the months of October to December 2020 was carried out by recording job vacancies advertised daily in the mainstream print media namely the Daily Nation and the Standard.

Analysis was undertaken for each occupational category and economic activity based on 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 Classification Standards used in the Job Opportunities Analysis

In the analysis of the advertised jobs, the following classification standards were used: Kenya National Occupational Classification Standard (KNOCS) 2000, International Standard of Industrial Classification (ISIC) and International Standard Classification of Education (ISCED).

3.2.1 Kenya National Occupational Classification Standard (KNOCS)

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 the Job Opportunity Index, KNOCS framework was used to classify job titles using occupational codes by major and minor occupational groups.

3.2.2 International Standard of Industrial Classification (ISIC)

International Standard of Industrial Classification (ISIC Rev 4) is an International Labour Organization (ILO) classification standard. It disaggregates the economy into detailed levels of industries and industry groups, aggregates levels of divisions and sections as well as allowing for comparability of economic activities among countries. 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 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.

4.0 ANALYSIS OF JOB VACANCIES

This section presents summaries on job vacancies in the period October to December 2020. The summaries cover vacancies advertised by economic activity, major occupational group, terms of service, skill area, level of education and county. During the reference period, a total of **15,342** job openings were advertised.

4.1. Vacancies by Economic Activity

Job opportunities occur within certain economic activities. 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 (rev 4). Table 1 shows that Education economic sector had the highest number of job vacancies with about 91 percent followed by Human Health and Social work activities at 3.3 percent. The rest of economic activities accounted for less than 5.7 percent of the advertised jobs.

Table 1: Vacancies by Economic sector and No of Vacancies reported.

Economic Sector	No of vacancies	%
Administrative and Support Service activities	37	0.24
Agriculture, Forestry and Fishing	78	0.51
Arts, Entertainment and Recreation	6	0.04
Construction	34	0.22
Education	13901	90.61
Financial and Insurance activities	24	0.16
Human health and Social work activities	505	3.29
Information and communication	39	0.25
Manufacturing	19	0.12
Mining and Quarrying	1	0.01
None	1	0.01
Other service activities	216	1.41
Professional, scientific and technical activities	76	0.50
Public Administration and Defense; Compulsory social security	293	1.91
Transportation and storage	75	0.49

Water supply, Sewerage, Waste management and Remediation activities	37	0.24
Grand Total	15342	100.00

4.2. Vacancies by Major Occupational Group

Table 2 presents number of vacancies by Major Occupational Group. The highest number of job openings at 50.9 percent were in Professionals Major Group followed by the Legislators, Administrators and Managers Major Occupational Group at 43.8 percent and Technicians and Associate Professionals Major Occupational Group at 4.5 percent of all vacancies advertised. The rest of the Major Occupational Groups accounted for less than 1 percent.

Table 2: Vacancies by Major Occupational Group

Major Occupational Group	No. of Vacancies	%
Legislators, Administrators and Managers	6724	43.8
Professionals	7807	50.9
Technicians and Associate Professionals	687	4.5
Secretarial, Clerical Services and Related Workers	29	0.2
Service Workers, Shop and Market Sales Workers	49	0.3
Craft and Related Trades Workers	4	0.0
Plant And Machine Operators and Assemblers	40	0.3
Elementary Occupations	2	0.0
Grand Total	15342	100.0

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, 93.1 percent of the advertised jobs were on permanent terms, 5.6 percent on contract terms while 1.3 percent of the advertised jobs were silent on the terms of engagement as shown in table 3.

Table 3: Distribution of Vacancies by Terms of Service

Terms of Service	No. of Vacancies	%
Contract	863	5.6
Not Stated	197	1.3
Permanent	14282	93.1
Grand Total	15342	100.0

4.4. Vacancies by Skill area

Table 4 provides information on vacancies by skill area as demanded by employers. Out of the total advertised jobs, 89 percent required applicants who had skills in Education, followed by Health at 3.3 percent and Arts at 1.7 percent. The rest of the skill areas had less than 1 percent each.

Table 4: Vacancies by Skill Area

Skill Area	No. of vacancies	%
Agriculture	15	0.1
Architecture and construction	39	0.3
Arts	258	1.7
Basic programmes	253	1.6
Biological and related Sciences	1	0.0
Business and Administration	222	1.4
Education	13648	89.0
Engineering and Engineering trades	62	0.4
Environment	31	0.2
Fisheries	1	0.0
Health	507	3.3
Humanities	20	0.1
Information Communication Technology (ICT)	106	0.7
Journalism and information	1	0.0
Law	43	0.3
Manufacturing and Food processing	12	0.1
Mathematics and statistics	3	0.0
Physical Sciences	15	0.1
Security services	3	0.0
social and behavioural science	57	0.4
Transport services	14	0.1

Veterinary Medicine	31	0.2
Total	15342	100.0

4.5 Vacancies by Skill Level

Table 5 provides information on skill levels demanded by employers. Out of the total advertised jobs, 94.7 percent required Bachelors Degree level, 2.4 percent required Diploma level while 1.7 percent of the jobs required applicants with a Certificate level of Education.

Table 5: Distribution of Vacancies by Skill Level

Skill Level	No. of Vacancies	%
Bachelors Degree	14526	94.68
No Certificate	266	1.73
Diploma	362	2.36
Doctorate (PhD)	3	0.02
Higher Diploma	14	0.09
Masters Degree	127	0.83
Certificate	5	0.03
Not Stated	14	0.09
Other	24	0.16
Post Graduate Diploma	1	0.01
Grand Total	15,342	100

4.6 Vacancies by County and Skill Level

Table 6 provides analysis of advertised vacancies on the basis of the County where they arose and the major occupational group into which each job belongs. A total of 15,342 vacancies were advertised in all Counties. Nairobi County had the highest number of vacancies at 93.8 percent followed by Nyandarua at 2.9 percent while the rest of the counties accounted for 3.3 percent.

Vacancies that required a degree level of Education accounted for 95 percent of all advertised jobs followed by Certificate and Diploma level of Education at 2 percent each.

Jobs captured under Nairobi county also included advertisements from the national government, multinational agencies and organizations with headquarters in Nairobi and hence had more vacancies compared to other counties (See annex Table 1).

Table 6: Vacancies by county and skill level

County	Bachelors	Cert	Dip	PhD	H. Dip	Masters	No Cert	Not Stated	Other	PGD	Grand Total	%
Baringo	10	4	2			19				1	36	0.23
Bungoma	3										3	0.02
Busia	5										5	0.03
Tharaka Nithi						1					1	0.01
Uasin-Gishu	1					6					7	0.05
Garissa	3					1					4	0.03
Kakamega	1										1	0.01
Kericho	1										1	0.01
Kiambu	6					4		1			11	0.07
Kilifi						1					1	0.01
Kirinyaga	1							1			2	0.01
Kisii	202		108			15					325	2.12
Kisumu	5										5	0.03
Narok	1							2			3	0.02
Meru	2										2	0.01
Mombasa	10	1	23		1	1	5		10		51	0.33
Nairobi	14158	5	155	2		49		9	14		14392	93.81
Nakuru	3										3	0.02
Nyeri	2					2					4	0.03
Nyandarua	106	225	74		13	23					441	2.87
EAC				1							1	0.01
Siaya	6					5					11	0.07

Taita-Taveta								1			1	0.01
Trans-Nzoia		31									31	0.2
Grand Total	14526	266	362	3	14	127	5	14	24	1	15342	100
%	95	2	2	0	0	1	0	0	0	0	100	

4.7 Vacancies by Occupational Major Group and Educational Award

Table 7 shows the number of vacancies advertised by occupational major group and educational award. Professionals major group had the highest number of vacancies accounting for 50.9 percent followed by Legislators, Administrators and Managers at 43.8 percent and Technicians and Associate Professionals at 4.5 percent. Majority of vacancies required a bachelors degree level of Education. These accounted for 94.7 percent

Table 7: Vacancies by Occupation and Educational Award

Occupational Major Group	Bachelors	Cert	Dip	PhD	H.Dip	Masters	No Cert	Not Stated	Other	PGD	Grand Total	%
Craft and Related Trades Workers			2						2		4	0.0
Elementary Occupations		2									2	0.0
Legislators, Administrators and Managers	6624	2		3		82		8	5		6724	43.8
Plant and Machine Operators and Assemblers	4	10	9					3	14		40	0.3
Professionals	7700	4	47		13	39		3		1	7807	50.9
Secretarial, Clerical Services and Related Workers	4	16	8						1		29	0.2
Service Workers, Shop and Market Sales Workers	9	31	2		1	1	5				49	0.3
Technicians and Associate Professionals	185	201	294			5			2		687	4.5
Grand Total	14526	266	362	3	14	127	5	14	24	1	15342	100.0
Percent	94.7	1.7	2.4	0.0	0.1	0.8	0.0	0.1	0.2	0.0	100.0	

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 advertised jobs 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

Job opportunity indices for the period October to December 2020 are presented in Table 7. Other Service Activities Economic sector had the highest job creation with an index of 21600 followed by Transportation and Storage at 3750 and Construction at 3400. Comparatively there was an increase in the job opportunity index from a low of 11 in September 2020 quarter to 1485 in the quarter ending December 2020.

Table 7: Job Opportunity Indices by Economic Activity

ISIC Code	Economic Activity	Dec 2018	March 2019	Sept 2019	Dec, 2019	March ,2020	June, 2020	July 2020	Oct-Dec index
A	Agriculture, Forestry and Fishing	0	60	4	42	189	14125	67	975
B	Mining and Quarrying	0	50	200	0	0	100	100	100
C	Manufacturing	288	22	1	17	187	0	0	1900
D	Electricity, Gas, Steam and Air Conditioning Supply	0	0	75	0	0	0	0	0
E	Water Supply; Sewerage, Waste Management and Remediation	100	83	50	15	950	345	45	740
F	Construction	0	18	4	9	300	0	0	3400
G	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	35	9	17	9	0	0	0	0
H	Transportation and Storage	2	3	15	1	1500	167	22	3750
I	Accommodation and Food Service Activities	75	0	5	15	200	0	0	0
J	Information and Communication	36	62	79	59	96	0	50	1950
K	Financial and Insurance Activities	9	8	4	30	99	386	229	75

L	Real Estate Activities	25	0	0	0	0	0	0	0
M	Professional, Scientific and Technical Activities	10	8	21	5	1100	0	0	380
N	Administrative and Support Service Activities	116	62	31	996	235	61	4	116
O	Public Administration and Defense; Compulsory Social Security	38	9	30	406	413	329	157	40
P	Education	8	732	31	24	5	65	5	316
Q	Human Health and Social Work Activities	2	6	37	42	124	2	2	398
R	Arts, Entertainment and Recreation	0	10	10	80	50	80	0	300
S	Other Service Activities	2	11	19	77	562	0	20	21600
T	Activities of Households as Employers;	0	0	0	0	0	0	0	0
U	Activities of Extraterritorial Organizations and Bodies	5	7	11	5	8921	28250	167	0
	Total	31	142	26	199	44	54	11	1485

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

5.2. Job Opportunity Indices by Occupation

Table 8 presents job opportunity indices for the period October to December 2020 by occupation. During the period under review the highest growth was reported in Professionals Major Occupational group at 3790 followed by Technicians and Associate Professionals at 3000 index. Skilled Farm, Fishery, Wildlife and Related Workers and Service Workers, Shop and Market Sales Workers, major occupational groups registered no growth.

On overall, there was an increase in the number of jobs advertised with an aggregate index rising from 11 in the previous quarter to an index of 1485.

Table 8: Job Opportunity Indices by Occupation

Major Occupational Group	Dec 2018	March 2019	Sept 2019	Dec, 2019	March, 2020	June, 2020	Sept, 2020	Oct-Dec,2020
Legislators, Administrators And Managers	8	12	15	696	129	51	353	1034
Professionals	6	301	24	23	45	196	4	3790
Technicians and Associate Professionals	114	6	69	46	35	146	5	3000

Secretarial, Clerical Services and Related Workers	62	18	16	14	154	90	189	85
Service Workers , Shop and Market Sales Workers	10	1	4	7	25	11685	0	0
Skilled Farm, Fishery, Wildlife and Related Workers	0	0	0	0	0	0	0	0
Craft and Related Trades Workers	533	0	100	0	0	0	0	36
Plant and Machine Operators and Assemblers	44	28	56	20	40	350	43	1333
Elementary Occupations	115	4	16	1	50	0	0	12
Occupations Groups Not Classified Elsewhere	0	0	0	0	0	0	0	0
Grand Total	31	114	26	241	44	186	11	1485

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 has a high potential for job openings.
- The labour market required occupations with high level of skill and training at Degree level.
- The skill area most sought by employers was in Education.

Annex table 1: vacancies by skill area and level

Skill Area	Skill level										Grand Total	
	Bachelors Degree	Cert.	Dip	PhD	H.Dip	Masters Degree	No Cert	Not Stated	Other	Post Graduate Diploma		
Agriculture	14					1					15	0.10
Architecture and construction	15		18		5	1					39	0.25
Arts	255					1			2		258	1.68
Basic programmes		235					5		13		253	1.65
Biological and related Sciences						1					1	0.01
Business and Administration	147	17	11	1		36		7	3		222	1.45
Education	13637				8	3					13648	88.96
Engineering and Engineering trades	24		28			9		1			62	0.40
Environment	11		11			8			1		31	0.20
Fisheries			1								1	0.01
Health	210	3	258			35		1			507	3.30
Humanities	3	1	13			3					20	0.13
Information Communication Technology (ICT)	89		1			10		2	4		106	0.69
Journalism and information			1								1	0.01
Law	41					1				1	43	0.28
Manufacturing and Food processing	10					2					12	0.08
Mathematics and statistics	2					1					3	0.02
Physical Sciences	9		4			2					15	0.10
Security services	1				1	1					3	0.02
social and behavioural science	45			2		10					57	0.37
Transport services		10						3	1		14	0.09
Veterinary Medicine	13		16			2					31	0.20
Grand Total	14526	266	362	3	14	127	5	14	24	1	15342	100.0
%	94.68	1.73	2.36	0.02	0.09	0.83	0.03	0.09	0.16	0.01	100.0	0