



REPUBLIC OF KENYA

MINISTRY OF EDUCATION
State Department of Early Learning and Basic Education
Directorate of quality assurance and standards



*An empty classroom due to Covid -19 Pandemic
(Disrupted classes, undisrupted learning)*

**A REPORT ON ONLINE LEARNING PROGRESS DURING COVID -19 PANDEMIC IN
BASIC EDUCATION INSTITUTIONS IN KENYA**

1.0 Introduction

Education in Kenya, and indeed all over the World has been hit hard by the COVID- 19 Pandemic. While other critical needs such as health, water and sanitation are being responded to, educational needs cannot be forgotten since it can have an equally detrimental impact if left unaddressed. Therefore, continuing education through alternative learning pathways, as soon as possible becomes a top priority to ensure interruption to education is as limited as possible. To this end, the Directorate of Quality Assurance and Standards prepared an online tool to gather information on online and media learning with a hope of supporting and working with teachers, parents/caregivers, innovators, communications experts and all those who are positioned to provide education, whether through radio programmes, home-schooling, online learning and other innovative approaches.

The Survey tool (Annex 11) had been sent to Headteachers and Principals through the County Directors of Education who shared with the teachers in every county. The analysis was based on 12,925 responses received from across all the 47 Counties in Kenya. The responses received showed a break down of respondents per County and per Sub County (Annex 1) The survey was guided by six objectives as follows;

To find out on the:

- (i) Awareness of the radio and television lessons on KICD Edu Channel and other online learning programs,
- (ii) Quality of teaching being offered via online and other media
- (iii) Quality of Supervision of learning by teachers
- (iv) Quality of Assessment of learning by teachers
- (v) Role of stakeholders such teachers, learners, principals/headteachers, parents and religious organization in enhancing online learning.
- (vi) Way forward to advance online learning

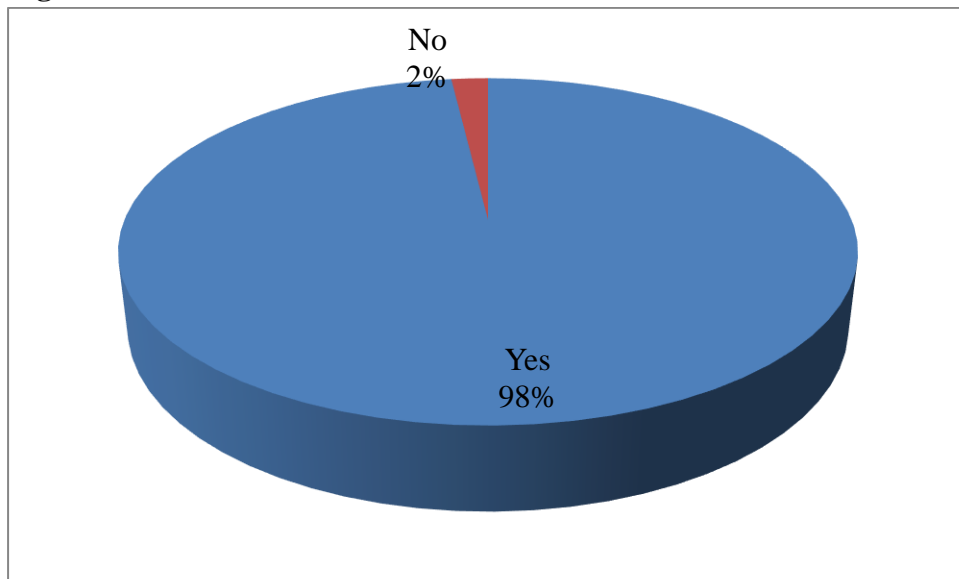
2.0 Presentation of findings

Responses from this survey per objective were as presented herein

2.1 Awareness of the radio and Television lessons on KICD Edu Channel

The first theme of interest was the awareness of the radio and television lessons on the KICD Edu Channel. As such, respondents were asked to indicate their level of awareness (see Figure 1).

Figure 1: Awareness of the radio and Television lessons on KICD Education Channel

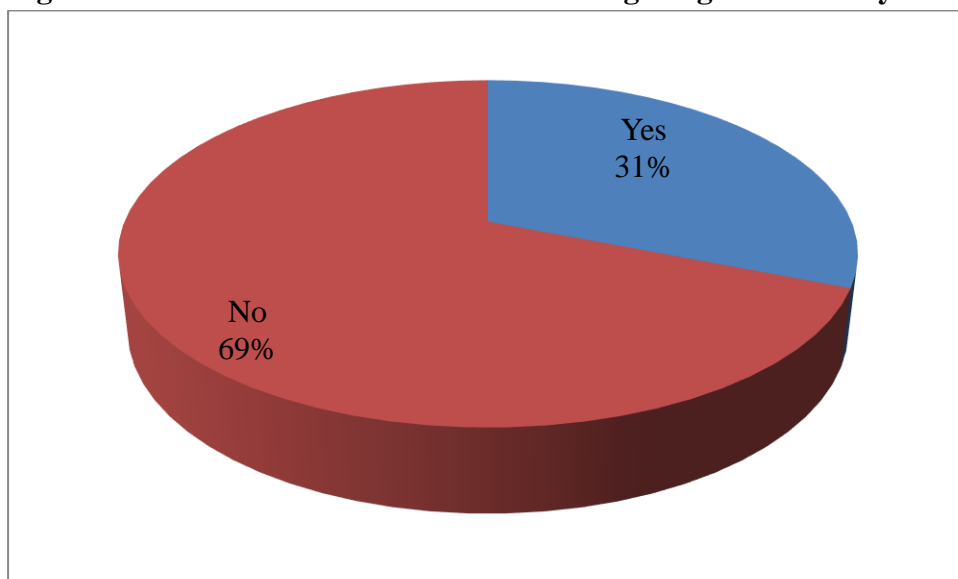


As shown in the figure, an overwhelming majority of the respondents are aware of the radio and television lessons on KICD Education Channel. However, 2% of the respondents are not aware of it. This shows that despite the efforts made by KICD in creating awareness, there are still a few lacking the information on the radio and television lessons provided by KICD.

From the comments, most of the respondents commented that teachers and parents were most likely aware of the programs than students. A few, however, explained that most of those who were not aware of the lessons were those individuals residing in the rural areas of Kenya.

Additionally, further responses were given on the level of awareness of other online learning programs that the students are participating in.

Figure 2: Awareness of other Online Learning Programs used by students



Slightly more than two thirds (69%) were not aware of other online learning programs that students are participating in. Only 31% indicated that they were aware of the programs. This implies that there are other online learning programs utilized by a few of the students in the country which are still not known to many.

To determine the level of awareness of the radio and television lessons on KICD education channel per county, a cross-tabulation was done (see Table 1). As shown in Table 1, Machakos County is leading with the number of individuals who are aware of the radio and television lessons on the KICD education channel followed by Kakamega, Nandi, Bungoma, Muranga, Meru, Narok, Kitui, Vihiga, and Migori among others. This shows that, in most counties, there is a large population of individuals who are aware of the lessons on the KICD education channel. However, a few counties in the remote areas have a few teachers who are aware, hence, there is more than needs to be done to create awareness.

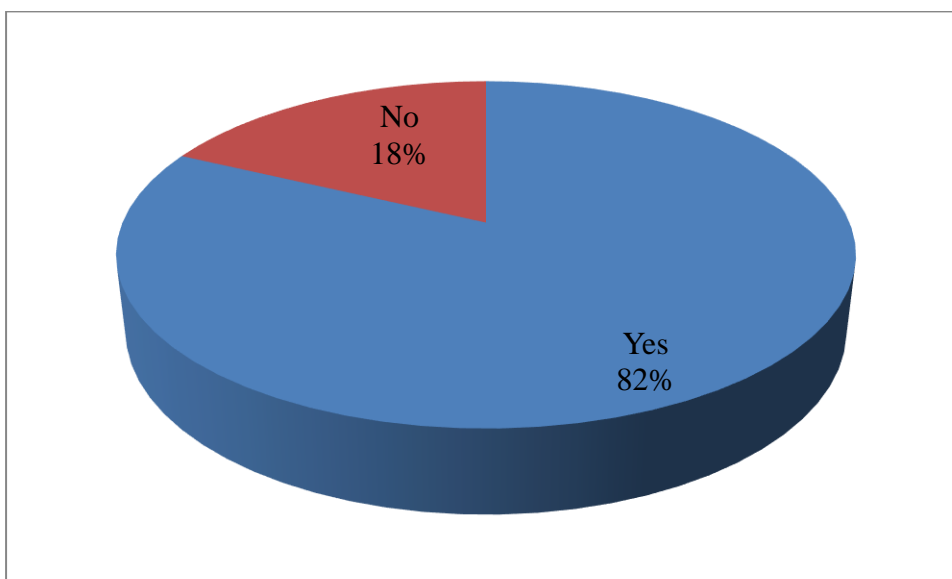
Table 1: Awareness of the radio and Television lessons on KICD Education Channel per County

	Awareness of the Radio and Television Lessons on KICD Education Channel			Awareness of the Radio and Television Lessons on KICD Education Channel	
	No	Yes		No	Yes
Machakos	14	726	Kwale	1	122
Kakamega	10	673	Marsabit	3	110
Nandi	18	637	Siaya	1	108
Bungoma	11	599	Nyeri	0	101

Murang'a	3	555	Nairobi	0	98
Meru	15	534	Nyamira	4	93
Narok	15	499	Tana River	1	90
Kitui	10	489	UasinGishu	1	83
Vihiga	6	464	Mandera	3	82
Migori	6	442	Trans Nzoia	0	81
Kisumu	5	414	Makueni	0	75
Embu	11	379	Baringo	3	68
Kiambu	6	372	Busia	1	64
Kisii	10	287	Bomet	0	55
Kirinyaga	6	277	Lamu	1	54
Kilifi	8	261	Wajir	2	38
Mombasa	4	259	Tharaka-Nithi	0	31
Laikipia	1	255	Nakuru	0	26
Homa Bay	3	234	Turkana	0	14
West Pokot	9	214	Isiolo	0	11
Taita-Taveta	1	191	Elgeyo-Marakwet	0	10
Kericho	2	174	Samburu	0	5
Nyandarua	1	156	Garissa	0	1
Kajiado	2	150			

Having established the level of awareness across different counties in Kenya, the survey was interested in establishing whether the respondents had the radio and Tv timetable provided by KICD. As shown in Figure 3, eighty-two percent (82%) of the respondents have the radio and Tv timetable provided by KICD. A few (18%) do not have it.

Figure 3: Whether the respondents have the radio and Tv timetable provided by KICD



The receipt of the radio and TV timetable provided by KICD was also crosstabulated to establish the situation in each county. According to Table 2, over 500 respondents have the timetable in Machakos, Kakamega, Nandi, and Murang'a. However, there is still quite a number of them who do not have the timetable across the counties and especially in the remote areas in Meru, Narok, nandi, Kitui, Kakamega, Vihiga, Isiolo, and Garissa among others.

Table 2: Ownership of the radio and TV timetable provided by KICD per County

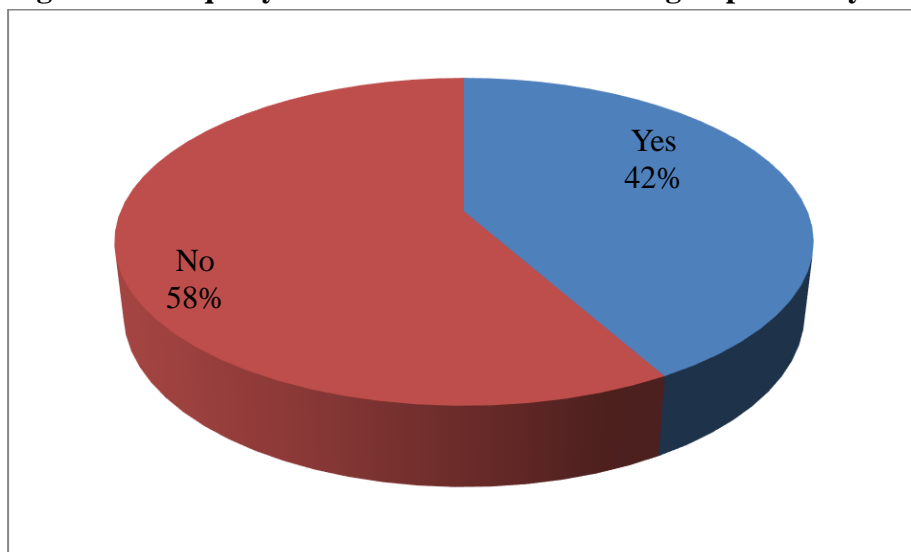
	Ownership of the radio and TV timetable provided by KICD			Ownership of the radio and TV timetable provided by KICD	
	No	Yes		No	Yes
Machakos	105	635	Marsabit	16	97
Kakamega	103	583	Kwale	29	94
Nandi	117	541	Nairobi	6	94
Murang'a	50	510	Nyeri	11	90
Bungoma	127	486	Siaya	21	88
Meru	123	429	Nyamira	12	85
Narok	111	403	Tana River	10	82
Kitui	115	384	UasinGishu	10	77
Vihiga	90	383	Trans Nzoia	11	70
Migori	100	350	Makueni	13	62
Kiambu	41	341	Baringo	18	52
Kisumu	78	342	Lamu	7	48
Embu	74	318	Busia	17	47
Kisii	56	243	Mandera	40	45
Laikipia	23	234	Bomet	11	44
Mombasa	33	231	Samburu	8	28
Kirinyaga	57	229	Wajir	13	28
Kilifi	52	218	TharakaNithi	5	27
Homabay	56	180	Nakuru	3	23
TaitaTaveta	31	162	Turkana	1	13
West Pokot	63	160	Isiolo	0	11
Kericho	36	140	ElgeyoMarakwet	1	9
Nyandarua	22	135	Garissa	0	1
Kajiado	28	123			

Since the majority agreed that the timetable was available, the reasons they gave for having included easy to access from the KICD website, through social media, and the media (radio and TV). On the other hand, the reasons for lacking the time table included the lack of electricity, smart-phones, and poor network. Moreover, it was also noted that some teachers in the remote

areas are not well conversant with the emerging technologies and especially in the education system.

The respondents were asked to indicate whether the timetable was adequate for learning as per the syllabus. The responses that were given are as shown in Figure 4.

Figure 4: Adequacy of the Timetable for learning as per the Syllabus



Whereas 58% of the respondents indicated that the timetable was not adequate, 42% indicated it was adequate. This implies that there are major gaps within the timetable that need to be addressed so as to ensure that it is adequate in meeting the educational needs of students while at home. The comments given for the inadequacy of the timetable include:

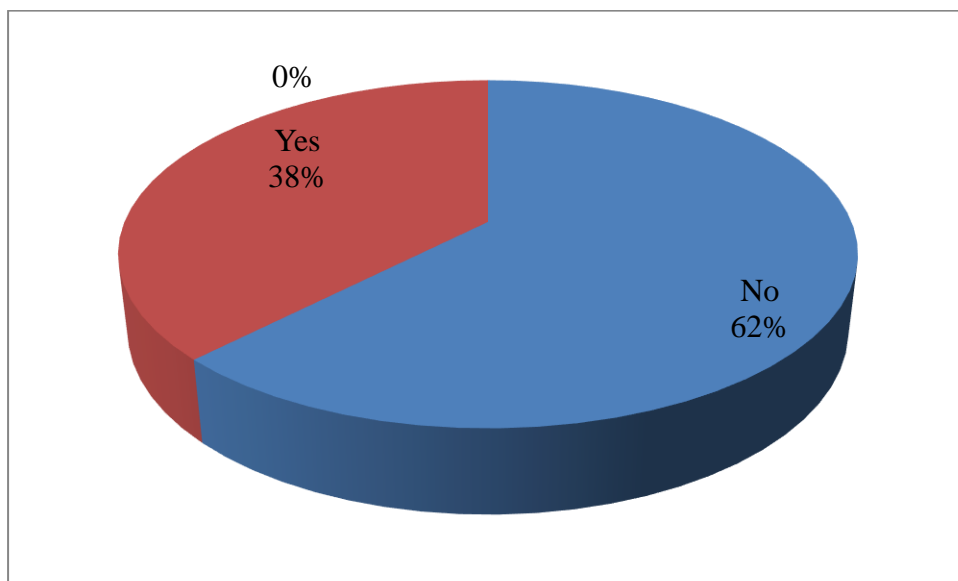
- Inaccessibility
- Inadequate time allocated
- Unequal distribution of subjects
- Not all lessons are covered in the timetable

In summary, it is evident that despite many respondents being aware of the radio and television lessons in KICD edu channel, there are still many who are not aware of it across the counties. Lack of awareness not only depends on the level of development in the county, but it also depends on the level of exposure among teachers in the respective counties. Moreover, the timetable is considered inadequate because those with technological limitations have not yet accessed it whereas others noted that the subjects are not equally distributed.

2.2 Quality of Teaching of the Media lessons

The survey was interested in establishing the quality of teaching provided through the radio and television lessons. Hence, the respondents were asked to indicate whether the radio and TV lessons are designed to cater for learners with varied abilities and needs.

Figure 5: Whether the radio and Tv lessons are designed to cater for learners with varied abilities and needs



Slightly less than two thirds (62%) indicated that the radio and TV lessons were not designed to cater for learners with varied abilities and needs. Only 38% agreed. This implies that the lessons need to be reviewed to address the varied needs and abilities of learners. Further, cross tabulations was carried out to assess the situation in various counties regarding whether the radio and television lessons designed catered for learners with varied abilities and needs.

Table 3: Whether the radio and TV lessons designed cater for learners with varied needs and abilities per County

	Whether the radio and TV lessons are designed to cater for learners with varied abilities and varied needs			Whether the radio and TV lessons are designed to cater for learners with varied abilities and varied needs	
	No	Yes		No	Yes
Kakamega	469	217	Kwale	78	45
Bungoma	433	180	Siaya	74	35
Machakos	414	326	Kajiado	73	78
Nandi	383	275	Nyeri	66	35
Meru	352	200	Mandera	65	20

Vihiga	331	142	Nyamira	57	40
Narok	321	193	Nairobi	53	47
Murang'a	317	244	Makueni	51	24
Kitui	309	190	UasinGishu	51	36
Migori	300	150	Tana River	48	44
Kisumu	276	144	Baringo	45	25
Embu	248	144	Busia	45	19
Kisii	205	94	Trans Nzoia	43	38
Kiambu	197	185	Bomet	38	17
Kilifi	163	107	Lamu	32	23
Kirinyaga	169	117	Wajir	25	16
West Pokot	155	68	Samburu	23	13
Laikipia	152	105	TharakaNithi	20	12
Mombasa	150	114	Nakuru	14	12
Homabay	150	88	Turkana	12	2
TaitaTaveta	121	72	ElgeyoMarakwet	8	2
Kericho	117	59	Isiolo	8	3
Marsabit	85	28	Garissa	0	1
Nyandarua	80	77			

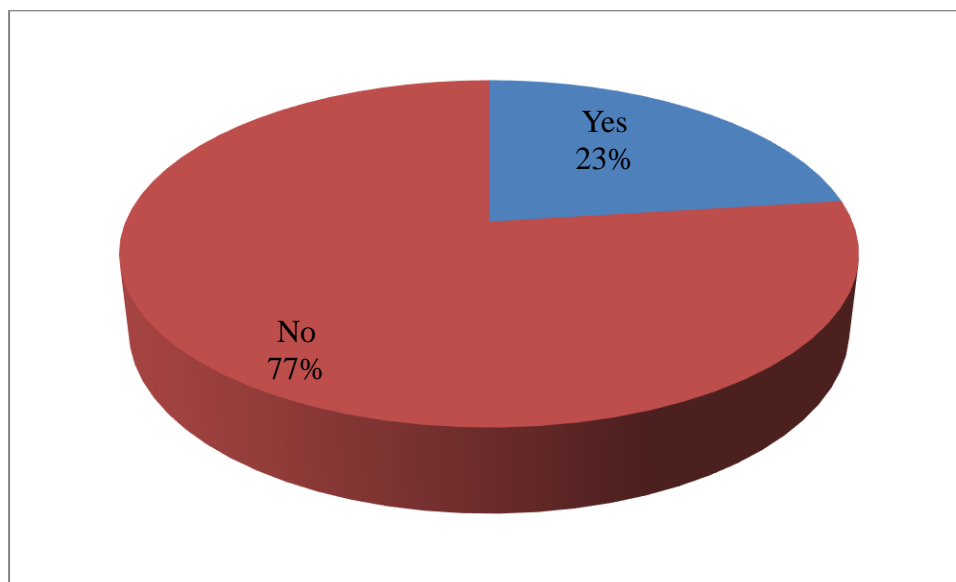
As shown in Table 3, it is evident that in all the counties, the radio and televison lessons provided by KICD do not cater for the varied needs and abilities of learners. The reasons as to why the lessons were considered inadequate in meeting the varied needs and abilities of learners include the following:

- Learner gaps not addressed
- Slow learners not addressed
- Deaf students are not taken care of
- Visual and hearing impairments not taken care of
- Some students cannot access TV or Radios
- Teachers are too fast for average students

2.3 Quality of Supervision of learning by teachers

This survey was interested in establishing the quality of supervision in the learning process. The respondents were asked to indicate whether they were able to know whether students are learning at home (see Figure 5).

Figure 5: Ability to know whether students are learning at home



Majority of the respondents 77% indicated that they can not tell whether students are studying at home, while only 23% indicated otherwise. This shows that there is still a challenge in supervising the learning patterns of students while at home during this pandemic season. To find out how the situations were in different counties regarding supervision of student at home, crosstabs was done (see Table 4).

Table 4: Ability to know whether students are learning at home in counties

	Ability to Know Whether Students are Learning at Home in Counties			Ability to Know Whether Students are Learning at Home in Counties	
	No	Yes		No	Yes
Kakamega	570	116	Marsabit	91	22
Machakos	550	190	Siaya	81	28
Bungoma	498	115	Nyamira	77	20
Nandi	494	164	Nyeri	77	24
Meru	436	116	Tana River	68	23
Kitui	416	83	Makueni	65	10
Narok	410	104	Mandera	65	20
Murang'a	401	159	UasinGishu	63	24
Vihiga	385	87	Baringo	62	8
Migori	348	102	Trans Nzoia	61	20
Kisumu	330	90	Busia	57	7
Embu	312	80	Nairobi	53	47

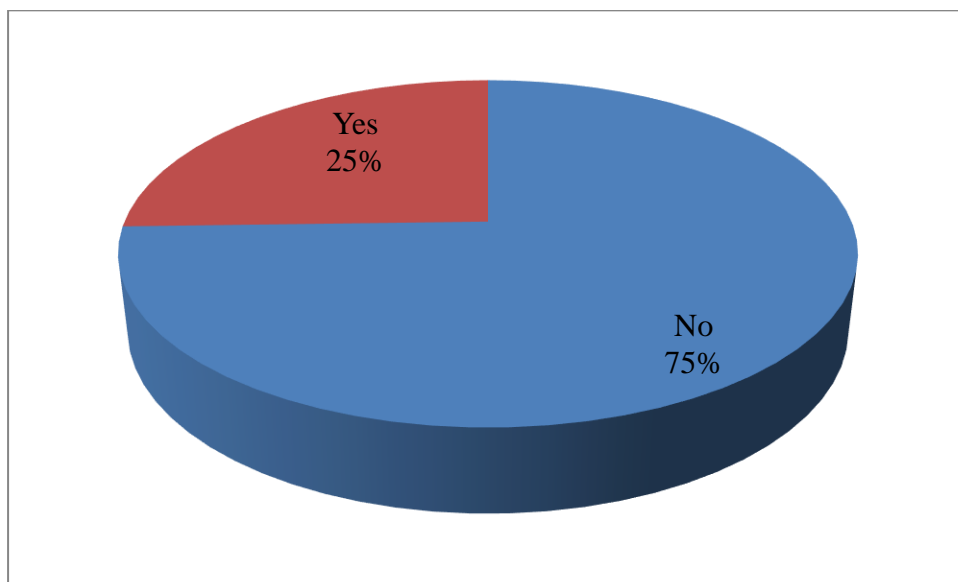
Kiambu	259	123	Bomet	41	14
Kilifi	212	58	Lamu	32	23
Kisii	212	87	Samburu	32	4
Kirinyaga	209	77	Wajir	29	12
Laikipia	208	49	TharakaNithi	23	9
Homabay	183	55	Nakuru	17	9
West Pokot	174	49	Turkana	14	0
Mombasa	160	104	Isiolo	10	1
TaitaTaveta	152	41	ElgeyoMarakwet	8	2
Kericho	144	32	Trans River	0	1
Nyandarua	121	36	Garissa	0	1
Kajiado	101	50			
Kwale	91	32			

As shown in Table 4, majority of the schools in the respective counties are not in a position to know whether the students are learning at home. Only a few schools and especially in the Western, Rift Valley, Coast and Central parts of Kenya are able to know whether students are learning from home. Comments were also given on the ability to know whether students are learning from home. The respondents indicated that lack of communication made it a challenge to contact the parents and check on whether the students are learning. Additionally, some of the parents were from poor backgrounds hence they could not be consistent in communicating with the school on the progress of the students. It was also reported that in some schools WhatsApp group was commonly used for the communication purposes with the parents.

It has also been reported that learning at home is a challenge for many learners due to various challenges such as lack of infrastructure (radio and television), and home chores and responsibilities. Additionally, the reluctance of some parents in following up on the learning progress of the students also makes it a challenge to assess whether the students are learning at home during this period of Covid-19 pandemic.

The respondents were further asked whether the parents are at the forefront of their children learning at home. In response, a majority (75%) indicated that the parents are not at the forefront of their children learning at home. Only a quarter (25%) were of the idea that parents supported their children learning from home (see Figure 6). This implies that there are a lot of parents who have not yet embraced the idea of children learning at home.

Figure 6: Whether parents are at the forefront of their children learning at home



Additionally, crosstabulation was done to establish the comparison of parents in supporting their children to learn from home in different counties (see Table 5). As shown in Table 5, it is evident that most parents in Central, Eastern and Western Kenya are not at the forefront of their children learning at home. The same is also evident across different parts of the country such as the Coastal, North Eastern and Rift Valley area.

Table 5: Whether parents are at the forefront of their children learning at home per county

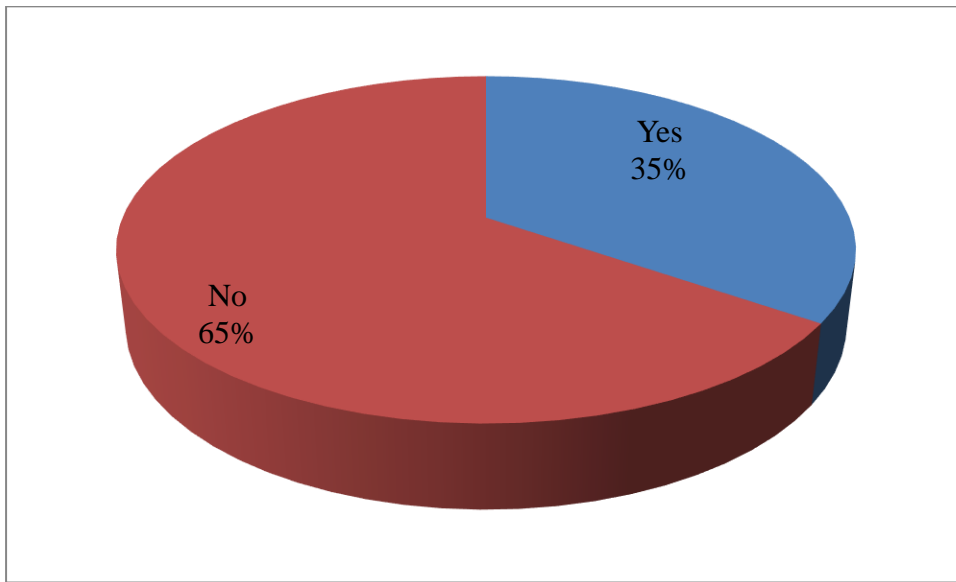
	Whether parents are at the forefront of their children learning at home			Whether parents are at the forefront of their children learning at home	
	No	Yes		No	Yes
Kakamega	579	107	Marsabit	97	16
Machakos	533	207	Kwale	90	33
Bungoma	493	120	Siaya	82	27
Nandi	485	173	Nyamira	78	19
Meru	429	123	Tana River	77	15
Murang'a	399	161	Nyeri	73	28
Vihiga	391	82	Mandera	66	19
Narok	390	124	UasinGishu	63	24
Kitui	376	123	Makueni	58	17
Kisumu	329	91	Busia	55	9
Migori	325	125	Trans Nzoia	55	26

Embu	295	97	Baringo	54	16
Kiambu	226	156	Nairobi	46	54
Kilifi	212	58	Bomet	44	11
Kisii	210	89	Lamu	41	14
Kirinyaga	191	95	Samburu	31	5
Homabay	181	57	Wajir	30	11
Laikipia	179	78	TharakaNithi	20	12
West Pokot	170	53	Turkana	14	0
Mombasa	168	96	Nakuru	14	12
TaitaTaveta	150	43	Isiolo	8	3
Kericho	143	33	ElgeyoMarakwet	7	3
Nyandarua	104	53	Garissa	1	0
Kajiado	100	51			

Comments were further given regarding parents' support for children learning from home. From the comments it was evident that there were parents who supported the learning of children from home by purchasing reading materials, revision papers and even assisting the students to learn. However, many parents in the rural areas were not supporting it because some of them have poor education background and lack the means to ensure that the students learn from home. Besides being poor, some parents feel that the teaching process is the work for teachers, others lack the knowledge of how to best help the child learn from home.

Also of interest in the survey was whether there is a communication system between the school and students. Figure 7 shows the response that was given by the respondents.

Figure 7: Availability of a communication system between schools and students



As shown in Figure 7, slightly less than two thirds (65%) indicated that they do not have a communication system with the students. Only 35% indicated that they had communication systems. Further, crosstabulation was carried out to establish the situation in different counties regarding the availability of communication systems between schools and students (see Table 5). According to the Table 5, majority of the schools in the Central, Eastern and Western parts of Kenya do not have communication systems between schools and students. The same is also distributed to other counties. Lack of communication systems may pose a challenge especially when it comes to supervising the learning process of students while at home.

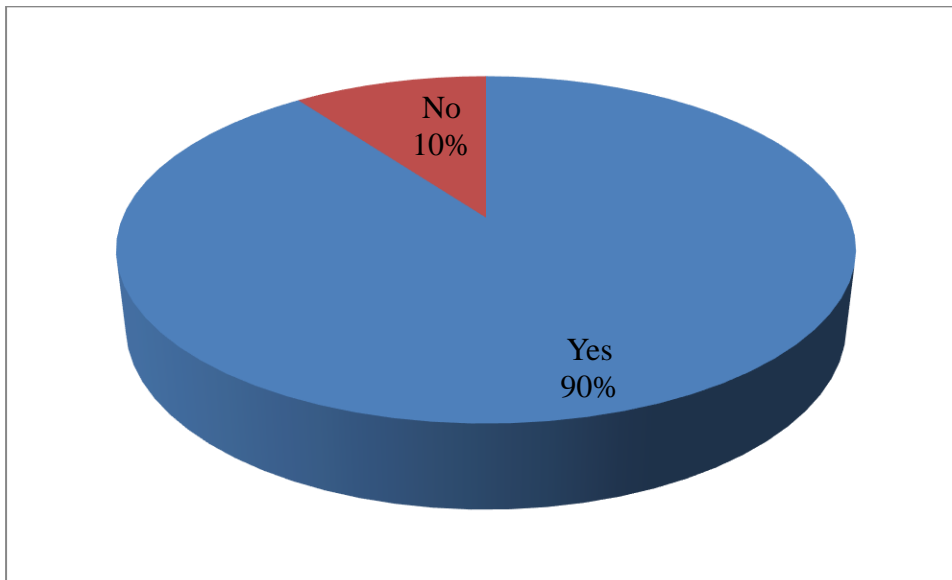
As part of the comments, the respondents indicated that poor networks in the rural areas made it a challenge for them to have a consistent communication with the students while at home. Moreover, most of the students do not have the phones that can access some communication frameworks such as whatsapp groups and this makes it a challenge for the communication systems. On the other hand, bulk SMS was mainly used for communication purposes with the students through the parents' phones. Use of newsletters is another communication system utilized in most of the schools for communication purposes.

Table 5: Availability of communications systems between schools and students in counties

	Availability of Communication Systems between Schools and Students			Availability of Communication Systems between Schools and Students	
	No	Yes		No	Yes
Kakamega	504	182	Mandera	66	19
Machakos	496	244	Marsabit	86	27
Nandi	447	211	Siaya	79	30
Bungoma	414	199	Nyamira	75	22
Kitui	354	145	Tana River	65	27
Meru	379	173	Kwale	64	59
Narok	370	144	Nyeri	62	39
Vihiga	339	134	Trans Nzoia	55	26
Murang'a	330	230	Makueni	53	22
Kisumu	280	140	Baringo	50	20
Migori	278	172	UasinGishu	49	38
Embu	266	126	Busia	49	15
Kisii	203	96	Bomet	40	15
Kiambu	182	200	Lamu	30	25
Kilifi	192	78	Samburu	26	10
West Pokot	171	52	Nairobi	25	75
Laikipia	159	98	Wajir	24	17
Kirinyaga	159	127	TharakaNithi	18	14
Homabay	151	87	Nakuru	13	13
TaitaTaveta	133	60	Turkana	12	2
Kericho	123	53	ElgeyoMarakwet	7	3
Nyandarua	100	57	Garissa	1	0
Mombasa	99	165	Isiolo	7	4
Kajiado	70	81			

Of importance in the study was to find out the resources required for ensuring learning continues while students are at home. Hence, the respondents were asked to indicate whether they require any resources to ensure that learning is taking place at home.

Figure 8: Whether schools require resources to ensure that learning is taking place at home



An overwhelming majority (90%) indicated that they required resources to ensure that learning is taking place at home. Only a few (10%) indicated otherwise. This implies that for learning to be effective while at home, teachers and students need to be provided with the necessary resources. Comments were further given on the requirement of resources for effective learning purposes.

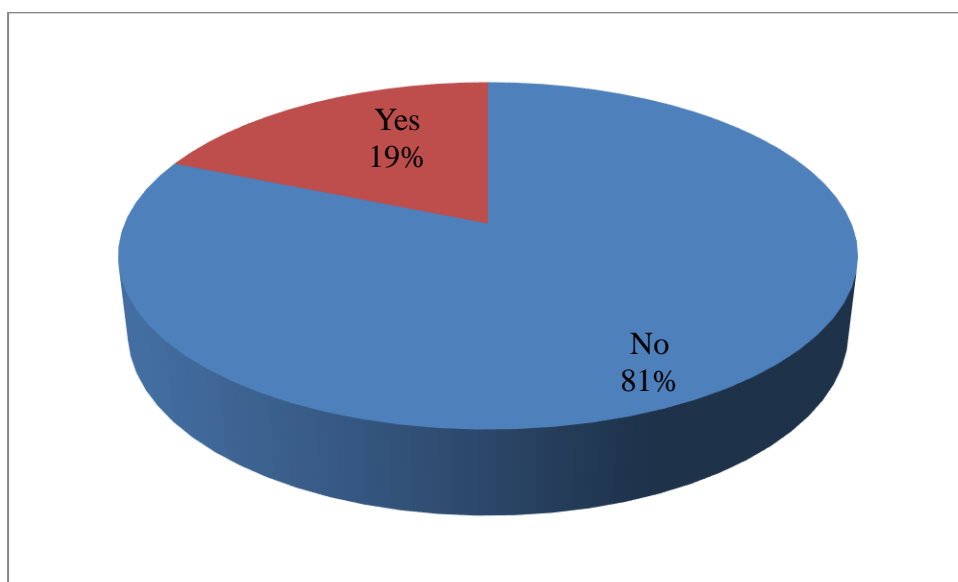
These included:

- Radios and television
- Internet connections
- Homework booklets
- Electricity/power connections
- Strengthening communication networks
- Laptops, tablets and computers among other electronic gadgets
- Standardised E-learning materials (digital content)

2.4 Quality of Assessment by teachers

The survey sought to establish the quality of assessment of students while learning from home. The respondents were asked to indicate and explain whether it was possible for the teachers to assess students while at home. Figure 9 shows the response that was given.

Figure 9: Assessment of students while at home



In terms of students' assessments, 81% indicated that they were not able to assess the students while at home. Only 19% indicated that they were able. Further crosstabulation also indicate that the major counties in the Central, Eastern and Western Kenya lack the communication systems between schools and students. The same scenario is also evident across all the counties in the country (see Table 6). These findings, therefore, imply that there is still a big gap among schools in the country in assessing students while at home.

Table 6: Crosstabulation for the assessment of students while at home in counties

	Availability of Communication Systems between Schools and Students			Availability of Communication Systems between Schools and Students	
	No	Yes		No	Yes
Machakos	597	143	Kwale	100	23
Kakamega	589	97	Siaya	98	11
Bungoma	521	92	Marsabit	98	15
Nandi	515	143	Nyeri	89	12
Meru	474	78	Tana River	87	4
Narok	442	72	Nyamira	81	16
Murang'a	438	122	Mandera	73	12
Kitui	435	64	UasinGishu	73	14
Vihiga	409	64	Makueni	66	9
Migori	370	80	Trans Nzoia	64	17
Kisumu	361	59	Busia	58	6
Embu	335	57	Baringo	57	13
Kiambu	281	101	Nairobi	55	45

Kisii	234	65	Bomet	47	8
Kilifi	228	42	Lamu	42	13
Kirinyaga	214	72	Wajir	33	8
Laikipia	213	44	Samburu	28	8
Homabay	194	44	TharakaNithi	26	6
West Pokot	190	33	Nakuru	17	9
Mombasa	173	91	Turkana	12	2
TaitaTaveta	160	33	Isiolo	9	2
Kericho	140	36	ElgeyoMarakwet	7	3
Nyandarua	128	29	Garissa	1	0
Kajiado	106	45			

The reasons why it is impossible to assess students while at home, as commented, include:

- Lack of facilities and gadgets to support learning from home (smartphones, laptops, desktops, TV, and Radio)
- Lack of connectivity (internet and cellphones networks)
- Geographical distance between teachers and students
- Lack of contacts for the students and their parents
- Government laws (social distancing)
- Financial constraints

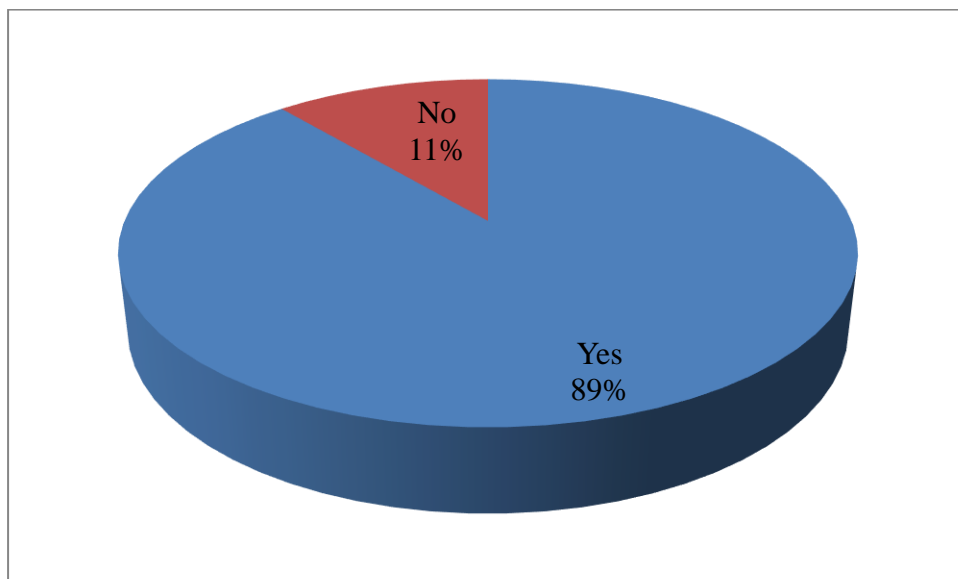
On the other hand, there were some suggestions given on how to assess students during this period of covid 19. The suggestions include:

- Contacting parents
- Give assessment to the learners through local leaders such as village elders and chiefs
- Scanning assignments and forwarding them to parents
- Giving assignments online

2.5 Role of Stakeholders

This survey sought to establish the roles that different stakeholders needed to play to ensure learning during this period of Covid-19. First, the teachers were asked to indicate whether they had a role to play in the learning of students while they are at home due to COVID-19. In response, 89% indicated ‘Yes’ whereas the remaining 11% said ‘No’ (see Figure 10). This shows that despite some of the respondents feeling that they have role to help students learn during this time of Covid-19, there are those who do not feel like they have a role to play.

Figure 10: Whether the teachers have a role to play in the learning of students while they are at home



Further, the respondents were asked to comment on the roles that different stakeholders could play to enhance learning during this period of Covid-19. The stakeholders include principal/headteacher, teachers, parents/guardians, students, religious, and government. The roles include:

2.5.1 Role for Principal/Headteacher

The role of the principals/headteachers to enhance learning during this period of COVID-19 include:

- a) Communicating with parents on the learners progress.
- b) Source of information for both teachers and parents
- c) Request parents to monitor the learning process of students while at home
- d) Create awareness among teachers, students, and parents on the importance of continuing learning while at home.
- e) Coordinate with the parents and teachers and learners to ensure KICD programs on TV are followed and assessments and feedbacks are given back
- f) Ensure school working timetable is developed and infrastructure is available to support the learning process.

2.5.2 Role for Teachers

The role of the teachers to enhance learning during this period of COVID-19 include:

- a) Provide guidance to the parents and students on how to proceed with the learning while at home.
- b) Create awareness on the online learning programs and KICD lessons aired on television and radio
- c) Create whatsApp groups and other social media platforms for each class and share learning and revision materials with the students through their parents.
- d) Be in constant communication with the parents through the available communication platforms.

2.5.3 Role for Parents/Guardians

The role of the parents/guardians to enhance learning during this period of COVID-19 include:

- a) Supervising and monitoring the learners and ensuring that they tackle all the questions and assignments given.
- b) Purchasing the necessary resources for the students to use for learning while at home
- c) Liase with school for the learning and assessment materials.
- d) Providing encouragement and support for the children to study while at home.

2.5.4 Roles to be played by Students

The role of the students to enhance learning during this period of COVID-19 include:

- a) Cooperate with the parents/guardians and teachers
- b) Get guidance from the paretns/guardians
- c) Be active participants
- d) Collaborate with other students in the area.
- e) Be disciplined and follow the lessons keenly and adhere to the KICD timetable.
- f) Keep in touch with their teachers

2.5.5 Role for Religious/ Sponsors Leaders

The role of the religious leaders to enhance learning during this period of COVID-19 include:

- a) Provide learning materials for the needy learners

- b) Pray for the country to get well
- c) Sensitize parents about the online learning programs

2.5.6 Roles to be played by the Government

The role of the government to enhance learning during this period of COVID-19 and ensure that it is not interrupted include:

- a) Increase capacity in marginalized areas
- b) Provide sufficient integrated teaching and learning resources for all learners.
- c) ICT and E-learning literacy
- d) Sustain distance learning programs in all schools
- e) Improve on facilities and encourage home schooling.
- f) Creating awareness on the KICD lessons through local leaders, school principals/headteachers, teachers among others.
- g) Creating local libraries in the remote areas to encourage students to learn.
- h) Digitize teaching and learning materials
- i) Improving on the communications networks and enabling people to acquire electricity in their homes.

2.6 Way forward to improve radio, TV and Onlinelearning Programs aired by KICD to enhance learning

- a) Extend learning hours per day
- b) Create a different channel for secondary students
- c) Notify teachers about the programs regularly
- d) Create more channels besides KBC and KICD Edu Channel for airing the KICD lessons
- e) Creating awareness about the Programs on all platforms
- f) Creating links with others stakeholders to ensure that the learners are able to access the lessons at their convenience and time.
- g) Government to improve on connectivity and communications network across the country.

3.0 Conclusion

Given schools' closed in Kenya due to the spread of COVID-19, alternative approaches, such as online learning became crucial in order to maintain uninterrupted learning. However, several challenges have been highlighted in this report such as (a) unreliable Internet connection; (b) Some teachers finding it difficult to find suitable online resources amidst a great number of resources available online; (c) Some teachers and learners lack appropriate digital skills to teach and learn using the online platform. (d) Several learners lacking crucial learning competencies, such as adaptation, independent study, self-regulation and motivation, which are key factors for successful online learning; and, (e) Some teachers simply using direct instructions without considering important features of online learning, such as interactivity, social and cognitive presence, resulting in un motivating learning experiences. Lack of appropriate channels for supervising and assessing online learning have also emerged as a major challenge. Based on the foregoing, it is clear that there is need to not only address the immediate educational consequences of this unprecedented crisis, but to build up longer-term resilience of Kenya education systems.

4.0 Recommendations

Ensuring reliable network infrastructure, which can handle millions of users simultaneously, is crucial to support smooth online learning experience without interruption when: (a) providing online teaching using video conferencing; (b) using (watching, downloading, uploading) interactive learning resources (videos, games, etc.); and, (c) collaborating with peers via social platforms.

Using friendly learning tools is beneficial to learners in finding and processing information, constructing knowledge, collaborating with peers, expressing understanding, and evaluating learning effects in concrete ways. It is also vital that teachers avoid overloading learners and parents by asking them to use too many applications or platforms. In this context, schools should coordinate between all the teachers to use consistent learning tools or platforms.

Providing interactive suitable digital learning resources, such as online video micro-courses, e-books, simulations, animations, quizzes, and games. The criteria for selecting digital learning resources should include licensing, accuracy, interactivity, ease of adaptability, cultural relevance & sensitivity, and also the suitability of content, difficulty, structure, media, and organization.

Guiding learners to apply effective learning methods can be used individually or in groups. Specifically, the online instructional practice should involve using online communities, via social networks, to ensure regular human interactions and to address potential online challenges, such as learners' perceived loneliness or helplessness.

Promoting effective methods to organize instruction by adopting a range of teaching strategies, such as case studies, open debate and discussions, learners-led discovery, experiential learning, etc.

Providing instant support services for teachers and learners on learning about urgent school and governmental policies, using effective learning technologies, tools, and resources and collaborating between the government, schools, enterprises, families, society, etc.

Empowering the partnership between governments, enterprises, and schools. Specifically, the governments should also coordinate enterprises, schools, research institutes, and families to build smooth communication platforms to exchange urgent notices and to keep everyone safe.

ANNEX 1

1.1: Response Rate per County per Sub County

Response rate per county

West Pokot County	Frequency	Percent	Vihiga County	Frequency	Percent
Kipkomo	93	35.2	Emuhaya	69	13.2
North Pokot	89	33.7	Hamisi	169	32.3
Pokot Central	6	2.3	Luanda	86	16.4
Pokot South	61	23.1	Sabatia	114	21.8
West Pokot	16	6.1	Vihiga	85	16.3
Total	264	100.0		523	100.0

Turkana County	Frequency	Percent	TharakaNithi County	Frequency	Percent
Loima	3	18.8	Maara	50	52.7
Turkana Central	1	6.3	Tharaka South	29	30.6
Turkana East	8	50.1	Tharaka North	13	13.8
Turkana North	2	12.5	Igambang'ombe	2	2.2
Turkana West	2	12.5	Mbeere North	1	1.1
Total	16	100.0		95	100.0

Trans Nzoia County	Frequency	Percent	Siaya County	Frequency	Percent
Endebess	13	11.5	Ugunja	61	52.2
Kiminini	30	26.5	Rarieda	33	28.3
Kwanza	13	11.5	Siaya	9	7.7
Saboti	2	1.8	Ugenya	6	5.1
Trans Nzoia East	9	8.0	Gem	5	4.3
Trans Nzoia West	45	39.8	Bondo	2	1.7
Transnzoia	1	0.9	Rachuonyo South	1	.9
Total	113	100.0		117	100.0

TaitaTaveta County	Frequency	Percent	Nyamira County	Frequency	Percent
Mwatate	90	38.3	Borabu	2	1.9
Voi	76	32.3	Manga	43	41.3
Taveta	69	29.4	Nyamira South	59	56.9
Total	235	100		104	100.0

Wajir County	Frequency	Percent	Nyandarua County	Frequency	Percent
Buna	8	6.4	Nyandarua North	105	65.2
Eldas	19	15.2	Mirangine (Olkalau)	43	26.7
Habaswein	7	5.6	Nyandarua Central	4	2.5
Tarbaj	16	12.8	Ndaragwa	3	1.9
Wajir East	15	12.0	Kipipiri	2	1.2

Wajir North	28	22.4	Nyandarua	2	1.2
Wajir South	17	13.6	Matugap	1	.6
Wajir West	15	12.0	Nyandarua South	1	.6
Total	125	100.0		161	100.0

Nakuru County	Frequency	Percent	Migori County	Frequency	Percent
Njoro	70	20.0	Awendo	74	15.5
Naivasha	66	17.9	Kuria East	21	4.4
Nakuru East	63	17.2	Kuria West	2	.4
Nakuru Town West	51	13.8	Mabera	29	6.1
Gilgil	43	11.7	Migori	7	1.5
Nakuru North	37	10.0	Ntimaru	14	2.9
Rongai	17	4.6	Nyatike	106	22.2
Subukia	13	3.5	Rangwe	1	.2
Molo	5	1.4	Rongo	93	19.5
Bahati	3	0.9	Suna East	18	3.8
Kuresoi North	1	0.3	Suna West	43	9.0
Kuresoi South	1	0.3	Uriri	70	14.6
Total	370	100.0		478	100.0

Nandi County	Frequency	Percent	Narok County	Frequency	Percent
Nandi North	194	24.1	Transmara West	128	21.4
Nandi South	150	19.3	Narok West	116	19.4
Chesumei	140	18.1	Narok South	114	19.0
Nandi Central	115	14.8	Narok East	84	14.0
Tinderet	110	14.1	Narok North	84	14.0
Nandi East	56	7.2	Transmara East	69	11.5
Chemundu	1	.1	Kilgoris	2	0.3
Kapseret	1	.1	Batik West	1	0.2
Nandi	6	.8	Transmara	1	0.2
Total	773	100.0		599	100.0

Nyeri County	Frequency	Percent	Murang'a County	Frequency	Percent
Mukurweini	73	70.4	Gatanga	119	20.2
Tetu	10	9.6	Murang'a South	103	17.5
Kieni West	6	5.8	Murang'a East	102	17.3
Nyeri Central	4	3.8	Mathioya	85	14.4
Mathira East	3	2.9	Kandara	55	9.4
Kieni East	3	2.9	Kigumo	51	8.7
Nyeri South	2	1.9	Kangema	39	6.6
Mathira	1	1.0	Kiharu	32	5.5
Mathira West	1	1.0	Kimathi	1	.2
Buuri	1	1.0	Muranga	1	.2
Total	104	100.0		588	100.0

Mombasa County	Frequency	Percent	Marsabit County	Frequency	Percent
Bamburi	1	.4	Marsabit Central	62	44.6
Changamwe	26	9.5	Moyale	27	19.4
Jomvu	29	10.6	Sololo	19	13.7
Kisauni	46	16.8	Loiyangalani	18	12.9
Likoni	48	17.6	North Horr	7	5.0
Mombasa	1	.4	Chalbi	3	2.2
Mvita	31	11.3	Saku	2	1.4
Nyali	92	33.6	Marsabit	1	.7
Total	274	100.0		139	100.0

Tana River County	Frequency	Percent	Lamu County	Frequency	Percent
Tana North	50	50.0	Lamu	2	3.1
Tana Delta	24	24.0	Lamu Central	11	16.9
Tana River	23	23.0	Lamu East	10	15.4
Bura	3	3.0	Lamu West	45	64.6
Total	100	100.0		65	100.0

Mandera County	Frequency	Percent	Kisumu County	Frequency	Percent
Banissa	14	15.5	Kisumu	1	.2
Kutulo	3	3.3	Kisumu Central	17	3.8
Lafey	1	1.1	Kisumu East	19	4.2
Mandera	1	1.1	Kisumu West	91	20.1
Mandera North	2	2.2	Menara	3	.7
Mandera East	9	10.0	Muhoroni	116	25.6
Mandera Central	12	13.3	Nyakach	122	26.9
Mandera West	44	48.9	Nyando	45	9.9
Mandera South	4	4.4	Seme	38	8.4
Total	90	100.0		452	100.0

Makueni County	Frequency	Percent	Kwale County	Frequency	Percent
Mbooni East	55	66.3	Kaloleni	1	.7
Kathonzweni	13	15.7	Kinongo	1	.7
Makueni	7	8.4	Kwale	39	28.8
Nzau	3	3.6	Matuga	1	.7
Mukaa	2	2.4	LungaLunga	18	13.3
Kilungu	1	1.2	Matuga	32	23.7
Mashuuru	1	1.2	Msambweni	24	17.7
Wote	1	1.2	Samburu	19	13.9
Total	83	100.0		135	100.0

Lakipia County	Frequency	Percent	Kericho County	Frequency	Percent
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Laikipia East	72	22.7	Belgut	8	4.4
Laikipia West	62	19.5	Bureti	11	6.0
Laikipia North	36	11.3	Kericho	14	7.7
Laikipia Central	54	17.0	Kipkelion	26	14.2
Laikipia	2	.6	Kipkelion West	1	.5
Nyahururu	90	28.4	Londiani	80	44.0
Rumuruti	1	.3	SoinSigowet	42	23.1
Total	317	100.0		182	100.0

Kisii County	Frequency	Percent	Garissa County	Frequency	Percent
Kisii South	86	25.2	Hulugho	2	100.0
Kisii Central	73	21.4	Embu County	Frequency	Percent
Sameta	43	12.6	Embu	1	.2
Etago	36	10.5	Embu East	95	21.9
Gucha South	31	9.1	Embu North	68	15.6
Nyamache	29	8.5	Embu West	66	15.2
Masaba South	28	8.2	Mbeere	2	.5
Kenyanya	10	2.9	Mbeere North	105	24.2
Kitutu Central	3	.9	Mbeere West	1	.2
Kisii	2	0.6	Mbeere South	94	21.7
Marani	1	.3	Runyejes	1	.2
Total	342	100.0		433	100.0

Samburu County	Frequency	Percent	Isiolo County	Frequency	Percent
Samburu East	35	71.3	Isiolo	19	76.0
Samburu Central	9	18.4	Garbatulla	2	8.0
Wamba	2	4.1	Isiolo North	2	8.0
Samburu	2	4.1	Isiolo Central	1	4.0
Samburu North	1	2.0	Merti	1	4.0
Total	49	100.0		25	100.0

Bomet County	Frequency	Percent	UasinGishu County	Frequency	Percent
Bomet East	38	63.3	Kesses	64	35.2
Bomet Central	7	11.7	Soy	80	44.0
Sotik	7	11.7	Kapseret	22	12.1
Chepalungu	5	8.3	Moiben	10	5.5
BometEast	2	3.3	Turbo	3	1.6
Konoin	1	1.7	Ainabkoi	3	1.6
Total	60	100.0		182	100.0

Kajiado County	Frequency	Percent	Meru County	Frequency	Percent
Kajiado North	43	27.7	Buuri	68	11.5
Isinya	40	25.8	Imenti South	1	.2
Loitoktok	31	20.0	Imenti	1	.2

Kajiado West	21	13.5	Imenti Central	4	.7
Mashuuru	12	7.7	Imenti North	7	1.2
Kajiado Central	5	3.2	Igembe Central	97	16.5
Kajiado	1	.6	Igembe North	72	12.2
Kajiado East	1	.6	Igembe South	7	1.2
Kathiani	1	.6	Imenti South	161	27.4
Total	155	100.0	Mbeere North	1	.2
Baringo County			Meru	3	.5
Mogotio	65	83.4	Meru Central	99	16.8
Baringo North	5	6.4	Meru South	1	.2
East pokot	6	7.7	Tigania Central	47	8.0
Koibatek	1	1.3	Tigania East	1	.2
Tiaty East	1	1.3	Tigania West	21	3.5
Total	78	100.0		591	100.0

Kirinyaga County	Frequency	Percent	Kilifi County	Frequency	Percent
Kirinyaga Central	35	11.8	Chonyi	32	11.3
Kirinyaga East	74	24.9	Ganze	9	3.2
Kirinyaga West	92	31.3	Kaloleni	97	34.2
Mera East	1	.3	Kauma	9	3.2
Mera West	2	.6	Kilifi North	4	1.4
Mutithi	1	.3	Kilifi South	7	2.5
Mwea East	23	7.8	Magarini	12	4.2
Mwea West	60	20.4	Malindi	96	33.9
Ndia	6	2.0	Rabai	18	6.3
Total	294	100.0		284	100.0

Nairobi County	Frequency	Percent	Kiambu County	Frequency	Percent
Dagoretti	8	3.4	Gatundu	17	4.0
Embakasi	35	15.2	Gatundu North	93	21.7
Embakasi Central	2	.9	Gatundu South	56	13.1
Embakasi East	3	1.3	Juja	7	1.6
Embakasi West	2	0.8	Kabete	34	8.0
Embakasi South	2	.9	Kiambaa	71	16.6
Kasarani	34	14.7	Kiambu	47	11.0
Kibra	2	.9	Kiganjo	1	.2
Langata	56	24.2	Kikuyu	6	1.4
Makadara	26	11.3	Lari	2	.5
Roysambu	3	1.3	Ndumberi	1	.2
Starehe	1	.4	Ruiru	43	10.1

Westlands	57	24.6	Thika	49	11.4
Total	231	100.0		427	100.0

Homabay County	Frequency	Percent	Busia County	Frequency	Percent
Emuhaya	1	.3	Teso South	34	48.5
Homabay Town	11	3.3	Butula	17	24.3
Karachuonyo	237	71.8	Samia	11	15.7
Mbita	8	2.4	Teso North	3	4.3
Ndhiwa	37	11.2	Bunyala	2	2.9
Rangwe	27	8.2	Nambale	2	2.9
Suba	9	2.7	Busia	1	1.4
Total	330	100.0		70	100.0

Machakos County	Frequency	Percent	ElgeyoMarakwet County	Frequency	Percent
Machakos	150	18.8	Keiyo	7	11.7
Yatta	118	14.8	Keiyo North	10	16.7
Matungulu	105	13.2	Keiyo South	9	15.0
Kathiani	97	12.1	Keyo North	1	1.7
Mwala	93	11.6	Marakwet East	13	21.7
Kangundo	85	10.7	Marakwet West	20	33.3
Masinga	77	9.6	Total	60	100.0
Mavoko	70	8.7			
Kangundo	1	.1			
Kilombo	1	.1			
Kitui Central	1	.1			
Total	798	100.0			

Kakamega County	Frequency	Percent	Kitui County	Frequency	Percent
Kakamega North	121	16.2	Katulani	43	7.4
Kakamega South	91	12.3	Kisasi	40	7.0
Likuyani	81	11.0	Kitui Central	75	13.0
Khwisero	70	9.4	Kitui East	21	3.6
Mumias West	69	9.3	Kitui Rural	68	11.8
Navakholo	67	9.0	Kitui South	129	22.3
Matungu	62	8.4	Kitui West	73	12.5
Matete	54	7.3	Mutitu	19	3.3
Mumias East	46	6.2	Mwingi Central	34	5.9
Kakamega East	27	3.7	Mwingi East	10	1.8
Kakamega Central	21	2.8	Mwingi North	23	4.0
Lugari	9	1.2	Mwingi West	41	7.1
Mumias	4	.5	Thagicu	1	.2
Butere	4	.5	Tsekuru	1	.2
Kakamega	4	.5	Total	578	100.0
Malava	2	.3			
Ikolomani	1	.1			
Ikolomani south	1	.1			
Kabras	1	.1			
Kongoni	1	.1			
Lurambi	1	.1			
Total	738	100.0			

Bungoma County	Frequency	Percent
Bumula	112	16.0
Bungoma South	95	13.5
Webuye West	83	11.8
Kimilili	75	10.6
Bungoma West	69	9.8
Tongaren	68	9.7
Bungoma Central	64	9.1
Bungoma East	57	8.1
Bungoma North	33	4.7
Mt. Elgon	27	3.7
Bungoma	4	.6
Sirisia	3	.4
Webuye East	3	.4
Kabuchai	2	.3
Kanduyi	1	.1
Webuye	1	.1
Cheptaid	1	.1
Total	698	100.0
Grand Total of all respondents	12,925	100.0

