THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

ANALYSIS OF THE ASSESSMENT OF READING, WRITING AND ARITHMETIC SKILLS (3Rs) FOR STANDARD TWO PUPILS 2021

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FOREWORD

The assessment of Reading, Writing and Arithmetic Skills (3Rs) for Standard Two pupils in 2021 was conducted by the National Examinations Council of Tanzania so as to evaluate the pupils' competence in those skills. The assessment was done on 24th of January 2022 and 25th of January 2022 for the pupils who were in Standard Two in 2021. All regions in Tanzania Mainland were involved in the assessment whereby a total of 524 public primary schools were sampled from all district councils for the assessment. Moreover, 2 to 5 schools were sampled from each district council depending on the number of schools within the council both in rural and urban areas.

Assessment tools for all the three skills were prepared by the National Examinations Council. Writing and Arithmetic Skills were assessed by using question papers for all 524 schools involved. Furthermore, a total of 489 schools were assessed by means of a Reading scale for reading and Arithmetic Skills which were orally administered. Moreover, 35 schools used tablets to administer the assessment. In addition, head teachers, supervisors and invigilators filled in a questionnaire about the teaching and learning status of the 3Rs.

The total number of pupils registered for 3Rs assessment was 28,364. Among them, 27,770 pupils (equivalent to 97.90%) sat for the assessment whereby 594 (2.10%) pupils did not sit for the assessment for various reasons.

The analysis of pupils' responses was done so as to determine their performance levels in each skill. The analysis indicates that the performance of the pupils who sat for the assessment in all the three skills was average by 63.73 per cent. The performance on Reading Skills was the highest as 68.10 per cent of pupils had the performance ranging from average to very good in contrast to Writing Skills (62.21%) and Arithmetic Skills (60.90%).

This report is divided into six chapters. Chapter One presents an introduction, Chapter Two to Four describe the administration and assessment results in Reading, Writing and Arithmetic skills respectively. Chapter Five presents the results of the analysis of questionnaires whereas Chapter Six presents conclusion and recommendations.

The National Examinations Council of Tanzania expects that this report will give feedback to Education Stakeholders including 3Rs teachers about the challenges facing the pupils in learning the 3R skills in the country. Therefore, it is expected that measures will be taken to improve teaching and learning process so as to improve pupils' competence in the skills.

Dr. Charles E. Msonde
EXECUTIVE SECRETARY

CHAPTER ONE
SAMPLE, ASSESSMENT TOOLS AND DATA ANALYSIS

1.1 Introduction

The National Examinations Council of Tanzania conducted the assessment to the 2021 Standard Two pupils on Reading, Writing and Arithmetic Skills (3Rs) on 24th January 2022 and 25th January 2022. The assessment aimed at determining pupils' ability in those skills.

The pupils' competencies were assessed on various concepts for each set of skills. For instance, in the reading Skills, the pupils' competency was assessed based on their ability to read a passage fluently and rapidly as well as answering the questions that tested their comprehension. Furthermore, in Writing Skills, the pupils' competency was assessed based on word formation by using pictures, identifying the words written in capital and small letters. Also, they were assessed on their ability to copy a passage and insert punctuation marks correctly. Moreover, in Arithmetic Skills, the pupils' competency was assessed based on ability to identify the missing numbers in the sequence, add or subtract numbers that do not exceed 999 and solve word problems.

1.2 Assessment Sample

The Standard Two 3Rs' assessment was conducted in the 26 regions of Tanzania Mainland. These regions were Arusha, Dar es Salaam, Dodoma, Geita, Iringa, Kagera, Katavi, Kigoma, Kilimanjaro, Lindi, Manyara, Mara, Mbeya, Morogoro, Mtwara, Mwanza and Njombe. Other regions were Pwani, Rukwa, Ruvuma, Shinyanga, Simiyu, Singida, Songwe, Tabora and Tanga. A total of 186 District councils from those regions participated in the assessment. In addition, all schools which were involved in the assessment were randomly selected from urban and rural localities. In each District council, 2 to 5 schools were selected making a total of 524 schools. The selected schools are the one that use Kiswahili as a medium of instruction on teaching and learning. A total of 27,214 pupils were assessed on Writing Skills whereas a total of 27,770 pupils were assessed in Reading Skills and Arithmetic Skills orally. The pupils' attendance in the assessment varied from one skill to another due to truancy or sickness.

1.3 Scope of Assessment

In this assessment, there were factors that were considered in selecting the sample to be used. The factors included selecting 524 schools out of 16,406 schools in Tanzania Mainland by random sampling. Furthermore, the sample excluded schools which use English Language as a medium of instruction. Moreover, the data which were used to determine the pupils' performance in each skill was not weighed. Therefore, the analysis was done by using actual data.

1.4 Assessment Tools

The assessment tools that were used were question papers for Reading, Writing and Arithmetic skills and questionnaires (see Appendices No. 1 to 5). The questions which were prepared for each set of skills aimed at assessing the pupils' competency based on performance levels. The questionnaires were prepared for head teachers and invigilators in order to collect information about Standard Two pupils, the availability of 3Rs' teachers and teaching and the learning materials as well as the learning environment. Also, the questionnaires aimed at collecting information about various challenges encountered by teachers and pupils in the teaching and learning process.

1.5 Data and Response Analysis for the Assessment of the 3Rs in 2021

Data and response analysis in Reading, Writing and Arithmetic skills was done to find out the pupils' competency in each set of skills. The pupils' competency was assessed based on the levels of performance whereby, 0 - 12 marks were considered as weak performance, 13 - 25 as average, 26 - 37 as good and 38 - 50 as very good. The pupils' performance on the levels for each set of skills is shown in Table 1.

Table No. 1: The Pupils' Performance in 2021

Skills	Number of Pupils Assessed	The Pupils whose Performance Ranged from Average to Very Good	
		Number	Percentage
Reading	27,770	18,911	68.10
Writing	27,412	17,053	62.21
Arithmetic	27,770	16,910	60.90

Table No. 1 shows that the pupils' performance in Reading, Writing and Arithmetic Skills were 68.10 per cent, 62.21 per cent and 60.90 per cent respectively implying that the pupils performed better in Reading Skills compared to other skills.

In the analysis, samples of pupils' responses were used to show their competency and the challenges they faced in each set of skills. In addition, the comparison of the pupils' performance was done based on sex, school location and region.

CHAPTER TWO

READING SKILLS ASSESSMENT

2.1 Introduction

The purpose of conducting the Reading Skills assessment was to determine the pupils' ability to read a passage of fifty words fluently at the required speed and respond to comprehension questions. In the Reading Skills assessment, each pupil was required to answer two questions. In the first question, rating of the pupils' competence depended on the number of words that a pupil was able to read fluently in a minute. In the second question the assessment of the pupils' competence was based on the ability to read the passage, understand its content, interpret what he/she had read, and answer comprehension questions orally. Furthermore, the results of the Reading Skills Assessment were, in turn used to make a comparison of the pupils' competence across regions, location of the school (urban/rural) and sex whether they were boys or girls.

2.2 Structure of the Reading Skills Assessment Paper

The Reading Skills Assessment had two papers which were; the pupils' paper in which a pupil was supposed to read and a special form (Reading Scale) that the teacher used in rating the pupil's performance. The pupils' paper contained two questions which were prepared in Kiswahili. The first question tested the pupil's competence (fluency and speed) in reading a passage with fifty (50) words fluently in a minute. The second question tested pupil's competence in answering comprehension questions orally after re-reading the same passage. During the assessment process, in some District councils a special form (Reading scale) was used for rating while others used tablets which automatically captured the marks.

The assessment which was done by using a special form (Reading Scale) for rating pupils took ten (10) minutes for each pupil. One (1) minute was used to test the pupil's accuracy (fluency and speed) in reading the passage and three (3) minutes were used by the pupil in re-reading the same passage in order to answer comprehension questions orally. Moreover, the assessor spent six (6) minutes rating each pupil's reading performance, calculating and filling in the scores based on the assessment scale for all the questions.

Furthermore, the pupils who were assessed by using a tablet spent five minutes each. One (1) minute was used in reading a passage; at the same time, the assessor rated the pupil while the marks were automatically captured by the system in the tablet. Moreover, three minutes were used by a pupil to re-read the passage in order to answer comprehension questions orally. The assessor used one minute to ask the questions to the pupil.

2.3 Performance Criteria in Reading Skills Assessment

The performance criteria which were considered in Reading Skills Assessment were *very good performance*, *good*, *average* and *weak*. In question one, a pupil was considered to have a very good performance if he/she read 38-50 words correctly in a minute. Moreover, a pupil who read 26-37 words had good performance, 13-25 words had average performance and 0-12 words had weak performance.

During the assessment process, the assessor was supposed to apply the following procedures so as to identify the words read fluently by a pupil:

(a) If a pupil read all words fluently, the assessor put brackets [ ] around the last word of the passage.

(b) If a pupil failed to read a word fluently, the assessor put a slanted slash mark on the word (/).

(c) The assessor put a circle (Ø) on a slanted slash mark (/) if a pupil corrected the word which he/she had failed to read fluently.

(d) If a pupil failed to read all the words of the first sentence, the assessor put a slanted slash mark (/) and brackets [ ] on the last word of the sentence. The remaining words were counted as failed.

(e) If a pupil failed to read the whole passage within a minute, the assessor put brackets [ ] on the last word read; All the unread words were considered to have been failed.

The performance criterion for the second question was based on the number of items a pupil answered correctly after re-reading the passage. The question had five items that a pupil was supposed to answer. The pupils who answered five items correctly were regarded to have very good performance; the one who answered four items were rated to have

good performance; those who got two to three items were regarded to have an average performance and the one who answered one or none of the items had weak performance.

2.4 Pupils' Performance on Reading Skills

A total number of 33,245 pupils were registered for the Reading Skills Assessment in 2021. Among them, 27,770 (83.53%) sat for the assessment. Out of them, 13,619 (49.04%) were boys and 14,151 (50.95%) were girls. The analysis of the pupils' responses shows that 68.10 per cent had performance ranging from average to very good. However, 31.90 per cent of the pupils had weak performance.

2.4.1 Question 1: Competence in Reading Words

This question assessed the pupils' competency in reading fifty (50) words fluently per minute. The analysis of pupils' responses indicates that the performance on this question ranged from average to very good as 66.84 per cent of the pupils read from 13 to 50 words. However, other pupils (33.16%) had weak performance as they read only 0-12 words. Table 2 illustrates the pupils' performance in this question.

Table No. 2: Performance of Pupils on Reading Words

Words	Performance	Number	Percentage
0 – 12	Weak	9,208	33.16
13 – 25	Average	3,179	11.45
26 – 37	Good	5,330	19.19
38 – 50	Very Good	10,053	36.20
Total		**27,770**	**100.00**

Table 2 shows that a total of 10,053 (36.20%) pupils who attempted the Reading Skills Assessment had very good performance as they read 38 to 50 words fluently in a minute. The variation in performance of these pupils depended on speed and fluency in reading the given words. Extracts 1 and 2 provide samples of pupils' responses who had very good performance.

Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka[hospitali.]

Extract 1: A sample of pupils' correct responses to question 1

In Extract 1, the pupil read all 50 words fluently within a minute as the assessor indicated by putting a bracket [ ] around the last word read 'hospitali' to indicate that the pupil had finished reading all the words.

Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng/alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka(hospitali.)

Extract 2*:* A sample of pupils' correct responses to question 1

Extract 2 indicates the response from a pupil who had very good performance although he/she failed to read a word Ng'alo' and 'Kijiji' fluently. The assessor put a slash (/) on the words which the pupil could not read.

However, 33.16 per cent of the pupils had weak performance. Among them, 4,154 (14.96%) pupils read from 1 to 12 words and 5,054 (18.20%) pupils were unable to read even a single word of the passage. Extracts 3 and 4 illustrate inadequate performance on question 1.

Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng/alo. [Kijiji] chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Extract 3: A sample of a pupil's weak response to question 1

In Extract 3, the pupil read fluently 7 out of 10 words he/she read in a minute. However, the pupil lacked reading speed as he/she ended up reading the first word of the third sentence that is "kijiji". The remaining 40 words were unread.

Tina na Subira ni [marafiki.]
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Extract 4: A sample of pupils' weak responses to question 1

Extract 4 shows the responses from a pupil who failed to read even a single word of the passage. The assessor put a slash (/) on each word and brackets around the last word of the first sentence to mark that the pupil could not read any word.

Further analysis of the data indicates that 19.19 per cent of the pupils who sat for the Reading Skills Assessment had good performance. They fluently read from 26 to 37 words, which was more than half of all the words which they were supposed to read in the passage as shown in Extract 5.

Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya
maji. Siku moja, Tina na Subira walikwenda kisimani kuteka
maji. Subira alichukua kata na kujaza ndoo yake. Mara
akaanza kupiga kelele, kumbe alikuwa [amechomwa] na
mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi
wake walimpeleka hospitali.

Extract 5: A sample of pupils' responses with a good performance on question 1

Extract 5 illustrates the responses of the pupil who read fluently 36 out of 39 words in a minute. However, the pupil failed to read the next 11 words after the bracketed word "amechomwa".

On the other hand, 11.45 per cent of the pupils had average performance as they read fluently 13 to 25 words. Extract 6 shows a sample of pupil's responses that earned average performance.

Tina na Subira ni marafiki.
Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya
maji. Siku moja, Tina na Subira walikwenda[kisimani]kuteka
maji. Subira alichukua kata na kujaza ndoo yake. Mara
akaanza kupiga kelele, kumbe alikuwa amechomwa na
mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi
wake walimpeleka hospitali.

Extract 6: A sample of pupils' responses with an average performance on question 1

In Extract 6, the pupil read fluently 19 out of 23 words in a minute. However, the pupil lacked reading speed as he/she failed to finish reading the next 27 words after the bracketed word "kisimani".

2.4.2 Pupils Performance on Reading Each Word

Analysis of pupils' responses in reading each word shows different performance. Some pupils read all the words fluently and others failed for various reasons. Chart 1 shows the percentage of pupils who read fluently each word.
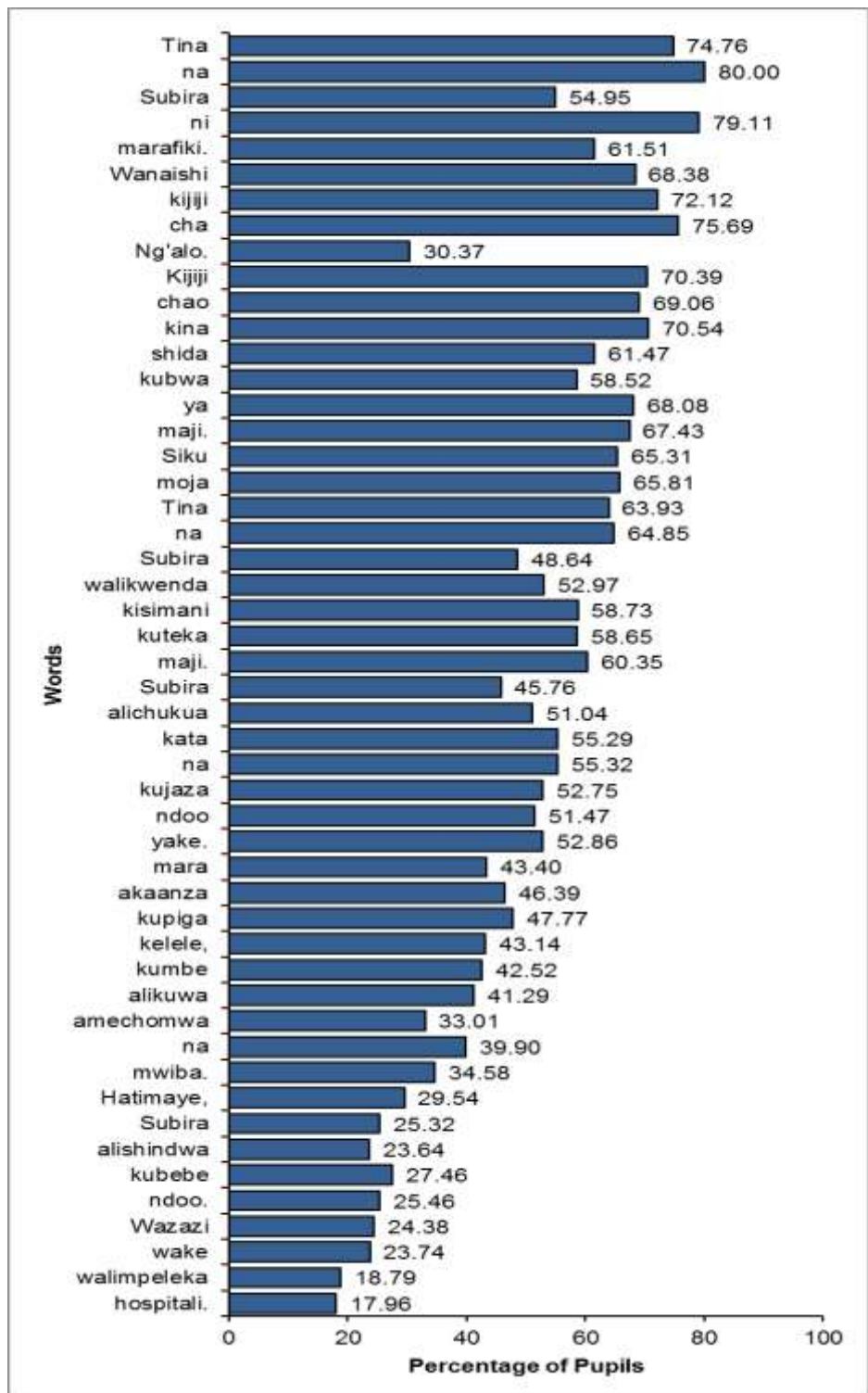
Chart 1: *Pupils' performance in reading each word*

The analysis in Chart 1 reveals that the majority of pupils were able to read fluently the words containing a single syllable. Those words included: *na* (80.00%), *ni* (79.11%) and *cha* (75.69%). In addition, words that had more than one syllable with a single consonant and a vowel were fluently read by many pupils. Such words included: *Tina* (74.76%), *kijiji* (72.12%) and *kina* (70.54%).

In addition, pupils' performance on reading words formed by syllables with consonant clusters was average. These words are made up of syllables with the sequence of consonants and a pupil was required to pronounce them as a single syllable. Thus, they posed a challenge to some pupils to pronounce them as a single syllable even though they morphologically appear as two different sounds. Words with clustered consonants on which pupils had average performance were: shida (61.47%), kubwa (58.52%), walikwenda (52.97), alichukua (51.04%), ndoo (51.47%) and akaanza (46.39%).

However, some of the pupils failed to read fluently words such as *Subira* (45.05%), *Mara* (56.00%) and *Ng'alo* (69.63%). Those pupils were unable to read these words for various reasons. For example, the word Ng'alo which is formed by a nasal sound (ng') pronounced by passing air through the nose, most of the pupils pronounced the sound by passing air through the mouth. Hence, they pronounced *Ngalo* instead of *Ng'alo*.

Similarly, some pupils failed to read the words, 'Mara' and 'Subira' due to influence of the ethnic languages on the second language which is Kiswahili. Specifically, this was due to the absence of some sounds in their ethnic languages which are available in the Kiswahili Language. For example, the absence of sound 'r' in some ethnic languages caused pupils from those ethnic-community backgrounds to fail to pronounce sound 'r'. Instead, they pronounced it as 'l'. Thus they pronounced the word 'Subira' as 'Subila' and 'Mara' as 'Mala'.

Also, the sounds 'r' and 'l' posed problems to the pupils due to sharing manner and place of articulation. These sounds are articulated on the alveolar ridge with partial obstruction of the air. Therefore, both are technically referred to as liquids. The sound 'r'

is produced when the tip of the tongue touches the back of the alveolar ridge and sides of the tongue are in contact with the sides of the palate. The sound 'l' is produced when the tip of the tongue touches the alveolar ridge and the air escapes over the two sides of tongue. This was a challenge to some pupils as they failed to make a distinction on the manner of articulation. Therefore, some of the pupils pronounced 'r' as 'l' in the words: *Subila*, *Mala* and *lafiki* instead of *Subira*, *Mara* and *rafiki* respectively. Moreover, other pupils pronounced 'l' as 'r' for example in the words: *kerere* and *Ng'aro* instead of *kelele* and *ng'alo* respectively.

Further analysis shows that 24,064 pupils equal to 86.65 per cent failed to read fluently the entire passage of 50 words per minute. This implies that those pupils were not able to read fast. Most of them ended up reading the 36th word which is "kelele". Other words which they failed to read within the given time were: *kumbe* (57.57%), *alikuwa* (58.71%), *amechomwa* (66.99%), *na* (60.01%), *mwiba* (65.42%), *Hatimaye* (70.45%), *Subira* (74.77%), *alishindwa* (76.36%), *kubeba (72.54%), ndoo* (74.54%), *wazazi* (75.62%), *wake* (76.26%), *walimpeleka (81.21%)* and *Hospitali* (82.04%). However, the reading ability of the majority of the pupils was above average as they read fluently twenty-seven (27) words per minute.

2.4.3 Question 2: Reading and Listening for Comprehension Competence

This question tested the pupils' competence in reading a comprehension text, understanding it and answering questions that were derived from it orally. The question had five items constructed from the passage which was supposed to be read in three minutes. The following is the passage which a pupil was supposed to read and answer comprehension questions orally.

> *Tina na Subira ni marafiki.*
> *Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.*

Generally, the performance of the pupils on this question ranged from average to very good as majority of them (60.03%) answered correctly two to five items of the question. Table 3 shows the performance of the pupils on this question.

Table No. 3: Pupils' Performance on Reading Comprehension

Number of Items	Performance Levels	Number of Pupils	Percentage of Pupils
0-1	Weak	11,099	39.97
2-3	Average	5,767	20.77
4	Good	7,292	26.26
5	Very Good	3,612	13.01
Total		**27,770**	**100.0**

The analysis of the pupils' responses indicates that 11,099 (39.97%) pupils had weak performance of which 3,849 (13.86%) answered correctly only one out of five items. Moreover, 7,250 (26.11%) of the pupils failed to answer any of the five items. Extracts 7 and 8 show samples of the pupils' responses with weak performance.

Kipengele	Maswali na majibu	Alama	
1.	Rafiki yake Tina anaitwa nani? (Subira)	⑤	o
2.	Tina na Subira wanaishi katika kijiji gani? (Ng'alo)	5	Ⓞ
3.	Tina na Subira walikwenda wapi? (Kisimani)	5	Ⓞ
4.	Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata)	5	Ⓞ
5.	Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ ili apate matibabu/ili apate dawa)	5	Ⓞ

Extract 7: A sample of pupils' responses with weak performance on question 2

In Extract 7, the pupil correctly answered only one out of five items as he/she failed to read the passage fluently and

understand it. Thus, he/she could not recall the content of the passage.

Kipengele	Maswali na majibu	Alama	
1.	Rafiki yake Tina anaitwa nani? (Subira)	5	◎
2.	Tina na Subira wanaishi katika kijiji gani? (Ng'alo)	5	◎
3.	Tina na Subira walikwenda wapi? (Kisimani)	5	◎
4.	Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata)	5	◎
5.	Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ ili apate matibabu/ili apate dawa)	5	◎

Extract 8: A sample of pupils' responses with weak performance on question 2

Extract 8 shows the responses from the pupil who failed to answer any of the items in this question hence he/she demonstrated weak performance.

However, 7,292 (26.26%) pupils had good performance since they answered correctly four items of the question. This was because they had good comprehension skills which enabled them to recall the theme within the passage they read. Extract 9 is a sample of the pupil's responses with good performance.

Kipengele	Maswali na majibu	Alama	
1.	Rafiki yake Tina anaitwa nani? (Subira)	(5)	0
2.	Tina na Subira wanaishi katika kijiji gani? (Ng'alo)	(5)	0
3.	Tina na Subira walikwenda wapi? (Kisimani)	(5)	0
4.	Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata)	5	(0)
5.	Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ ili apate matibabu/ili apate dawa)	(5)	0

Extract 9: A sample of pupils' responses with good performance on question 2

In Extract 9, the pupil answered correctly four items. This demonstrates that he/she comprehended the passage and as a result responded to the questions which tested lower as well as upper level thinking order.

Further analysis shows that 5,767 (20.77%) pupils answered correctly two to three items of the question. This reveals that these pupils had an average performance in reading and listening for comprehension. Extract 10 provides a sample of the pupil's response which earned him/her average performance.

Kipengele	Maswali na majibu	Alama	
1.	Rafiki yake Tina anaitwa nani? (Subira)	5	⓪
2.	Tina na Subira wanaishi katika kijiji gani? (Ng'alo)	5	⓪
3.	Tina na Subira walikwenda wapi? (Kisimani)	⑤	0
4.	Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata)	5	⓪
5.	Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ ili apate matibabu/ili apate dawa)	⑤	0

Extract 10: A sample of pupils' responses for those with an average performance on question 2

In Extract 10, the pupil answered correctly two items of the question. This shows that this pupil had partial knowledge in answering comprehension questions. However, he/she managed to answer correctly the fifth item of this question which tested the higher thinking level.

On the other hand, 3,612 (13.01%) pupils answered all the five items correctly which indicated very good performance. The pupils in this category were competent in reading, comprehending and interpreting what they had read. These competencies enabled them to respond correctly to the items which tested both remembering as well as evaluating. Extract 11 provides a sample of the responses from one of the pupils.

Kipengele	Maswali na majibu	Alama	
1.	Rafiki yake Tina anaitwa nani? (Subira)	⑤	0
2.	Tina na Subira wanaishi katika kijiji gani? (Ng'alo)	⑤	0
3.	Tina na Subira walikwenda wapi? (Kisimani)	⑤	0
4.	Subira alitumia nini kujaza maji kwenye ndoo yake? (Kata)	⑤	0
5.	Kwanini Subira alipelekwa Hospitali? (Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ ili apate matibabu/ili apate dawa)	⑤	0

Extract 11: A sample of pupils' responses for the one who had very good performance on question 2

Extract 11 illustrates a sample of responses from a pupil who answered correctly all the five items of the question 2. This indicates that the pupils in this category had good comprehension skills.

2.4.4 Pupils' Performance on Comprehension Questions

The performance of the pupils in answering items of this question varied for various reasons. Despite the diverse responses given by pupils, on average all the pupils answered correctly the two items of the question. Thus, pupils' ability to read, comprehend and respond to questions was average. Chart 2 indicates the percentage of pupils' performance on each word.
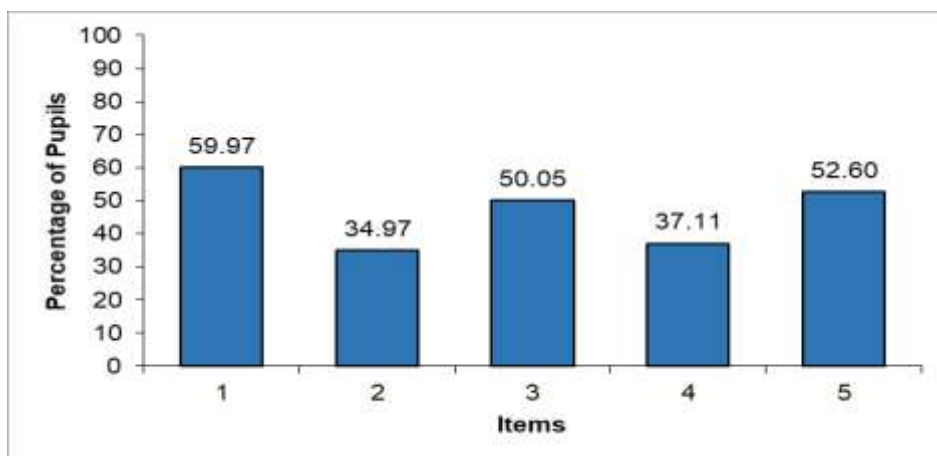
Chart 2: *Pupils' performance on each Item of question 2*

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A total of 16,654 (59.97%) pupils correctly answered the first item of the question, which asked "Rafiki yake Tina anaitwa nani?" These pupils correctly responded to the item because they fluently read the passage and comprehended the main ideas. Thus, they remembered the name of Tina's friend to be Subira.

Similarly, 14,606 (52.60%) pupils correctly answered the fifth item which asked "Kwa nini Subira alipelekwa Hospitali?" Though this item tested higher order thinking level, it was responded correctly by the majority of the pupils. This indicates that those pupils understood the passage. Some pupils related the question to their real life experience that someone is taken to hospital when sick or injured for treatment.

In the third item, pupils were asked 'Tina na Subira walikwenda wapi?' The pupils' performance on this item was average as 13,898 (50.05%) pupils correctly stated that "walikwenda kisimani". This response indicates that those pupils had adequate knowledge in reading fluently and were able to comprehend the main ideas of the passage. Hence, they correctly stated the place where Tina and Subira had gone which is called 'Kisimani.'

However, the second item which asked "Tina na Subira wanaishi kijiji gani?" was correctly answered by a few pupils (34.97%). The correct answer for this item was *Ng'alo*. Many pupils (65.03%) failed to answer this item correctly because they could not pronounce the word 'Ng'alo' which has a nasal sound (ng'). Instead they pronounced it as an oral sound (Ng), therefore they pronounced it as 'Ngalo'.

In addition, pupils had weak performance on the fourth item which asked "Subira alitumia nini kujaza ndoo yake?" only 37.11 per cent of the pupils answered it correctly. The analysis of the pupils' responses shows that majority of pupils (62.89%) were unable to mention the specific tool that Subira used to draw water from a well which was 'kata'. Some of the pupils supplied incorrect responses such as; *ndoo, kikombe, pipa* and *chungu* which are containers that can be used to fetch water but had not been mentioned in the passage. These responses, therefore, indicated

that those pupils did not understand the question. So, they supplied responses based on their daily life experience.

2.5 A Comparison of Pupils' Performance based on Region, School Location and Sex

In the Assessment of the Reading Skills, a comparison of pupils' performance was done based on the regions, school location (urban or rural), and sex (boys and girls). The purpose of this comparison was to identify the variation in pupils' performance in these categories in order to make appropriate suggestions aiming at improving the teaching and learning process.

2.5.1 A Comparison of Pupils' Performance per Region for 2019 and 2021 Assessments

The 2021 Reading Skills Assessment was conducted in all regions of Tanzania Mainland as was the case in 2019. The regional pupils' performance for 2019 and 2021 was compared to determine the trend of the performance on reading skills. In making such a comparison, the following criteria were considered: a pupil who scored 0-12 marks had weak performance, the one who scored 13-25 marks had average performance and 26-37 marks had good performance and 38-50 marks had very good performance. Chart 3 shows pupils' performance for 2019 and 2021 assessments regionally.
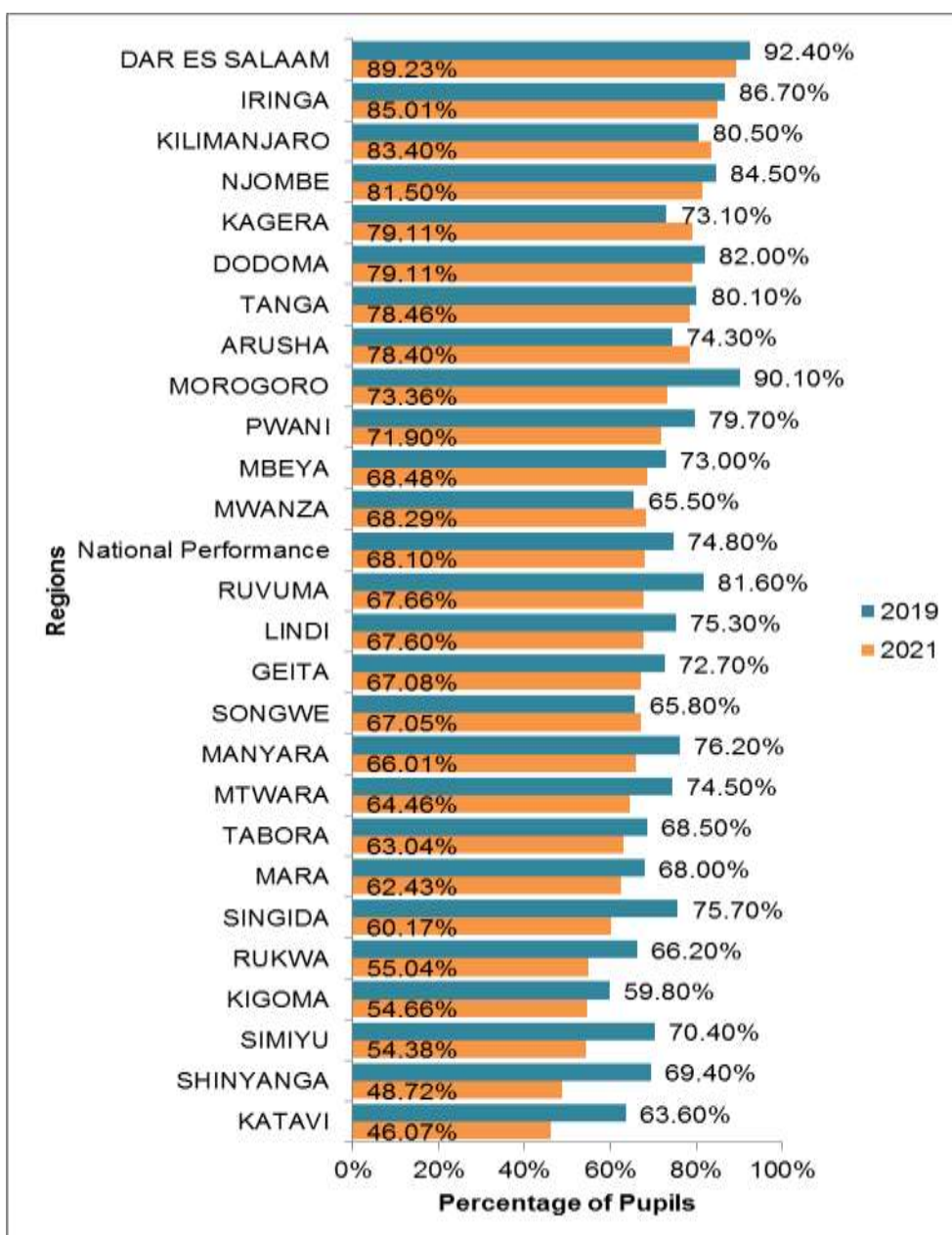
Chart 3: *Comparison of the pupils' performance regionally*

The comparison of pupils' performance regionally in 2019 and 2021 assessments shows that the national performance in 2021 dropped by 6.70 per cent. In 2019, the national performance was 74.80 per cent while in 2021 is 68.10 per cent. Dar es Salaam came first in performance in these two years though her performance has dropped by 3.17 per cent from 92.40 per cent in 2019 to 89.23 per cent in 2021.

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Further analysis shows that there are five regions whose performance has improved in 2021 compared to 2019. The percentage of pupils performance in those regions improved as follows; Kilimanjaro (3.40%), Arusha (4.10%), Kagera (6.01%), Songwe (1.25%) and Mwanza (0.79%).

On the other hand, Katavi region did not perform well in 2021 compared to 2019. Her performance dropped by 17.53 per cent, that is, from 63.60 per cent in 2019 to 46.07 per cent in 2021. Katavi had the lowest performance of all regions in Tanzanian Mainland.

2.5.2 Comparison of Pupils' Performance based School Location

The number of pupils who sat for the Reading Skills Assessment in 2021 was 27,770. Among them, 13,834 (49.82%) were from urban schools and 13,936 (50.18%) came from rural schools. The analysis shows variation in their performance as shown in Chart 4.
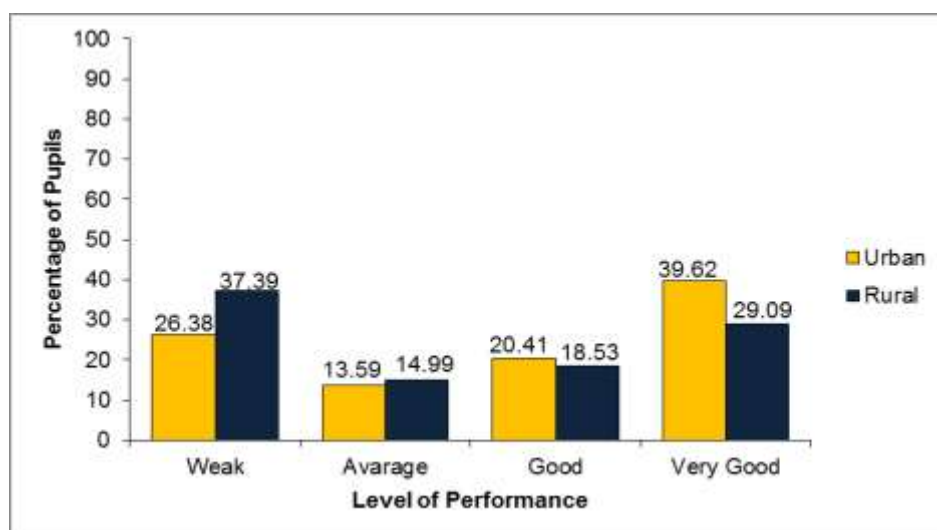
Chart 4: *Comparison of performance between urban and rural schools*

Chart 4 shows that the percentage of pupils from urban schools who got average to a very good performance was 73.62 per cent while the performance of the pupils from rural schools was 62.61 per cent. Thus, the pupils from urban schools performed better by

11.01 per cent. In 2019, the urban schools' pupils did better by 6.14 per cent.

2.5.3 Comparison of Pupils' Performance by Sex

A total of 27,770 pupils sat for Reading Skills Assessment in 2021 whereby 14,151 (50.95%) were girls and 13,619 (49.04%) were boys. The analysis of data has been done to identify differences in performance between boys and girls as summarized in Chart 5.
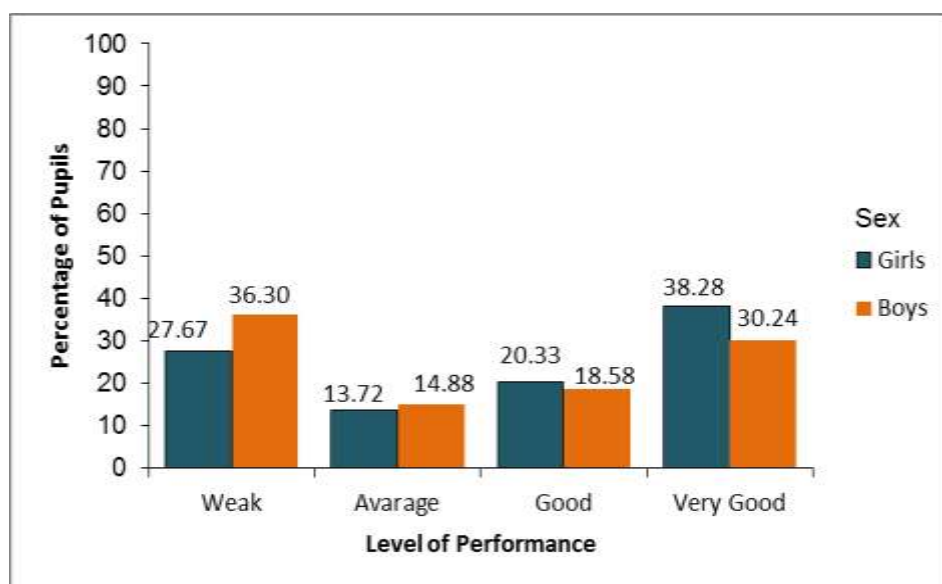
Chart 5: *Comparison of performance between boys and girls*

In Chart 5, the percentage of girls who attained average to a very good performance was 72.33 per cent while that of boys was 63.70 per cent. Therefore, the performance of girls was better than that of boys.

2.6 Summary of Reading Skills Analysis

The analysis of the Reading Skills Assessment shows that pupils had average performance Reading Skills by 68.10 per cent. Majority of the pupils read 13 to 50 words fluently in a minute and answered 2 to 5 comprehension questions correctly. On the other hand, 31.90 per cent of the pupils demonstrated weak performance as they lacked fluency in reading most words. These pupils failed to read words which consisted of consonant clusters such as 'kubwa', 'walikwenda', 'alichukua', 'ndoo'

and 'akaanza'. Similarly, the words consisting of the sound 'r' such as 'Subira' and 'Mara', and the word 'Ng'alo' formed by a nasal sound.

CHAPTER THREE

WRITING SKILLS ASSESSMENT

3.1 Introduction

This chapter analyses the Writing Skills Assessment based on the Structure of the Assessment Paper, the performance criteria upon which the pupils' competencies were assessed, as well as the pupils' response analysis. Moreover, the chapter indicates the performance levels whereas pupils had very good performance from thirty-eight to fifty (38 to 50) marks, good performance (26 to 37 marks), average performance (13 to 25 marks) and weak performance (0 to 12 marks). The chapter also, shows the pupils' ability to write correct words from the given pictures, writing capital letters and use of appropriate punctuation marks. Moreover, the chapter shows the comparison of the pupils' performance based on regions, school locations (urban/rural settings) and sex.

3.2 Structure of the Writing Skills Assessment Paper

The writing Skills assessment paper comprised three questions. The first question comprised 10 items. For each, a pupil was asked to identify the picture and write its name. The pupil in the second question was asked to write words in capital letters and in the third question a pupil was asked to copy a passage and punctuate it using appropriate punctuation marks. The objective of the Writing Skills assessment was to identify pupils' competencies in mastering writing skills.

3.3 Performance Criteria for Writing Skills

The pupils' competencies in writing skills were determined by four (4) levels of performance, namely weak, average, good and very good. In questions 1 and 2, the pupil's competencies were considered to be weak if he/she wrote 0 – 2 items, it was average if they wrote 3 – 5, good if they wrote 6 – 8 items and very good if they wrote 9 – 10 correct items. The pupil's competence in writing words in capital letters was based on the ability in formulating capital letters. The performance was considered to be weak if he/she managed to write in capital letters 0 - 2 words, average 3 – 5 words, good 6 - 8 words and very good 9 - 10 words. In addition, the pupils' performance depended on the overall scores after copying and applying the appropriate punctuation marks. Scores from 0 - 5 marks indicated weak performance, those from 6 - 10 indicated

average performance, 11 - 15 showed good performance, and 16 - 20 scores meant very good performance.

3.4 Pupils' Response Analysis in Writing Skills

The analysis of the pupils' responses indicates that a total of 27,412 (100%) pupils sat for the assessment on writing skills. Out of them, 62.21 per cent had performance ranging from average to very good. However, 37.79 per cent of the pupils had weak performance. Table 4 summarises the pupils' performance on writing skills.

Table No. 4: General Pupils' Performance on Writing Skills

| Competence Assessed | Level of Performance | | | | | | | |
| | Weak | | Average | | Good | | Very Good | |
	Number of pupils	%	Number of pupils	%	Number of pupils	%	Number of pupils	%
Word formation	7,982	29.12	4,314	15.74	10,642	38.82	4,474	16.32
Writing of Capital Letters	17,637	64.34	2,824	10.30	2,974	10.85	3,977	14.51
Copying the passage and using appropriate punctuation marks	15,958	58.22	1,772	6.46	4,409	16.08	5,273	19.24

Table No. 4 indicates the performance of pupils on writing skills. Their performance ranged from average to very good. The result shows that in writing names of the given pictures the performance was 70.88 per cent. In writing words in capital letters, it was 35.66 per cent, and in copying the passage and inserting the appropriate punctuation marks, it was 41.78 per cent.

3.4.1 Question 1: Identification of Pictures and Writing down their Names

The analysis was conducted for the purpose of identifying the pupils' competence to identify and write the names of the pictures correctly. The statistics show that 19,430 (70.88%) pupils had the performance ranging from average to very good. Moreover, 7,982 pupils (29.12%) had weak performance as shown in Chart 6.
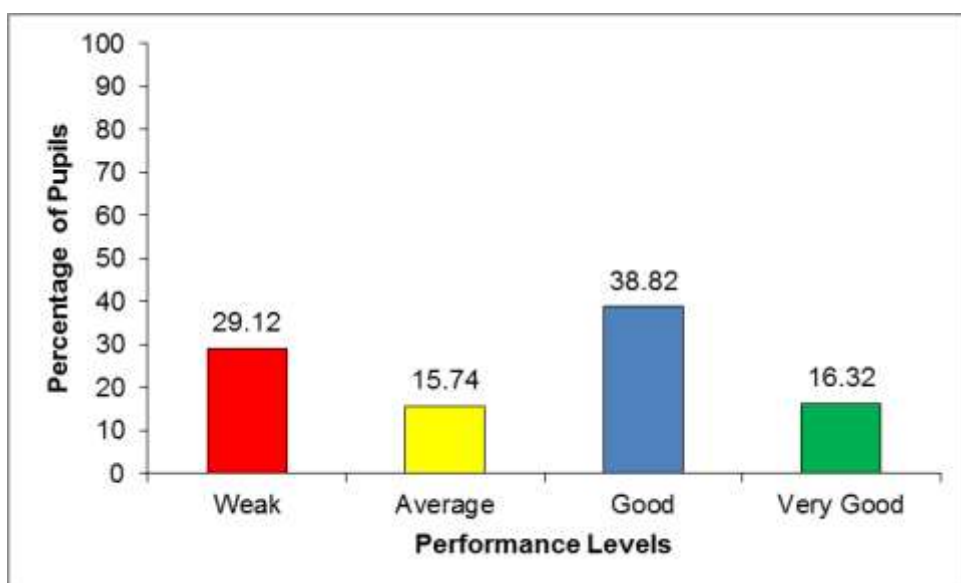
Chart 6: *Pupils' performance on writing names of pictures*

Chart 6 indicates the rate of pupils' performance on question 1. Moreover, the pupils had good performance as they managed to correctly identify and write names of the pictures.

Further analysis indicates that 7,982 (29.12%) pupils had weak performance. Those pupils failed to identify and write correctly the names of the pictures. Some of them mixed small and capital letters in forming words and some wrote instructions of the question instead of the correct names. Also, other pupils wrote incorrect answers and yet others failed to write the names of pictures or words which contained consonant clusters. Extract 12 provides a sample of the responses from a pupil with weak performance.

1. **Andika** majina ya **picha** hizi :

(a) DEGE	(b) gauni
(c) Basikari	(d) siba
(e) chanuo	(f) Muno

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(g)	(h)
kit<u>o</u>da	viatu
(i)	(j)
Jenbe	pondamiraa

Extract 12: A sample of pupil's incorrect responses

In Extract 12, a pupil failed to write the names of pictures with consonant clusters. For example, the word "Jembe" was written as "jenbe", pundamilia as "pondamiraa", Simba as "Siba", Kitanda as "kitada", Ndege as "dege" and Baiskeli was written as "basikari" The pupil, moreover, managed to write the words "gauni" in (b) and "chanuo" in (e) correctly and hence he/she got weak performance.

On the other hand, 4,314 (15.74%) pupils had average performance. Those pupils were able to identify 3 to 5 pictures and wrote their names correctly, and as a result they got 6 to 10 marks. Moreover, some pupils wrote the names of pictures in their mother tongues and others failed to write words which contained

nasal consonant letters. Extract 13 provides a sample of responses from a pupil with average performance.

1. **Andika** majina ya **picha** hizi :

(a)	(b)
De nge	go nDi
(c)	(d)
ji Lushe	Si mba
(e)	(f)
cha nus	muko no

(g)	(h)
ulili	viatu
(i)	(j)
je mbe	pudamilsiya
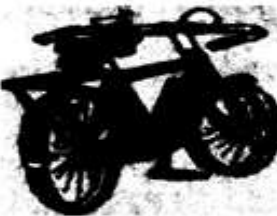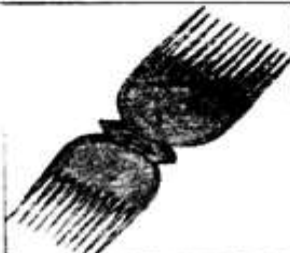
Extract 13: A sample of responses from a pupil with average performance

In Extract 13, a pupil managed to write correctly the names of pictures in items (d), (e), and (i). However, he/she failed to write correct names in items (a), (b, (c), (h), (f), (g) and (j). In items (a) and (f), the pupil failed to write correctly the words which start with nasal consonants such as /n/ and /m/ and hence, wrote "Denge" instead of Ndege and "Mukono" instead of "Mkono" respectively.

Further analysis shows that 10,642 (38.82%) pupils had good performance. Those pupils identified correctly some of the

pictures and wrote their names from 6 to 8 words. Hence, they scored 12 to16 marks. Extract 14 provides a sample of responses from a pupil with good performance.

1. **Andika** majina ya **picha** hizi :

(a)	(b)
ndege	gauni
(c)	(d)
basikeli	Simba
(e)	(f)
kichanio	mukono

(g)		(h)	
	kitanda		*kiatu*
(i)		(j)	
	jembe		*pundamilia*

Extract 14*: A sample of responses from a pupil with good performance*

Extract 14 indicates a sample of responses from a pupil who had good performance despite the fact that he/she failed to write correctly the names of pictures in items (c) and (f).

Furthermore, 4,474 (16.32%) pupils had very good performance. Those pupils were able to identify all 10 pictures correctly and wrote their names appropriately. Also, the letters that represented a name for a particular picture were well formed. Extract 15 shows a sample of responses from a pupil who had very good performance.

1. **Andika** majina ya **picha** hizi :

(a)

Ndege

(b)

Gauni

(c)

Baiskeli

(d)

Simba

(e)

Chanuo

(f)

Mkono

Extract 15: A sample of responses from a pupil who had very good performance

Extract 15 shows a sample of responses from a competent pupil who managed to write correctly the names of all 10 items assessed hence had very good performance.

3.4.2 Pupils' Performance on Identifying and Writing each Word

Data analysis was done in order to identify the performance of pupils on each word which was assessed. Their performance on each word was as follows:

(a) Ndege

The analysis reveals that a total of 15,441 (56.33%) of pupils managed to write the name "ndege" correctly. Those pupils had competence to identify the picture and associate it with the correct name by writing and forming the letters of the word correctly.

However, a total of 11,971 (43.67%) pupils failed to recognize the pictures and did not write their correct names. Some of the pupils in this category associated the picture of *Ndege* with "Garimoshi" and others wrote "nyumba" and "Samaki" as their answers. The words "Garimoshi", "Nyumba" and "Samaki" were definitely incorrect answers .

(b) Gauni

Further analysis indicates that 17,736 (64.70%) pupils managed to correctly identify the picture as they wrote the name "Gauni. The pupils had competence in writing words which were formed by consonants and vowels.

The analysis furthermore indicates that 9,676 (35.30%) pupils failed to write the word *Gauni* correctly. Some pupils misinterpreted the picture and wrote "kanzu", "gunia", "pazia" and "mdoli".

(c) Baiskeli

The analysis indicates that 21,774 (79.43%) pupils managed to identify pictures but failed to write the word *Baiskeli* correctly. Moreover, some pupils failed to write the word "Baiskeli" and instead they wrote "basikeli". Since they did not have sufficient knowledge of the words consisting of two consonants and vowels. For example the word "Baiskeli" is formed by syllables such as /ba/ /i/ /ske/ /li/.

Furthermore, the analysis shows that 5,638 (20.57%) pupils managed to identify the picture and wrote the word "Baiskeli" correctly. Pupils in this category are regarded to have adequate knowledge of consonants and vowels, which enabled them to provide a correct response.

(d) Simba

The analysis shows that 17,457 (63.68%) pupils had good performance as they were able to identify the picture and write correctly the name "simba". Those pupils were competent in associating the picture with the letters constituting the word "simba". The pupils did not get trouble to answer item (d) correctly

because the animal "Simba" is commonly known and its pictures are available in schools and homes. Furthermore, the word "Simba" is formed with two syllables, that is /si/ and /mba/ which enabled them to form a correct word easily.

On the other hand, 9,955 (36.32%) pupils failed to write the name "simba" correctly. Some of these pupils incorrectly wrote *thimba, siba and shimba* instead of *Simba*. Those pupils were affected by their ethnical languages as they failed to distinguish /s/ and /th/ sounds, whereas others had problems in forming syllables with consonants clusters.

(e) Chanuo

The findings reveal that a total of 16,646 (60.73%) pupils failed to write the word "Chanuo". Those pupils were not able to recognise the picture of *chanuo* hence they wrote *kitana*, *kichanio*, *chanulo* and *chanuwo*.

However, a total of 10,766 (39.27%) pupils managed to identify the picture and wrote correctly the word "chanuo". Those pupils were knowledgeable on the syllables /cha/ /nu/ and /o/ hence they wrote them correctly.

(f) Mkono

The findings show that a total of 15,610 (56.95%) pupils to have demonstrated good performance as they managed to identify the picture and write correctly the word "mkono". The pupils were able to associate the picture with the syllables which form the word "mkono".

Furthermore, the findings show that 11,802 (43.05%) pupils failed to write the word "Mkono" correctly as they had no competence in forming letters of such a word. Hence, they incorrectly wrote "kono", "vidole", "kibao", "jani" and "mti" to associate with a particular picture.

(g) Kitanda

The analysis indicates that 16,069 (58.62%) pupils succeded in writing the name "kitanda". Those pupils identified the picture and

wrote its name correctly. Kitanda is commonly known to most of pupils so its name was easier to be written.

On the contrary, 11,343 (41.38%) pupils were unable to write correctly the word *kitanda* as they failed to associate the name with the picture. Moreover, they had challenges in writing the words associated with nasal sound /n/ as some pupils wrote "tanda" which was incorrect and hence they had weak performance.

(h) Kiatu

A total of 14,902 (54.36%) pupils were competent in identifying the picture and in writing correctly the word "Kiatu". This is due to the fact that pupils managed to use accurately the syllables /ki/ /a/ and /tu/.

Further analysis indicates that 12,510 (45.64%) pupils had weak performance as they failed to associate the picture with the word "kiatu". They also lacked the knowledge of the syllables /ki/ /a/ and /tu/. Moreover, some pupils were affected by ethnic languages (mother tongues) and hence they wrote 'fiatu' and 'kilatu'.

(i) Jembe

The analysis indicates that 16,593 (60.53%) pupils were able to write the name "jembe". Those pupils identified the picture and correctly wrote its name.

On the other hand, 10,819 (39.47%) pupils failed to identify the name which was associated with the picture. They wrote names such as "gembe", "leki, "mpini" and "mti" which were incorrect. Moreover, they failed to differentiate a hoe from its handle. Furthermore, other pupils failed because they were incompetent in forming 'mb' which is a consonant cluster and therefore they incorrectly wrote "Jenbe" instead of "Jembe".

(j) Pundamilia

A total of 18,462 (67.35%) pupils had inadequate knowledge of the given picture with the word "pundamilia" as they wrote "nyau", "mbwa", "chui" and "pundamiliya" to mean "pundamilia". The

pupils in this category did not know that the word *pundamilia* consists of syllables /pu//nda/ /mi/ /li/ and /a/.

On the other hand, 8,950 (32.65%) pupils had adequate knowledge in writing correctly the name "pundamilia". Those pupils managed to correctly write the syllables /pu/ /nda/ /mi/ /li/ and /a/ which form the word *Pundamilia*.

3.4.3 Question 2: Writing Words by Using Capital Letters

The question was set to test the pupils' competencies in writing capital letters and it had 10 marks.

A total of 27,412 (100%) pupils attempted this question and the pupils' performance on this question was average. Chart 7 provides a summary of pupils' performance on question 2.
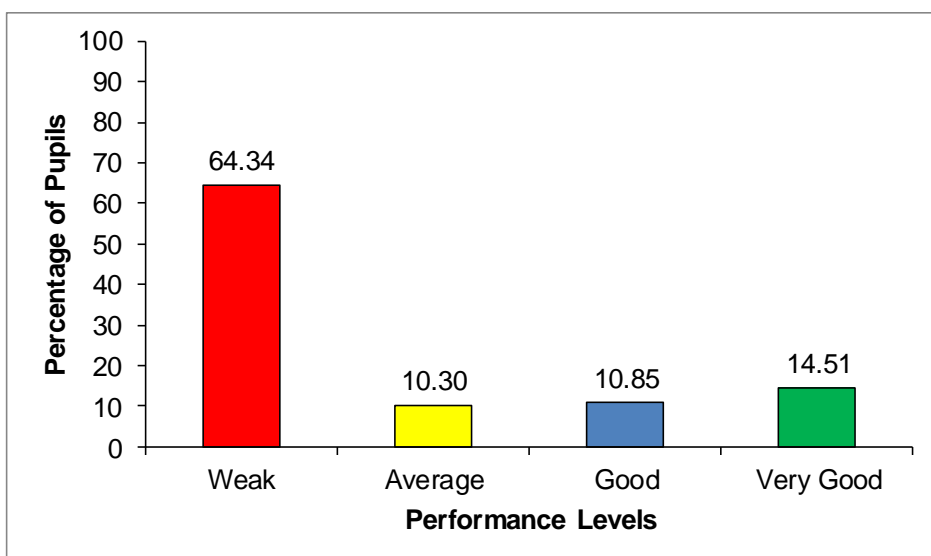
Chart 7: *Pupils' performance on writing words in capital letters*

Chart Na. 7 shows that a total of 3,977 (14.51%) pupils wrote 9 to 10 words in capital letters. This indicates that they had very good performance. Moreover, 2,974 (10.85%) pupils managed to write 6 to 8 words in capital letters correctly indicating to have good performance. Furthermore, 2,824 (10.30 %) pupils managed to write 3 to 5 words in capital letters indicating average

performance. On the contrary, 17,637 (64.34%) had weak performance as they wrote 0 to 2 words in capital letters.

The findings indicate that 17,637 pupils (64.34%) had weak performance. Those pupils failed to write the words in capital letters. Among them, there are those who mixed capital and small letters. Other pupils wrote the first letters of the given words. Some pupils constructed sentences instead of writing words in capital letters. Yet, others wrote the names of pictures of the question 1. Extracts 16 (a – c) provide samples of responses from pupils with weak performance.

2. **Andika** maneno yafuatayo kwa **herufi kubwa** katika nafasi iliyo wazi katika kila neno.

    (a) juisi   J

    (b) maji   M

    (c) asha   A

    (d) faida   F

    (e) gurudumu   G

    (f) papai   P

    (g) zabibu   Z

    (h) dodoma   D

    (i) nanasi   N

    (j) mwanza   Mw

Extract 16 (a): A sample of responses from a pupil who wrote the first letter instead of a word with capital letters for all the words.

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2. **Andika** maneno yafuatayo kwa **herufi kubwa** katika nafasi iliyo wazi katika kila neno.

(a) juisi   JuiSi

(b) maji   MAJI

(c) asha   asha anakula

(d) faida   analima Shambani

(e) gurudumu   anachunga ng'ombe

(f) papai   popo andau lote

(g) zabibu   tunakula na shangazi

(h) dodoma   tunakula na bibi

(i) nanasi

(j) mwanza   niko shuleni ninasoma

Extract 16 (b): A sample of responses from a pupil who formed sentences instead of writing words in capital letters. The pupil got correct answers in (a) and (b) items. Item (i) was not attempted.

2. **Andika** maneno yafuatayo kwa **herufi kubwa** katika nafasi iliyo wazi katika kila neno.

   (a) juisi   NDEG
   (b) maji   GUNI
   (c) asha   BISKELI
   (d) faida   SIMA
   (e) gurudumu   CRANIO
   (f) papai   KItANDA
   (g) zabibu   KiAtU
   (h) dodoma   sRoka
   (i) nanasi   puNDALIA
   (j) mwanza   _____

Extract 16 (c): A sample of responses from a pupil who wrote some names given in the pictures in question 1 instead of writing them in capital letters.

Extracts 16 (a) – (c) show samples of responses from pupils who were incompetent in writing capital letters. They had weak performance because they did not adhere to the instructions of the question.

Further analysis shows that 2,824 (10.30%) pupils had average performance. Those pupils managed to write some of the words in capital letters. Among them, there were those who mixed capital and small letters, whereas others showed syllable division in the words. Extract 17 provides a sample of responses from a pupil who had average performance.

Extract 17: A sample of responses from a pupil with average
performance

Extract 17 shows a pupil who wrote correctly 3 out of 10 words which were in (c), (h), and (j). By contrast, in items (a), (b), (d), (f), (g) and (i) the pupil mixed capital and small letters.

Further analysis shows that 2,974 (10.85%) pupils had good performance. Those pupils had competence in forming capital letters correctly but they failed to write a few words in capital letters. Extract 18 provides a sample of responses from a pupil who had good performance.

2. **Andika** maneno yafuatayo kwa **herufi kubwa** katika nafasi iliyo wazi katika kila neno.

(a) juisi   JUISI

(b) maji   MAJi

(c) asha   ASHA

(d) faida   FAiDA

(e) gurudumu   GURUDUMU

(f) papai   PAPAI

(g) zabibu   ZABiBU

(h) dodoma   DODOMA

(i) nanasi   NANASI

(j) mwanza   MwANZA

Extract 18*: A sample of responses from a pupil with good performance

Extract 18 shows a sample of responses from a pupil who managed to write capital letters in items (c), (e), (f), (h), (i) and (j) but he/she failed to do the same in (a), (b), (d) and (g). Also, he/she mixed capital and small letters to form a word.

On the other hand, 3,977 (14.51%) pupils were able to write all 10 words correctly in capital letters. Those pupils had very good performance. Extract 19 provides a sample of responses from a pupil who had very good performance.

2. **Andika** maneno yafuatayo kwa **herufi kubwa** katika nafasi iliyo wazi katika kila neno.

    (a) juisi   JUISI

    (b) maji   MAJI

    (c) asha   ASHA

    (d) faida   FAIDA

    (e) gurudumu   GURUDUMU

    (f) papai   PAPAI

    (g) zabibu   ZABIBU

    (h) dodoma   DODOMA

    (i) nanasi   NANASI

    (j) mwanza   MWANZA

Extract 19: A sample of responses from a pupil who had a very good performance

Extract 19 shows a sample of responses from a pupil who managed to write all 10 words in capital letters correctly and hence, demonstrated very good performance. This shows that a pupil had a competence in forming capital letters.

3.4.4 Question 3: Copying a Passage and Putting Punctuation Marks

The pupils were assessed on the competence of copying the passage and using the following punctuation marks: full stop (**.**), comma (**,**), Exclamation mark (!) and a question mark (?) appropriately. The punctuation marks were to be inserted in the provided blank spaces. The question carried 20 marks.

All the 27,412 (100%) pupils attempted this question and the performance was generally average. Chart 8 provides a summary of pupils' performance on question 3.
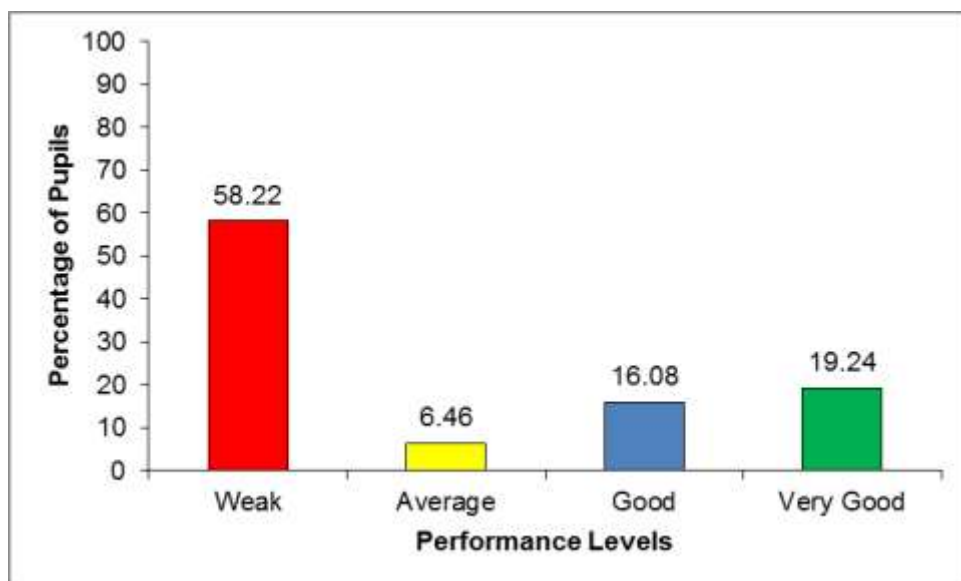
Chart 8: *Pupils' performance on copying a passage and punctuating it*

Chart 8 shows that 5,273 (19.24%) pupils had marks ranging from 16 to 20, which is very good performance. Those pupils managed to copy all 16 words and inserted all 4 punctuation marks in the appropriate places. Furthermore, 4,409 (16.08%) pupils had good performance as they copied the words in the given passage and inserted some of the punctuation marks correctly. They, therefore, scored 11 to 15 marks. Moreover, a total of 1,772 (6.46%) pupils got 6 to 10 marks, which indicates an average performance. Likewise, 15,958 (58.22%) pupils scored from 0 to 5 marks. Hence, they had weak performance. Those pupils failed to copy words from the given passage and punctuate them accordingly.

Data shows that 15,958 (58.22%) pupils failed to copy the given passage. Moreover, they failed to insert appropriate punctuation marks and hence, they had weak performance. Some of them wrote irrelevant words while others wrote letters which constituted meaningless Kiswahili words. Others copied the instructions of the question. Also, there were pupils who misplaced the punctuation

marks. Extracts 20 (a) and (b) are samples of responses from pupils with weak performance.

3. **Nakili** kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: **nukta (.), mkato (,), alama ya kushangaa (!)** na **alama ya kuuliza (?)** mahali panapostahili.

Musa __ kwa nini wewe umemaliza chakula chote __ Oh __ Mimi sikubali nitakwenda kusema kwa mama na baba __

Extract 20 (a): A sample of a pupil's incorrect response in question 3

3. **Nakili** kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: **nukta (.), mkato (,), alama ya kushangaa (!)** na **alama ya kuuliza (?)** mahali panapostahili.

Musa __ kwa nini wewe umemaliza chakula chote __ Oh __ Mimi sikubali nitakwenda kusema kwa mama na baba __

Nukta (.)
Mkato (,)
alama ya kushangaa (!)
alama ya kuuliza (?)

Extract 20 (b): A sample of a pupil's incorrect responses in question 3

Extracts 20 (a) and (b) show samples of responses from pupils with weak performance. Pupils in 20 (a) copied 4 punctuation marks

without the words of the passage and pupils in 20 (b) copied 4 words with punctuation marks. Hence, they had weak performance.

Further analysis shows that 1,772 (6.46%) pupils managed to copy 6 to 10 out of 16 words. Therefore, they had average performance. Some of them failed to insert punctuation marks appropriately while others misplaced the punctuation marks. Consequently, they failed to write the correct words as they had little knowledge of using punctuation marks. Extract 21 shows a sample of responses from a pupil with average performance.

3. **Nakili** kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: **nukta** (.), **mkato** (,), **alama ya kushangaa** (!) na **alama ya kuuliza** (?) mahali panapostahili.

Musa __ kwa nini wewe umemaliza chakula chote __ Oh __ Mimi sikubali nitakwenda kusema kwa mama na baba

___ Musa __ Kwaniniweweumemaliza chakula chote __ oh __ Mimi

Extract 21: A sample of responses from a pupil with average performance in question 3

Extract 21 shows a sample of responses from a pupil who copied 9 out of 16 words correctly but failed to insert the appropriate punctuation marks, and hence he/she had average performance.

Moreover, 4,409 (16.8%) pupils had good performance because they managed to copy some words and insert the punctuation marks correctly. Those pupils got 10 to 15 marks. However, among them there were those who inserted punctuation marks incorrectly and others did not insert them at all. Extract 22 shows a sample of responses from a pupil with good performance.

Extract 22: A sample of responses from a pupil with good performance

Extract 22 shows a sample of responses from a pupil who copied 14 words correctly and inserted only one punctuation mark. However, the pupil failed to correctly copy two words and insert three punctuation marks.

On the other hand, 5,273 (19.24%) pupils had very good performance, as they managed to copy the passage and insert all the punctuation marks correctly. Extract 23 is a sample of responses from a pupil with very good performance.

Extract 23: A sample of responses from a pupil with very good performance

Extract 23 is a sample of responses from a pupil who had very good performance. The pupil managed to copy the passage as well as

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inserting all 4 punctuation marks correctly. This indicates that the pupils in this category had competency in forming syllables and using punctuation marks appropriately.

3.5   Comparison of the Pupils' Performance based on Regions, School Locations (Urban/Rural Settings) and Sex

A comparison was done for the purpose of identifying the performance of the pupils based on regions, location of the schools (urban and rural) and sex. The comparison was done in order to identify problems and suggest ways for resolving challenges in order to improve the process of teaching and learning.

3.5.1   Comparison of the Pupils' Performance Regionally for 2019 and 2021

Assessment on Writing Skills in 2021 was done in all 26 regions in Tanzania Mainland as it was in 2019. After assessment results, the comparison of the pupils' performance regionally was done so as to identify their competencies in Writing Skills. In making that comparison, the following set criteria were considered: Those with 38 - 50 marks indicated very good performance, 26 - 37 marks showed good performance, 13 - 25 indicated average and 0 - 12 weak performance. Chart 9 provides a comparison of pupils' performance regionally for 2019 and 2021 assessments.
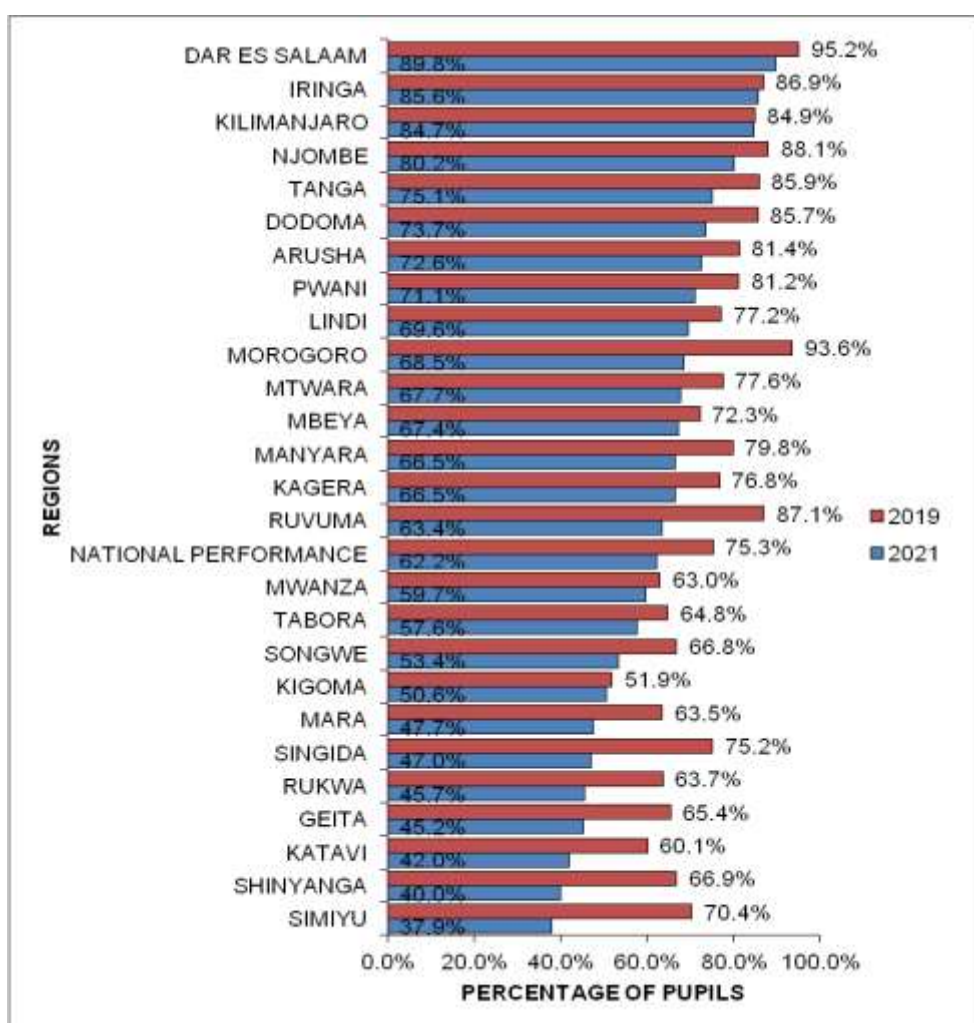
Chart 9: *Pupils' performance regionally for 2019 and 2021 assessment*

The comparison of pupils' performance regionally for the years 2019 and 2021 shows that the national performance has dropped by 13.09 per cent. In 2019, the national performance was 75.30 per cent whereas in 2021 the national performance was 62.21 per cent. The region which led in pupils' performance from average to very good performance for two years consecutively was Dar es Salaam. However, in 2021 Dar es Salaam dropped by 5.4 per cent from 95.2 per cent of 2019 to 89.82 per cent in 2021, although it did not lose its position.

On the other hand, the Simiyu region comparatively had the lowest performance rate of 37.94 per cent in 2021. In 2019, the region got the performance of 70.40 per cent, so it dropped by 32.46 per cent.

Also, in 2019 Kigoma region had the lowest performance of 51.9 per cent compared to the performance of 50.6 per cent of 2021. The region dropped by 1.3 per cent and it held the 19th position out of 26 regions in the performance levels.

3.5.2 Comparison of Pupils' Performance by School Location (Urban and Rural)

The analysis on the comparison of pupils' performance indicates that 27,412 pupils sat for the Writing Skills Assessment in 2021. Among them 13,725 pupils were registered in urban and 13,687 in rural schools. The purpose of comparing the urban and rural schools was to identify problems facing pupils and teachers in the teaching and learning processes and improving performance levels. Chart 10 shows the comparison of performance between pupils from urban and rural schools.
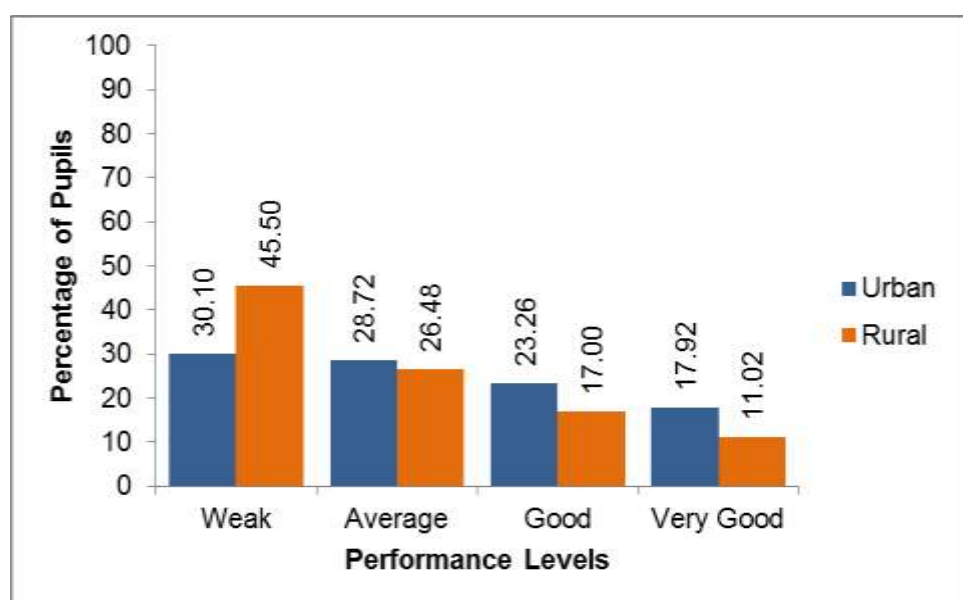
Chart 10*:   Pupils' performance in urban and rural schools*

Chart 10 shows that there was a difference between urban and rural pupils' performance. Moreover, urban schools had good performance of 69.90 per cent compared to rural schools which had 54.50 per cent.

3.5.3 Comparison of Pupils' Performance by Sex

A total of 27,412 pupils sat for the Writing Skills assessment in 2021. Boys were 13,403 and girls were 14,009. The purpose of comparing pupils based on sex was to identify their performance' achievement rates in order to improve their competencies based on equity and equality. Chart 11 illustrates a comparison of performance by sex between boys and girls.
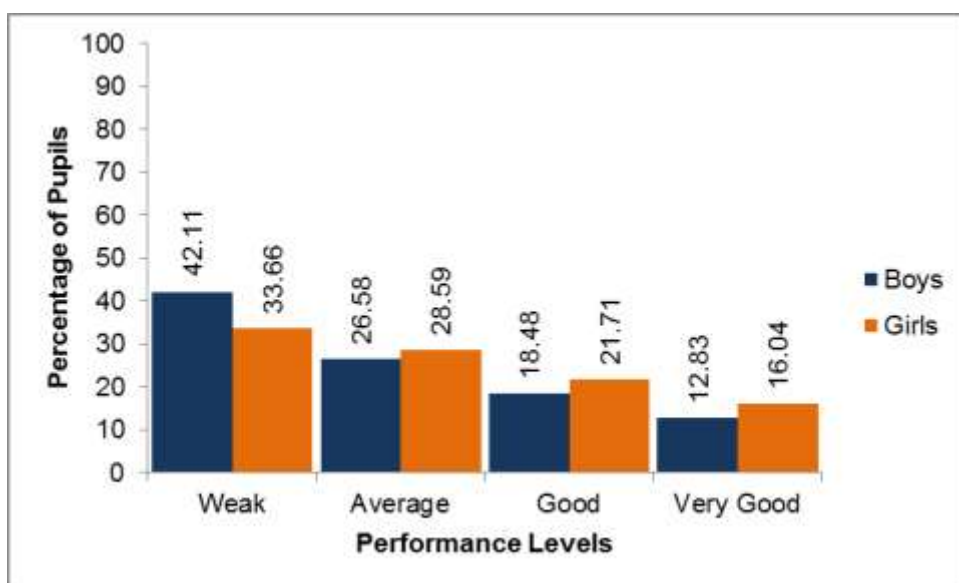
Chart 11: *Comparison of pupils' performance by sex*

Chart 11 shows that girls had the performance ranging from average to very good by 66.7 per cent while the boys had 57.89 per cent. Generally, the girls had a better performance than boys by 8.81 per cent.

3.6 Summary of Writing Skills Analysis

The analysis for Writing Skills shows that a total of 17,053 (62.2%) pupils had the performance which ranged from average to very good. The pupils' competence in writing the names of the pictures was higher compared to that of writing words in capital letters and copying a passage by inserting appropriate punctuation marks.

A total of 19,430 (70.88%) pupils were able to identify and write the names of the given pictures. The pupils' performance ranged from average to very good by writing 3 - 10 words correctly. Apart from

that, 9,775 (35.66%) pupils were competent in writing words in capital letters. Their performance ranged from average to very good as they managed to write 3 to 10 words in capital letters correctly.

However, a total of 11,454 (41.78%) pupils managed to copy and insert punctuation marks in the given passage as they managed to copy 6 - 16 words from the given passage and inserted 1 to 4 appropriate punctuation marks. The performance of those pupils ranged from average to very good.

CHAPTER FOUR

ARITHMETIC SKILLS ASSESSMENT

4.1 Introduction

This chapter describes the assessment of Arithmetic Skills that was conducted to Standard Two pupils in 2021. The chapter indicates the structure of the assessment papers, performance criteria and the overall performance of pupils in various competencies in Arithmetic Skills. Also, this chapter describes the areas on which the pupils had very good, good, average and weak performance. Furthermore, in this chapter the comparison of the pupils' performance based on sex, school location and regions is presented. Moreover, the chapter provides a summary of the analysis of pupils' performance in Arithmetic Skills.

4.2 Structure of the Assessment Papers

The pupils' competency in Arithmetic Skills was assessed in *STADI YA KUSOMA NA KUHESABU* and *STADI YA KUHESABU*. The first paper consisted of 10 questions with a total of 20 marks. The questions assessed pupils' competency in Addition and Subtraction of whole numbers less than 999. The pupils were required to answer all questions orally. The invigilators recorded pupils' scores in a special form for recording the pupils' scores (the assessment scale). For invigilators who used tablets, the scores were directly captured and stored into the database system.

The second paper had 10 questions which assessed pupils' competency in identifying the missing numbers and solving word problem subtasks. In that paper, the pupils were required to   answer all questions by writing the answers in blanks. Each question in the subtask of identifying the missing numbers carried 2 marks, whereas those in the subtask of problem solving carried 4 marks each making a total of 30 marks. Therefore, both papers had a total of 50 marks.

4.3 Performance Criteria in Arithmetic Skills Assessment

The pupils' performance criterion applied in each competency in Arithmetic Skills Assessment were divided into four categories which were: weak performance for a pupil who was not able to attempt any

question or correctly answered not more than two questions; average performance for a pupil who correctly answered three questions; good performance for a pupil who correctly answered four questions; and very good performance, for a pupil who correctly answered all five questions.

4.4 Overall Performance in Arithmetic Skills

The data shows that 27,770 out of 32,216 pupils sat for Arithmetic Skills assessment. This implies that 4,448 (13.8%) pupils did not attend the assessment. The number and percentages of pupils with weak, average, good or very good performances on each subtask are indicated in Table 5.

Table No. 5: Overall Performance in Arithmetic Skills

Assessed Competency	Pupils' Performance							
	Weak		Average		Good		Very Good	
	Number of Pupils	Percentage	Number of Pupils	Percentage	Number of Pupils	Percentage	Number of Pupils	Percentage
Identifying Missing Numbers	16,524	60.72	4,880	17.93	2,234	8.21	3,576	13.14
Addition	9,807	35.32	5,102	18.37	5,130	18.47	7,731	27.84
Subtraction	11,945	43.01	5,895	21.23	5,122	18.44	4,808	17.31
Solving Word Problems	11,776	43.27	4,946	18.17	4,549	16.72	5,943	21.84

In Table 5 about 60.72, 35.32, 43.01 and 43.27 per cent of pupils failed to answer three to five questions correctly in Identifying the Missing Numbers, Addition, Subtraction and Solving Word Problems, respectively. Generally, the pupils had a very good performance in Addition (27.84%), Subtraction (17.31%) and Solving Word Problems (21.84%). On the other hand, the pupils' performance was weak (60.72%) in identifying the missing numbers subtask.

4.5 Analysis of Pupils' Performance on Each Subtask

The analysis of pupils' performance in each subtask in Arithmetic Skills was done so as to show the percentage of pupils who correctly

responded to each question. In each subtask the pupils responses were analysed in order to identify those with very good, good, average and weak performance. Moreover, responses' extracts are included to justify the explanations related to pupils' responses.

In addition and subtraction subtasks, 18,088 (65.10%) pupils used tallies and counting fingers in answering all questions. Likewise, 18,581 (66.90%) pupils used papers and pencils while 4,012 (14.4%) pupils answered all questions without using any counting aid.

4.5.1 Pupils' Competency in Identifying Missing Numbers in a Sequence

The pupils' competency to identify missing numbers in a sequence of numbers was assessed in questions 1 to 5 in the *STADI YA KUHESABU* paper. Pupils were required to respond to the questions by writing answers in the blanks provided. Questions 2, 4, and 5 involved increasing sequences while questions 1 and 3 involved decreasing sequences of numbers. Chart 12 shows the percentage of pupils who answered each question correctly.
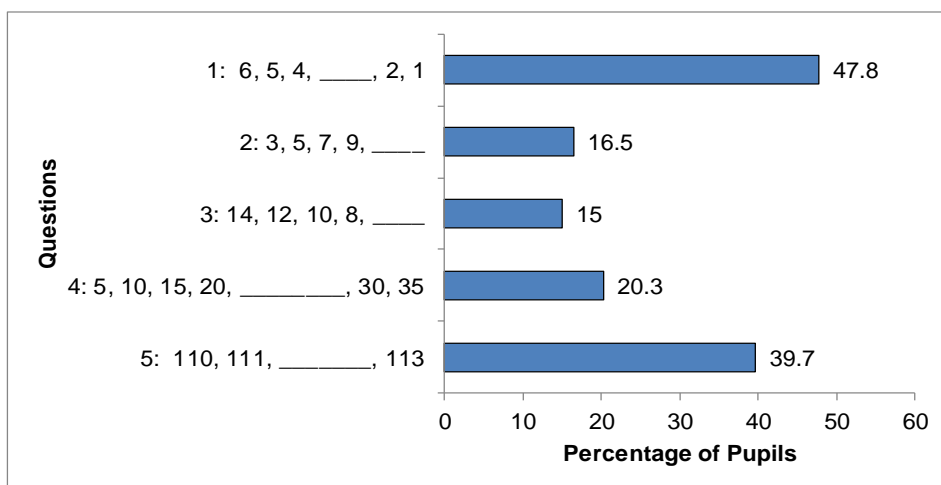
Chart 12: *The percentage of pupils who correctly identified the missing numbers in the sequence of numbers*

Chart 12 shows that 47.8 per cent of the pupils who did the assessment correctly responded to question 1. Also, 39.7 per cent of pupils got the correct answer in question 5. By considering the structure of these questions, it is obvious that the pupils were

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competent in identifying the missing numbers in the sequences of numbers which differ by 1.

The performance of pupils in questions 2, 3 and 4 was weak. Most pupils failed to realize that the consecutive numbers for each sequence in these questions differ by 2 or 5. In this competency, 1,845 (6.78%) pupils had very good performance. These pupils recognised whether the sequence of numbers is increasing or decreasing; and the difference of the consecutive numbers for each sequence. Also, they were able to perform the addition or subtraction of numbers. In questions 1 and 3, the pupils substracted 1 and 2 respectively from the number written before the blank. Therefore, they got the missing numbers for questions 1 and 3 as 3 and 6 respectively. Furthermore, the pupils identified the missing number in question 2 as 11 after performing the addition of 9 and 2. Similarly, they realised that the missing number in question 4 is 25 as a result of adding 20 and 5.

Andika namba inayokosekana katika nafasi iliyoachwa wazi katika swali la 1 hadi la 5.

1. 6, 5, 4, _3_, 2, 1
2. 3, 5, 7, 9, _11_
3. 14, 12, 10, 8, _6_
4. 5, 10, 15, 20, _25_, 30, 35.
5. 110, 111, _112_, 113.

Extract 24: A sample of a response of a pupil whose performance was very good

Extract 24 shows that the pupil was able to identify the missing number in each sequence. For instance, the pupil realised that the missing number in question 5 is 112 after adding 1 to 111 or subtracting 1 from 113.

A total of 1,731 (6.36%) pupils had good performance as they correctly responded to four questions while 2,234 (8.21%) pupils had an average performance as they correctly responded to three questions. Most of these pupils were able to determine whether a particular question was about increasing or decreasing sequence. However, some pupils committed errors by assuming that the

given sequence of numbers in question 2 differ by -2 and the sequence of numbers in question 3 differ by +2.

Andika namba inayokosekana katika nafasi iliyoachwa wazi katika swali la 1 hadi la 5.

1. 6, 5, 4, _3_, 2, 1
2. 3, 5, 7, 9, _8_
3. 14, 12, 10, 8, _9_
4. 5, 10, 15, 20, _25_, 30, 35.
5. 110, 111, _112_, 113.

Extract 25: Sample response of a pupil whose performance was average

In Extract 25, the pupil committed mistakes in answering questions 2 and 3 by assuming that the difference of consecutive numbers is 1 instead of 2 or 5.

On the other hand, 21,404 (78.65%) pupils had weak performance. Most of these pupils did not consider the pattern of the given sequence in a particular question. Thus, they performed addition instead of subtraction and vice versa. Other pupils wrote the missing number by adding the first number in the given sequence with the common difference of those numbers. For instance, in question 1, a pupil wrote 7 as a result of adding 1 to 6. Others added the difference to the last number to get the missing number. For instance, in question 4 a pupil added 5 to 35 to get 40 instead of adding 5 to 20 to get 25. Also, some pupils added numbers before the blank or all numbers in the sequence. For instance, in question 2 one pupil added 3, 5, 7 and 9 to get 24 instead of adding 2 to 9 to get 11 which was the correct answer. A sample answer from the pupils with weak performance is shown in Extract 26. Furthermore, some pupils did not understand the requirements of the questions. Thus, they did not respond to the questions or they wrote answers which were not related to the given sequence in a particular question.

Andika namba inayokosekana katika nafasi iliyoachwa wazi katika swali la 1 hadi la 5.

1. 6, 5, 4, _5_, 2, 1
2. 3, 5, 7, 9, _10_
3. 14, 12, 10, 8, _9_
4. 5, 10, 15, 20, _31_____, 30, 35.
5. 110, 111, _112__, 113.

Extract 26:   A sample of a response of a pupil whose performance was weak

Extract 26 shows how the pupil determined the missing numbers by adding 1 to the number before or after the blank. For instance, in responding to question 4, the pupil added 1 to 30 instead of subtracting 5 from 30 to get 25 which was the correct answer.

4.5.2 Pupils' Competency in Addition

The pupils' competency in adding numbers was assessed by using five questions. The pupil was required to answer the question orally. The pupil who could not answer the first four questions was instructed to proceed with subtraction questions. These questions are shown in Table 6.

Table No. 6: Addition Questions

Question Number	Question
1.	7 + 2 =
2.	14 + 5 =
3.	21 + 32 =
4.	39 + 52 =
5.	53 + 27 =

In Table 6, there are 5 questions. Questions 1, 2 and 3 that assessed the pupils' ability to add two numbers without carrying. Question 1 involved numbers with one digit, question 2 involved a two-digit number and a single-digit number and question 3 involved two digit numbers. On the other hand, questions 4 and 5 assessed the pupils' ability to add numbers with two digits each by carrying. Chart 13 shows the pupils' performance in the addition subtask.
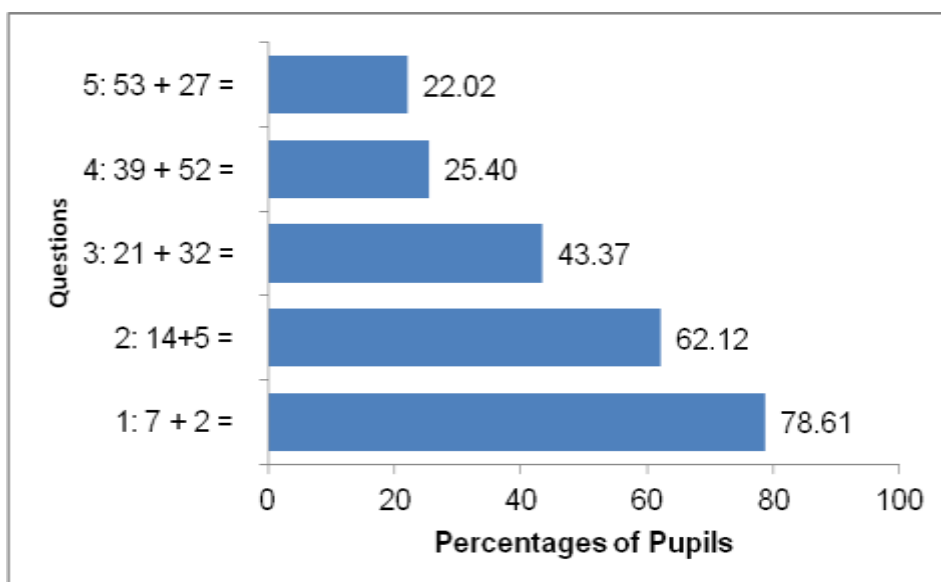
Chart 13:   *Percentage of pupils who correctly answered the questions involving addition of numbers*

Chart 13 shows that 78.61 per cent of the pupils answered question 1 correctly, that is $7+2=9$. Similarly, many pupils (62.12%) were able to answer question 2 orally by stating $14+5=19$. Such good performance indicates that the pupils were competent in performing addition of numbers without carrying. Additionally, the pupils' performance was average in question 3 whereby 43.37 per cent of the pupils were able to add the number 21 and 32 to get 53.

On the other hand, 25.40 per cent of pupils correctly stated that $39+52=91$ in question 4 while 22.02 per cent of the pupils correctly stated that $53+27=80$ in question 5 implying weak performance. The pupils' weak performance was due to failure in

carrying one tenth from ones to tens. For instance, in question 4 many pupils stated that $39+52=81$ instead of $39+52=91$. Likewise in question 5 most pupils stated that $53+27=70$ instead of $53+27=80$. Moreover, some pupils kept quiet in responding to oral Arithmetic implying that they lacked the addition competency.

4.5.3 Pupils' Competency in Subtraction

The competency in subtraction of numbers was assessed in questions 6 to 10 in the *201 STADI YA KUSOMA NA KUHESABU* paper. The pupils were required to answer these questions orally. Questions 6, 7 and 8 were based on subtraction without taking one-tenth from tens to ones while questions 9 and 10 involved taking one-tenth. Question 6 had two numbers of one digit each. Question 7 had two numbers; one number with two digits whereas the other had one digit. Each of the questions 8, 9 and 10 had two numbers which were made up of two digits each. Chart 14 shows the percentage of pupils who correctly responded to each question on the subtraction of numbers.
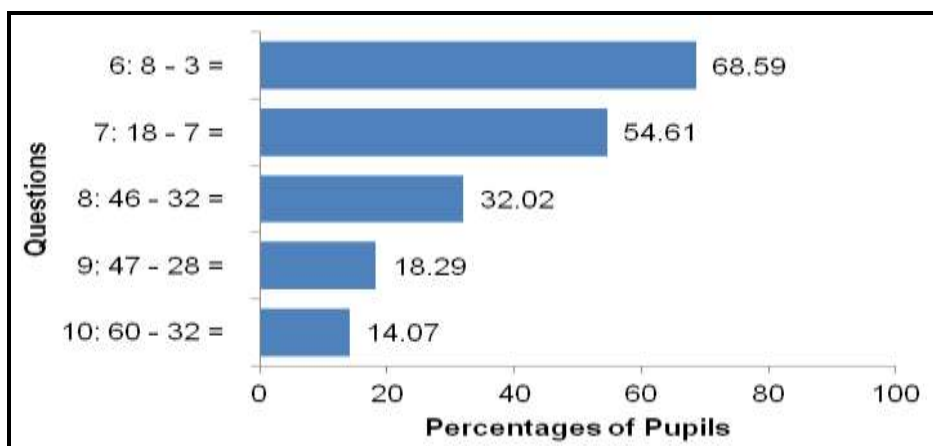
Chart 14: *The percentage of pupils who correctly performed subtraction of numbers*

Chart 14 shows 68.59 per cent of pupils correctly responded to question 6 by saying 8 – 3 = 5. This was the highest pupils' performance compared to other questions in this competency. Also, 54.61 per cent of pupils correctly responded to question 7 as they showed that 18 – 7 = 11. In addition, 32.02 per cent correctly

responded to question 8 stating that 46 – 32 = 14. By comparing the performance on questions 6, 7 and 8, it is obvious that most pupils were competent in subtracting single-digit numbers. However, some of them failed to subtract single-digit numbers from two-digit numbers or to subtract two-digit numbers each. For instance, in question 7 several pupils showed that 18 – 7 = 68 instead of 11.

Pupils' performance in questions 9 and 10 was weak. In question 9, only 18.29 per cent of pupils responded correctly by stating that 47 – 28 = 19. In addition, 14.07 per cent of pupils correctly responded to question 10 showing that 60 – 32 = 28. Thus, most of the pupils were incompetent in subtracting numbers by borrowing. For instance, in question 9, some pupils uttered 47 – 28 = 29 instead of 19. Likewise, in question 10, they uttered 60 – 32 = 38 instead of 28.

4.5.4 Pupils' Competency in Solving Word Problems

The pupils' ability to solve word problems was assessed in question 6 through 10. The questions are shown in Table 7.

Table No. 7: Word Problem Subtasks

Question Number	Question
6.	Kuku alitaga mayai 7. Ikiwa mayai 2 yalivunjika, je, yalibaki mayai mangapi?
7.	James alikuwa na mbuzi 6. Aliongezewa mbuzi 2 na baba yake. Je, jumla ana mbuzi wangapi?
8.	Juma alichuma maembe 30. Asha alichuma maembe 40. Jumla walichuma maembe mangapi?
9.	Asha alipewa pipi 44 na baba yake. Iwapo aliongezewa pipi 17 na dada yake, je, atakuwa na jumla ya pipi ngapi?
10.	Kuku ana vifaranga 54. Vifaranga 26 vililiwa na mwewe. Je, alibakiwa na vifaranga vingapi?

The questions assessed the pupils' ability to solve real life related problems using the concept of addition or subtraction of whole numbers. The performance of the pupils on this subtask has been indicated in Chart 15.
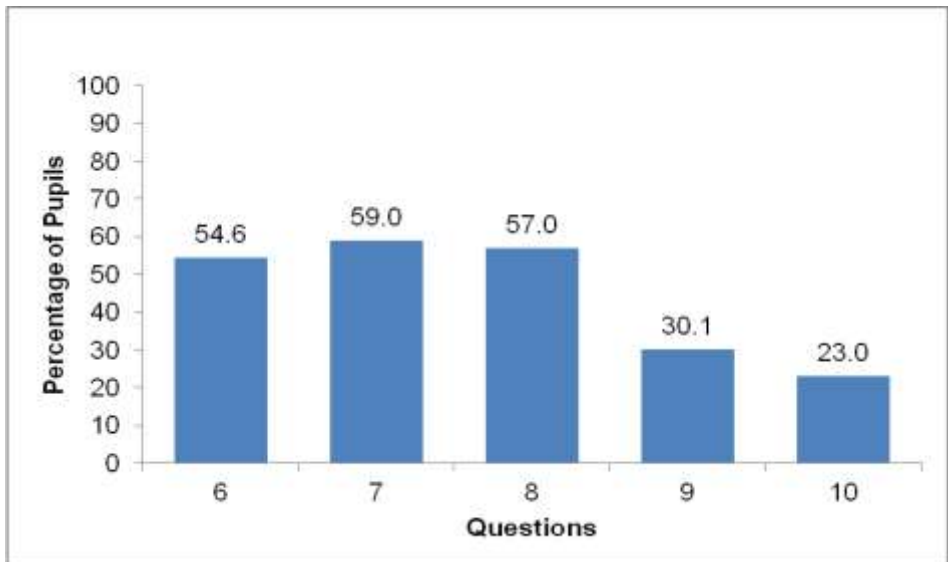
Chart 15: *Percentage of pupils who correctly solved the given word problems*

Chart 15 shows that 59.0 per cent responded to question 7 correctly while 57.0 per cent responded to question 8 correctly. Furthermore, 54.6 per cent of the pupils responded correctly to question 6. Moreover, few pupils correctly solved word problems in questions 9 and 10. Only 30.1 per cent answered correctly question 9 and 23.0 per cent answered question 10 correctly.

The analysis of data shows that, among 27,214 pupils who were assessed in this subtask, 11,028 (40.53%) pupils had average to very good performance whereas 16,186 (59.48%) pupils had weak performance.

The analysis of the pupils' responses shows that the pupils who did well in this subtask transformed words such as "aliongezewa", "alibakiwa", "yalibaki" and "jumla" into addition and subtraction operations. Hence, they correctly solved the given word problems as shown in Extract 27.

6. Kuku alitaga mayai 7. Ikiwa mayai 2 yalivunjika, je, yalibaki mayai mangapi?

$$\begin{array}{r} 7 \\ -2 \\ \hline 5 \end{array}$$

7. James alikuwa na mbuzi 6. Aliongezewa mbuzi 2 na baba yake. Je, jumla ana mbuzi wangapi?

$$\begin{array}{r} 6 \\ +2 \\ \hline 8 \end{array}$$

8. Juma alichuma maembe 30. Asha alichuma maembe 40. Jumla walichuma maembe mangapi?

$$\begin{array}{r} 30 \\ +40 \\ \hline 70 \end{array}$$

9. Asha alipewa pipi 44 na baba yake. Iwapo aliongezewa pipi 17 na dada yake, je, atakuwa na jumla ya pipi ngapi?

$$\begin{array}{r} 44 \\ +17 \\ \hline 61 \end{array}$$

10. Kuku ana vifaranga 54. Vifaranga 26 vililiwa na mwewe. Je, alibakiwa na vifaranga vingapi?

$$\begin{array}{r} {}^{4}5{}^{14}4 \\ -26 \\ \hline 28 \end{array}$$

Extract 27: A sample of responses from a pupil who correctly solved the given word problems in question 6 to 10

In Extract 27, the pupil was able to solve the given word problems correctly. Hence, he/she wrote 5, 8, 70, 61 and 28 which were the correct answers for question 6, 7, 8, 9 and 10 respectively. Additionally, the pupil managed to solve word problems which required carrying or borrowing.

Other pupils attempted all "word problems" items by counting fingers or tallying in finding the answers. Extract 28 shows the responses of a pupil from this category.

6. Kuku alitaga mayai 7. Ikiwa mayai 2 yalivunjika, je, yaliibaki mayai mangapi? 5

$oooooo\infty=5$

7. James alikuwa na mbuzi 6. Aliongezewa mbuzi 2 na baba yake. Je, jumla ana mbuzi wangapi?

$ooooooo+oo=8$

8. Juma alichuma maembe 30. Asha alichuma maembe 40. Jumla walichuma maembe mangapi?

$ooooooooooooooooooooooooooooooooo+oooooooooooo$
$oooooooooooooooooooooooooo=70$

9. Asha alipewa pipi 44 na baba yake. Iwapo aliongezewa pipi 17 na dada yake, je, atakuwa na jumla ya pipi ngapi?

$$\text{ooooooooooooooooooooooooooooooooooooooo}$$
$$+ \text{ooooooooooooooooo} = 61$$

10. Kuku ana vifaranga 54. Vifaranga 26 viliwa na mwewe. Je, alibakiwa na vifaranga vingapi?

$$\text{oooooooooooooooooo oooooooooooooooooo oooooooooo}$$
$$\text{ooooooo} = 28$$

Extract 28: A sample of responses from a pupil who correctly answered the given word problems in question 6 to 10

In Extract 28, the pupil drew small oval shaped objects and counted them by tallying when adding and subtracting numbers in solving the given word problems, hence the pupil got the correct answers.

On the other hand, a total of 16,186 (59.48%) pupils had weak performance in this subtask. Some of them failed to solve all the given word problems. The analysis of the pupils' responses shows that the answers they wrote had the following shortcomings:

(a) Failure to comprehend words like "yalibaki", "jumla", "aliongezewa" and "viliwa" which were used in word problems on addition and subtraction operations. For instance, in question 6, some pupils added the given numbers to get 9 instead of 5 eggs. In question 7, they subtracted 2 from 6 to get 4 instead of 8 goats. In question 9, they added 54 to 26 to get 80 instead of subtracting the given numbers to get 28 chicks.

(b) Lack of skills in adding and subtracting numbers. For instance, in question 9, a significant number of pupils failed to add by carrying one-tenth from ones to tens. Such pupils

got either $44+17=511$ or $44+17=51$ instead of $44+17=61$. In question 10, the pupils failed to subtract 26 chicks from 54 chicks by borrowing. Such pupils wrote either $54-26=32$ or $54-26=38$ or $54-26=710$ instead of $54-26=28$.

(c) Copying the given word problems instead of solving them.

(d) Omitting the items and writing the responses that are not related to the given word problems, indicating the pupils' inability to read and write.

Extract 29 represents a sample of responses from a pupil who failed to answer correctly all questions in this subtask.

6. Kuku alitaga mayai 7. Ikiwa mayai 2 yalivunjika, je, yalibaki mayai mangapi?

    $7-2=2$

7. James alikuwa na mbuzi 6. Aliongezewa mbuzi 2 na baba yake. Je, jumla ana mbuzi wangapi?

    $6+2=8$

8. Juma alichuma maembe 30. Asha alichuma maembe 40. Jumla walichuma maembe mangapi?

    $\begin{array}{r} 3\,0 \\ -1\,0 \\ \hline 0 \end{array}$

9. Asha alipewa pipi 44 na baba yake. Iwapo aliongezewa pipi 17 na dada yake, je, atakuwa na jumla ya pipi ngapi?

```
  44
+ 17
  21
```

10. Kuku ana vifaranga 54. Vifaranga 26 vililiwa na mwewe. Je, alibakiwa na vifaranga vingapi?

```
  54
-  2
  32
```

Extract 29: A sample of responses from a pupil who failed to solve all word problems in question 6 to 10

Extract 29 shows how the pupil made mistakes in subtracting and adding numbers. For instance, in question 10 the pupil subtracted the ones $6-4$ to get 2 instead of $14-6$ to get 8 and subtracted the tens $5-2$ to get 3 instead of subtracting the tens $4-2$ to get 2. In question 8, the pupil subtracted the numbers instead of adding them. In question 9, the pupil added the two-digit numbers to get 21 instead of 61 mangoes.

4.6 Comparison of Pupils' Performance by Sex

The comparison of pupils' performance based on sex in identifying the missing numbers in sequences, solving word problems, adding and subtracting numbers was done so as to know their performance in the given competencies.

4.6.1 Comparison of Pupils' Performance on Identifying the Missing Number and Solving Word Problems by Sex

The data shows that a total of 27,214 pupils (13,311 boys and 13,903 girls) sat for the assessment involving identifying the missing numbers and solving word problems. The results of analysis are shown in Chart 16.
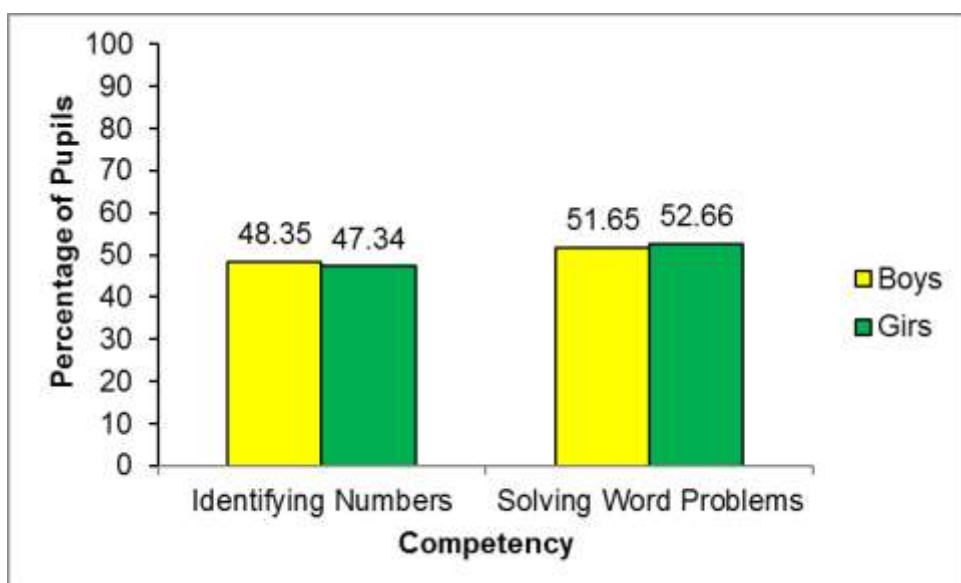
Chart 16: *The overall results for the comparison of two subtasks by sex*

Chart 16 shows that 42.35 per cent of boys had the performance ranging from average to very good in identifying the missing numbers in sequences compared to 47.34 per cent of girls. Also, it shows that both boys and girls had the performance ranging from average to very good with 51.65 and 52.66 per cent respectively in solving word problems. This shows that boys performed better than girls in identifying the missing numbers while girls performed better than boys in solving word problems.

4.6.2 Comparison of Pupils' Performance by Sex in Addition and Subtraction Subtask

The analysis shows that 13,617 boys and 14,153 girls were assessed in the competency of adding and subtracting numbers. Chart 17 shows the percentage of boys and girls who correctly responded to addition and subtraction questions.
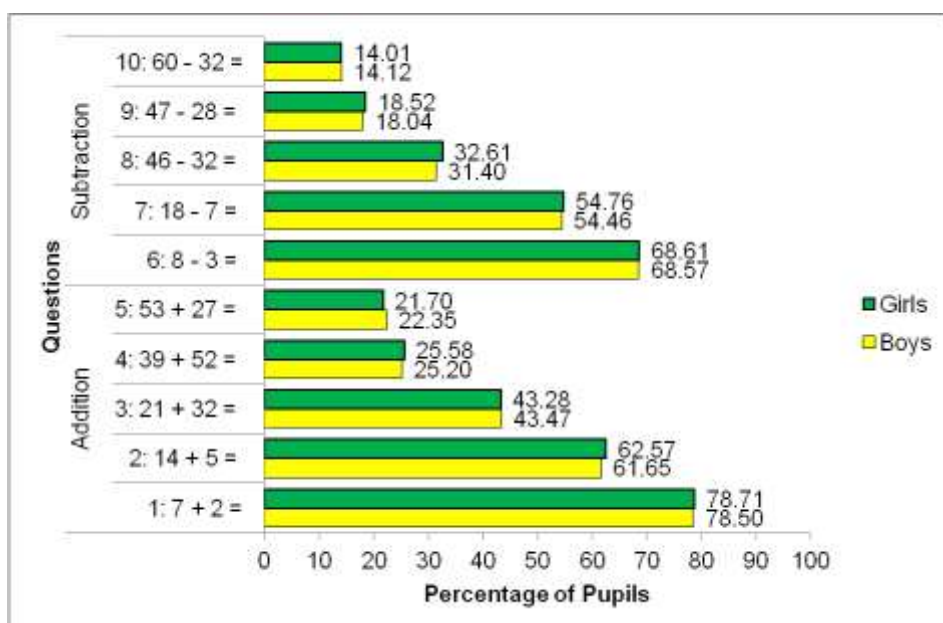
Chart 17: *The overall results for the comparison of two subtasks by sex*

Chart 17 shows that in the addition questions, girls' performance was better than boys in questions 1, 2 and 4 while boys did better than girls in questions 3 and 5. Similarly, in the subtraction subtask girls performed better than boys in questions 6, 7, 8 and 9 while boys performed better than girls in question 10 only. Nevertheless, the difference in performance between boys and girls was insignificant in all levels of performance.

4.7 Comparison of Pupils' Performance by School Location

The comparison of the pupils' performance by school location aimed to identify areas which need priority in teaching and learning. This will enhance the Government, institutions and education stakeholders to take appropriate measures for improving pupils' performance in Arithmetic Skills through strategic teaching and learning. The comparison is based on urban and rural schools. The comparison of performance was made on Identification of Numbers, Solving Word Problems, Addition and Subtraction subtasks. In addition, the pupils' performance in this part has been analysed regionally in Tanzania Mainland.

4.7.1 Comparison of Performance in Number Identification and Solving Word Problems in Urban and Rural Schools

The comparison of performance of pupils in Number Identification and Solving Word Problems in Urban and Rural Schools was done by assessing 13,687 and 13,527 from urban and rural schools respectively. The aim was to find out if there is a difference in performance between the pupils from Urban and Rural schools. The performance of pupils which were obtained from the assessment is presented in Chart 18.
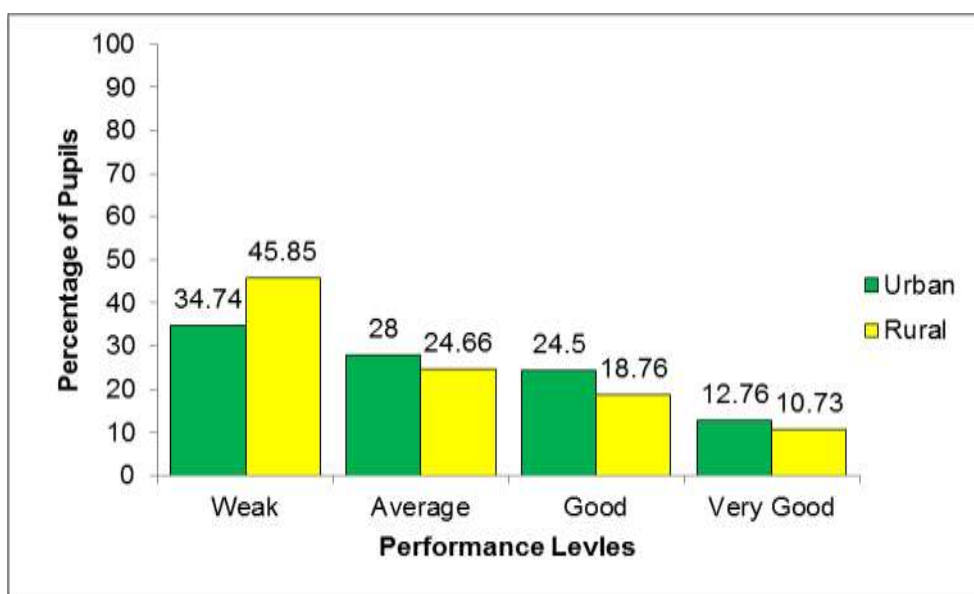
Chart 18: *Comparison of pupils' performance between urban and rural schools*

The statistics in Chart 18 show that in each category of performance, there is a difference in pupils' performance between rural and urban schools. The percentage of pupils with performance ranging from average to very good in urban schools was 65.26 per cent whereas that of rural schools was 54.15 per cent. Thus, the pupils' performance in urban schools was better than the one on rural schools.

4.7.2 Comparison of Performance in Addition and Subtraction between Urban and Rural Schools

The comparison of pupils' performance on addition and subtraction subtasks was done in order to find out the variations of pupils' performance based on schools' location. The results of the findings are shown in Chart 19.
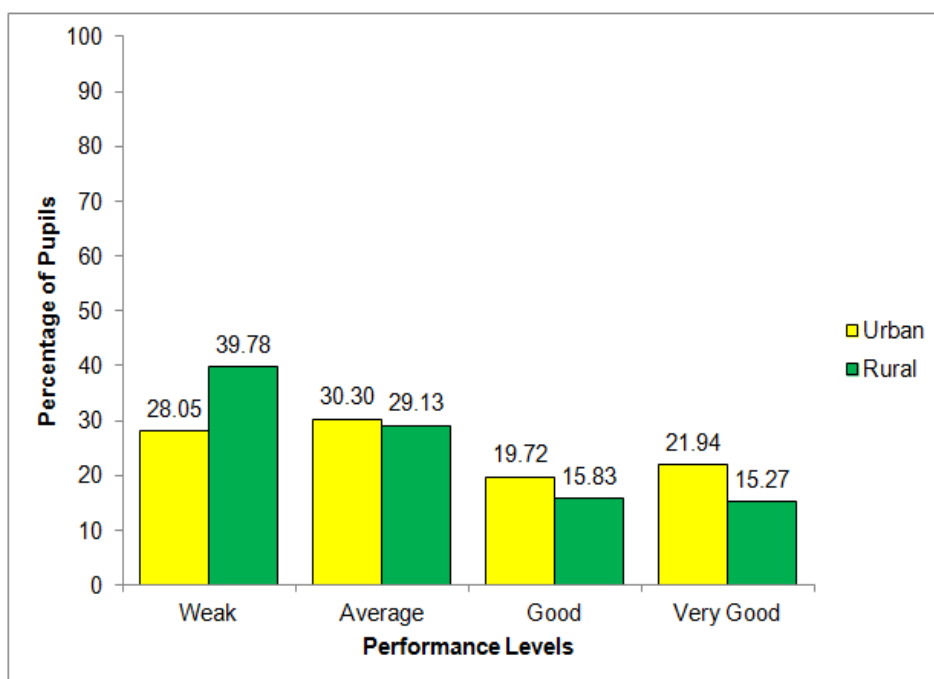
Chart 19: *Comparison of pupils' performance between urban and rural schools in Addition and Subtraction subtasks*

The data in Chart 19 show that 39.78 per cent of pupils in rural schools had weak performance while 28.05 per cent of pupils in urban areas had weak performance. This reveals that the ability of pupils to answer questions on Addition and subtraction orally was better in urban schools than that of the pupils in rural schools.

4.7.3 Comparison of Pupils' Performance in the Competency of Number Identification and Solving Word Problems Regionally between 2019 and 2021

In this part, the comparison of the pupils' performance between 2019 and 2021 in identifying the missing numbers in sequences and solving word problems was done in each region. This comparison is based on the number of pupils who were able to

correctly answer at least 5 out of 10 questions. Such performance was from average to very good. Additionally, the pupils who correctly answered at most 4 items demonstrated weak performance. The comparison of performance was done in 26 regions in which a total of 27,770 pupils sat for the assessment. The results are shown in Chart 20.
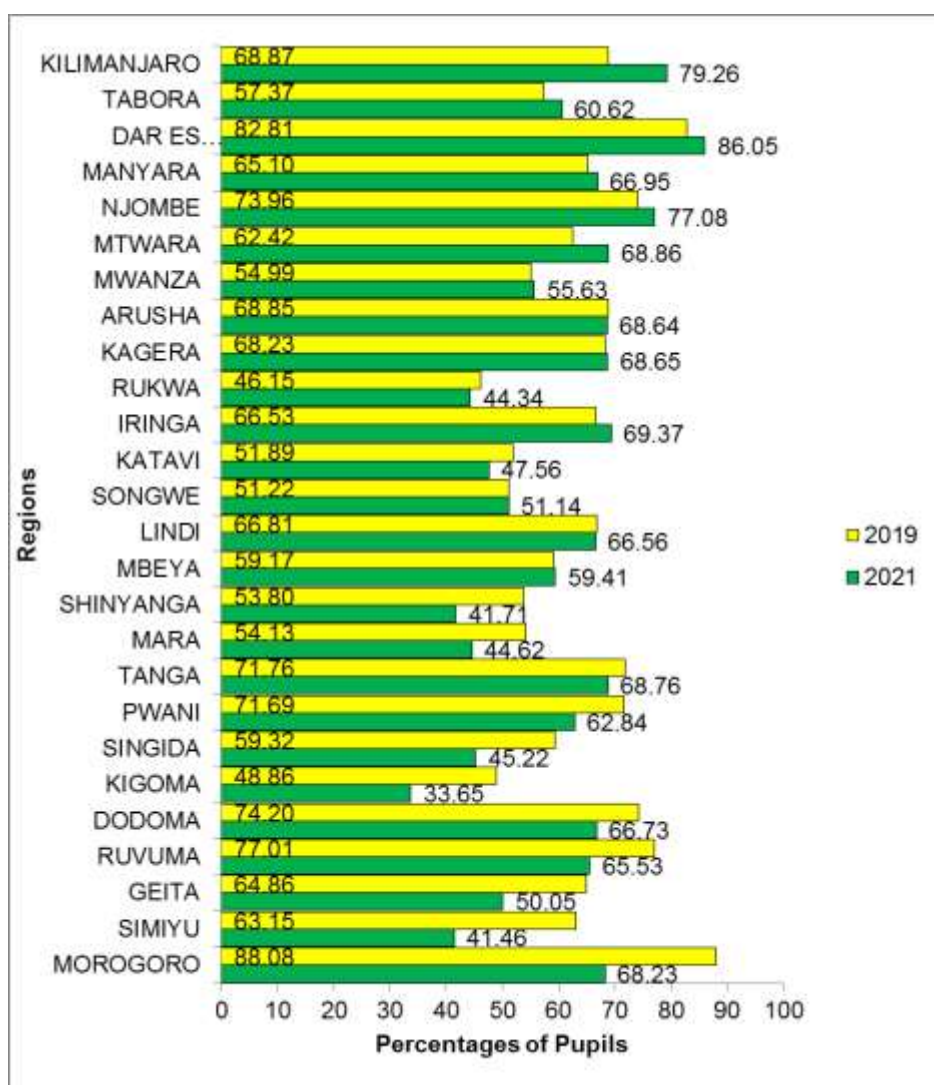
Chart 20: *Pupils' performance in identifying numbers and solving word problems regionally in 2019 and 2021*

Chart 20 shows that, the pupils' performance improved in some regions and decreased in others in 2021 compared to that of 2019. The pupils' performance improved in 10 regions and worsened in 16. In addition, in some regions there was a greater

fall in performance than others. Those regions included Morogoro, Simiyu, Geita, Ruvuma and Dodoma. The fall in performance for this region was greater than 10 per cent. The regions in which the fall in performance was less included Arusha, Rukwa, Songwe, Shinyanga, Mara, Tanga, Pwani, Singida na Kigoma. The decline in performance for this region was less than 10 per cent.

Chart 20 also shows that among the 26 regions which were assessed, 3 which are Dar es Salaam, Kilimanjaro and Njombe had highest level of performance of 86.05, 76.26 and 77.08 per cent respectively. In addition, most of the regions had good level of performance. However, pupils in 2 regions namely Kigoma and Simiyu had high level of weak performance of 33.65 and 41.46 respectively.

4.7.4 Comparison of Pupils' Performance Regionally in Addition and Subtraction of Numbers between 2019 and 2021

The comparison of performance among regions based on the assessments of 2019 and 2021 Standard Two pupils and the comparison involved the number of pupils who scored 10 to 20 marks in this subtask was done. The pupils' performance in 2019 and 2021 assessments for all regions of Tanzania Mainland is presented in Chart 21.
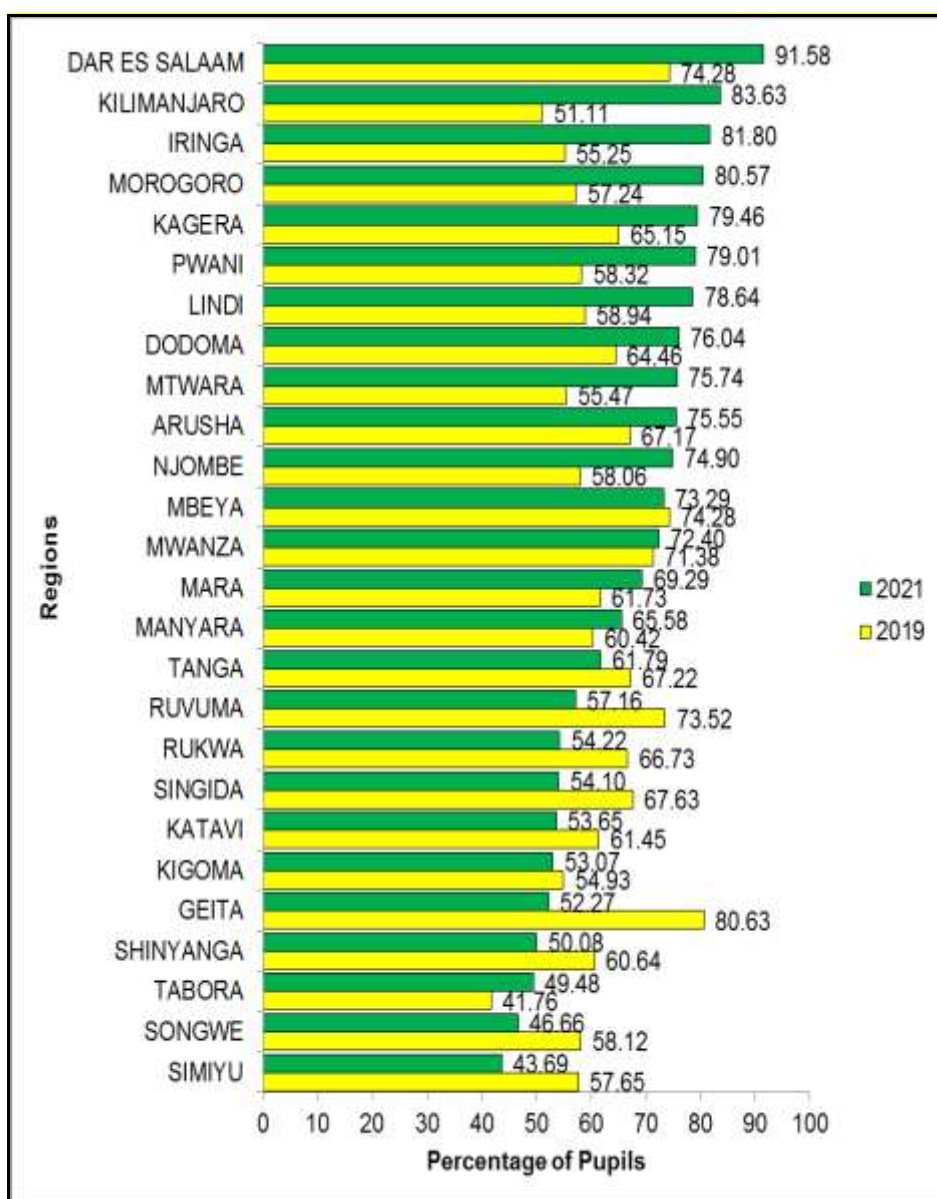
Chart 21: *Comparison of pupils' performance in addition and subtraction subtasks regionally*

Chart 21 shows that in the 2021 assessment, Dar es Salaam region attained the highest performance compared to other regions. In this region, the percentage of pupils' whose performance was average to very good was 91.58 per cent. Other regions which demonstrated good performance were Kilimanjaro (83.63%), Iringa (81.80%), Morogoro (80.57%), Kagera (79.46%), Pwani (79.01%), Lindi (78.64%), Mtwara (75.74%), Arusha

(75.55%) and Mwanza (72.40%). In addition, other regions with good performance included Dodoma (76.04%), Njombe (74.90%), Mbeya (73.29%), Mara (69.29%), Manyara (65.58%) and Tanga (61.79%). The other 10 regions got average performance. The regions include Ruvuma (57.16%), Rukwa (54.22%), Singida (54.10%), Katavi (53.65%), Kigoma (53.07%), Geita (52.27%), Shinyanga (50.08%), Tabora (49.48%), Songwe (46.66%) and Simiyu (43.69%).

Comparison of the performance in 2019 and 2021 assessments shows that in 2021, the performance improved in 15 regions and dropped in others. The regions whose performance improved and the respective percentage included Kilimanjaro (32.52%), Iringa (26.55%), Morogoro (23.33%), Dar es Salaam (17.30%), Mtwara (20.27%), Lindi (19.70%), Njombe (16.84%) and Kagera (14.31%). Also, other regions with improvement in performance included Pwani (13.86%), Dodoma (11.58%), Arusha (8.38%), Tabora (7.72%), Mara (7.56%), Manyara (5.16%) and Mwanza (1.02%).

Among the regions in which there was a drop of performance, Geita region seemed to have the greatest drop compared to other regions whereas the difference for the performance between 2019 and 2021 was 28.36 per cent. Other regions which had a decrease in performance and the respective percentage of decrease included Mbeya (0.99%), Kigoma (1.86%), Tanga (5.43%), Katavi (7.80%), Shinyanga (10.56%), Songwe (11.46%), Rukwa (12.51%), Singida (13.53%), Simiyu (13.96%) and Ruvuma (16.36%).

4.7.5 Pupils' Overall Performance Regionally in 2019 and 2021

The comparison of the overall performance of pupils between 2019 and 2021 was done for all regions with a total of 27,770 pupils who were assessed. This comparison focused on the number of pupils who scored 13 to 50 marks. Such pupils had average to very good performance. The results of the comparison are shown in Chart 22.
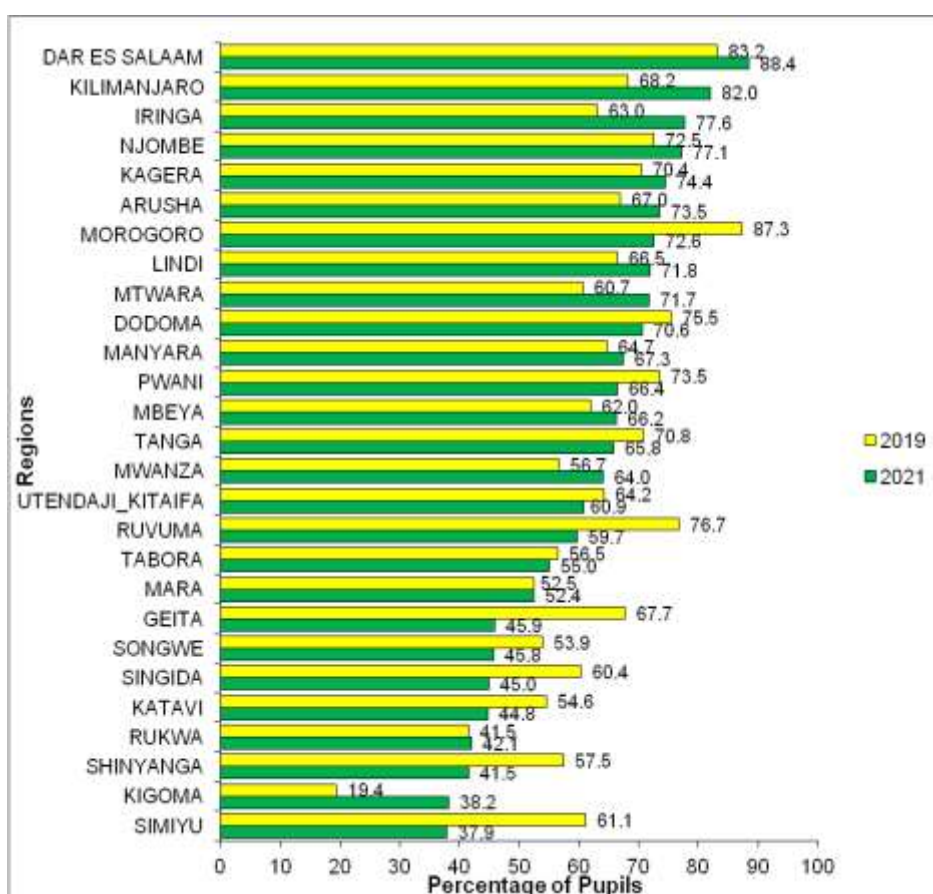
Chart 22: *Overall comparison of pupils' performance regionally*

Chart 22 shows that the national benchmark was 60.9 per cent in 2021 compared to 64.20 per cent in 2019. The pupils in five regions, namely Dar es Salaam, Kilimanjaro, Iringa, Njombe and Kagera had the highest performance of average to very good with 88.4, 82.0, 77.6, 77.1 and 74.4, per cent respectively. In 2019, most pupils had average to very good performance in Morogoro (87.30%), Dar es Salaam (83.20%), Ruvuma (76.71%), Dodoma (75.50%) and Pwani (73.50%) regions. Based on the performance, Dar es Salaam continued to be among five regions which performed well in 2019 and 2021 assessments. Similarly, pupils in Tanga and Manyara regions continued to score from average to very good performance which is greater than the national benchmark while that of Mwanza, Mbeya and Mtwara regions fall above the national benchmark for the first time. Moreover, the pupils' performance in Morogoro, Dodoma and Pwani regions dropped by 14.7, 4.9 and 7.1 per cent respectively

while the pupils' performance in Ruvuma dropped drastically by 17 per cent, which was below the national benchmark.

On the other hand, the pupils' performance in Simiyu, Kigoma, Shinyanga, Rukwa and Katavi regions was weak with 37.9, 38.2, 41.5, 42.1 and 44.8 per cent respectively. In 2019, the regions which had a few pupils with average to very good performance were Rukwa (41.5%), Kigoma (19.4%), Mara (52.5%), Songwe (53.9%) and Katavi (54.6%). Thus, Kigoma, Rukwa and Katavi regions have continued to have fewer pupils with average to very good performance. Moreover, Mara and Songwe regions were ranked 18th and 20th respectively nationally and they remained below the national benchmark. Other regions that fell below the national benchmark are Singida, Geita, Mara, Tabora and Ruvuma.

4.8 Summary of the Performance in Arithmetic Skills

In the Arithmetic Skills assessment, the pupils' competency was assessed in four areas. These areas included identifying the Missing Numbers in a sequence, Solving Word Problems, Addition and Subtraction.

The analysis that was done on the subtask of identifying missing numbers in a sequence, it was found that pupils had weak performance of 39.28 per cent. Those pupils were able to answer the question whose sequence increased or decreased by 1 only. Furthermore, they failed to answer the questions whose sequences increased or decreased by 2 or 5. This implies that they were incompetent in identifying the missing numbers in sequences which increase or decrease by another number different from 1.

For the questions that involved addition of numbers, the pupils' performance was good by 64.68 per cent. In this area, most of the pupils were able to answer correctly the questions that did not involve carrying. Nevertheless, the questions that involved carrying had low performance implying that the pupils were incompetent in adding numbers which involved carrying.

Conversely, the pupils' performance in subtracting numbers was average with 56.99 per cent of pupils responding to most of the questions correctly. They were able to answer correctly the questions that involved subtracting single-digit numbers and those which did not involve borrowing. The performance of pupils on questions that involved borrowing was weak.

Furthermore, in the word problems subtask, 56.73 per cent of the pupils were able to answer the questions correctly. The analysis shows that the pupils were more competent in solving questions that did not involve carrying or borrowing. The pupils failed to answer those questions due to lack of knowledge and skills of solving word problems which involved carrying or borrowing.

Generally, the performance of the pupils in Arithmetic Skills was good as 60.90 per cent of the pupils had average to very good performance. This shows that the pupils were competent in identifying the missing numbers in sequences, adding single-digit numbers and two-digit numbers by carrying, subtracting single-digit numbers and two-digit numbers by borrowing as well as solving word problems. On the other hand, 39.10 per cent of the pupils had an weak performance as they were incompetent in reading and writing numbers, adding by carrying and subtracting by borrowing as well as solving word problems.

CHAPTER FIVE

SITUATION OF THE TEACHING AND LEARNING OF 3Rs IN SCHOOLS

5.1 Introduction

This chapter clarifies the actual situation of teaching and learning in schools. Also it presents the situation pertaining to the availability of teaching and learning materials, the learning environment and the challenges that prevails during teaching and learning of 3Rs in the schools.

5.2 Sources of Data on the Teaching and Learning of 3Rs in Schools

The information about teaching and learning resources for 3Rs were obtained through questionnaires. Those questionnaires were administered to head teachers. The purpose of administering the questionnaires was to identify the real situation on the teaching and learning environment, availability of teaching and learning materials, teachers along with other resources. Moreover, the questionnaires were administered so as to identify the challenges face teachers in teaching and learning of 3Rs and collect teacher's opinions which aim at improving the teaching and learning of 3Rs.

5.3 Information about Teachers and Pupils

The analysis of the questionnaires shows that a total of 514 (98.09%) out of 524 head teachers responded. Those head teachers assured the presence of 904 teachers who teach Standards I and II. Among them 430 (47.6%) had undergone training about the teaching and learning of 3Rs. The number of teachers present per school was between one to four. Moreover, 375 (72.91%) head teachers reported that each stream had 40 to 45 pupils and 139 (27.09%) reported to have more than 50 pupils per class.

5.4 Availability of Teaching and Learning Materials and Resources

Head teachers were required to provide information on the availability of textbooks and supplementary books and teaching and learning materials for Arithmetic, Writing and Reading skills. The situation of the availability of teaching and learning materials was presented in five categories;

weak, below average, average, good and very good as presented in Table 8.

Table No. 8: Situation on Availability of Teaching and Learning Materials

S/N	Item	Weak (%)	Below average (%)	Average (%)	Good (%)	Very Good (%)	Total No. of respondents	Total % (Average to Very good)
(i)	Availability of textbooks for teaching Arithmetic skills.	4.37	11.43	47.61	34.51	2.08	481	84.20
(ii)	Availability of supplementary books for teaching Arithmetic skills.	7.68	18.46	44.19	26.76	2.9	482	73.85
(iii)	Presence of resources for teaching and learning Arithmetic skills (such as counting aids) and other resources.	5.04	10.08	35.5	43.49	5.88	476	84.87
(iv)	Presence of materials for teaching Writing skills (such as writing boards and other resources)	12.06	19.33	39.5	25.36	3.74	481	68.60
(v)	Availability of textbooks for teaching Reading skills.	4.43	13.92	42.83	33.12	5.7	474	81.65
(vi)	Availability of materials aimed at developing pupils' Reading skills such as storybooks.	3.11	10.58	28.22	40.46	17.63	482	86.31

Table 8 shows that availability of teaching and learning resources is good for all skills as it is recommended in the Standard I and II syllabus. Textbooks, supplementary books and other supportive resources for all skills were available for 68.60 per cent.

Statistical analysis shows that the availability of teaching and learning resources aimed at developing a pupil in Reading skills was good by 86.31 per cent. This percentage has decreased by 9.35 compared to the 95.66 per cent in 2019 assessment. The availability of teaching

resources for Arithmetic is good by 84.20 per cent. However, this percentage has dropped by 12.87 per cent when compared to 89.22 per cent in 2019. The availability of learning resources for writing skills was 68.60 per cent. Likewise, this percentage dropped by 11.43 per cent when compared to 80.03 in 2019. Generally, the decrease of the availability of resources was due to increase in the number of pupils enrolled in the year 2020/2021 being the success of free education policy.

5.5   Teaching and Learning Environment for 3Rs

Heads of schools were asked about the teaching and learning environment in their schools. Their responses are presented in Table 9.

Table No. 9: Situation of Teaching and Learning Environment

S/N	Item	Weak (%)	Below average (%)	Average (%)	Good (%)	Very Good (%)	Total No. of respondents	Total % Average to Very good
(i)	Availability of desks, tables and chairs for pupils and teachers	1.95	15.96	39.41	36.48	6.19	307	82.08
(ii)	Adequacy of classrooms relative to number of pupils in Standard I and II	7.42	19.68	35.81	31.94	5.16	310	72.91
(iii)	Availability of water sources for the pupils to drink and sanitation	7.82	19.54	28.66	34.85	9.12	307	72.63

Data in Table 9 shows the availability of desks, tables and chairs for the pupils and teachers being higher when compared to the number of classrooms and the availability of water for the pupils to drink. On availability of safe and clean water service in the school environment, 72.63 per cent of head teachers reported sufficient availability of this important service. Moreover, on the availability of classrooms, head teachers reported the presence of classrooms by 72.91 per cent. Moreover, the average number of pupils per classroom was between 40 and 45.

5.6 Challenges in Teaching and Learning 3Rs

Head teachers were inquired on the challenges experienced in the implementation of teaching and learning of the 3R skills in their schools. Identified challenges were highlighted and presented in Table 10.

Table No. 10: Challenges in the Teaching and Learning of 3Rs Skills

S/N	Challenges	Number of Respondents	Percentage
1.	Greater distance from home to school	173	33.7
2.	Unsatisfactory pupils' attendance	159	30.9
3.	Shortage of 3Rs teachers	213	41.4
4.	Transferred - in pupils with low 3Rs Skills	148	28.8
5.	Shortage of teaching and learning materials like books	194	37.7
6.	Others	351	68.0

Table 10 shows that the shortage of 3Rs teachers is a leading challenge that the heads of schools encounter during the teaching and learning of 3Rs. The analysis shows that 41.4 per cent of head teachers admitted the shortage of 3Rs teachers in their school. Also, shortage of teaching and learning materials has been reported by 37.7 per cent of head teachers. The analysis also reveals that 33.7 per cent of head teachers admitted that the distance travelled from home to school and back home affected pupils' learning. Furthermore, the analysis shows that unsatisfactory pupils' attendance was reported by 30.9 per cent of head teachers. Moreover, 28.8 per cent of head teachers revealed that the pupils who are transferred to these schools lack sufficient 3Rs skills.

In addition, the heads of schools were required to analyse the challenges that were not pointed out in the questionnaire. The results show that 68 per cent of the heads of schools provided challenges about; effects of the mother tongue, parents irresponsibility, parents migration (permanent or temporary due to various activities), shortage of classrooms and weak living environment of the pupils.

Moreover, the head teachers were required to point out other challenges which were inquired in the questionnaire but affect the teaching and

learning environment. The challenges that were pointed out include; inadequate number of teachers for special needs education, lack of appropriate services for special needs pupils and lack of food in schools. Other challenges were lack of toilets and the assessment schedule being done in January instead of either November or December.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the summary of the analysis of 2021 standard II pupils' performance on Reading, Writing and Arithmetic Skills (3Rs). Moreover, it provides recommendations to stake holders including teachers and parents/guardians on the areas to be improved.

6.2 Conclusion

The findings indicate that pupil's performance on Reading, Writing and Arithmetic skills was good as 67.00 per cent of pupils did well. In the Reading Skills, 18,911 (68.10%) pupils had the performance ranging from average to a very good. The performance was due to pupils having competence in reading passages fluently. Additionally, those pupils indicated great competence in re-reading the passage, understanding and interpreting it, and then answering correctly the comprehension questions.

On the other hand, 8,859 (31.90%) pupils had weak performance. The pupils failed to read the words which had syllables with consonant clusters the sounds /r/ and /l/ and also words with nasal sound /ng'/ that is pronounced by passing the air through the nose. Furthermore, some pupils did not finish reading the words in one minute. Moreover, they had weak performance on reading the passage, understanding and interpreting it, and also in answering comprehension questions.

The findings also show that 17,053 (62.21%) pupils performed in the range of average to very good in writing skills. The pupils were competent in the formation of letters and words. They identified the pictures and wrote the correct names for each picture. Moreover, they wrote words in capital letters, and they were able to copy the passage and insert appropriate punctuation marks. A total of 10,359 (37.79%) pupils had weak performance because they failed to write names of the pictures and write the words in capital letters. The pupils also failed to copy and punctuate the passage properly. In the Arithmetic Skills, the analysis indicates that 16,910 (60.90%) pupils had the performance that ranged from average to very good. These pupils were competent in

adding numbers by carrying and without carrying one tenth from ones to tens. Additionally, they comprehended the words used in the given word problems into addition and subtraction operations correctly.

On the other hand, 10,860 (39.1%) pupils had weak performance as they were incompetent in reading and writing numbers, adding by carrying and subtracting by borrowing as well as solving word problems. The pupils' performance for schools in urban and rural areas reveals that urban schools had good performance of 73.41 per cent compared to rural schools which had 60.60 per cent.

Regionally, the analysis shows that Dar es Salaam had very good performance of 90.46 per cent, above the national benchmark of 62.21 per cent. Additionally, Dar es Salaam region held the first position with performance of 89.2 per cent in Reading Skills, on Writing Skills (89.8 %) and on Arithmetic Skills (88.4%). Katavi region held the last position on Reading Skills for 46.07 per cent. Furthermore, Simiyu region held the last position as it had 37.9 per cent on Writing Skills and Arithmetic Skills respectively.

6.3 Recommendations

The findings show that the pupils' performance for Reading, Writing and Arithmetic skills dropped. In order to improve the performance, it is suggested that:

(a)   Teachers teaching Reading Skills should find strategies for guiding pupils so that they can read fluently 50 words or more in one minute. While reading, pupils should be guided to read the whole words instead of reading individual syllables in words so as understand and interpret what they are reading. In addition, teachers should guide pupils to read different passages and stories for comprehension to develop the ability to answer comprehension questions at all levels. The passages and stories should include words which have nasal sound (ng'), sound 'r' and 'l' and words formed by syllables with consonant clusters as those appeared to be problematic. Furthermore, teachers should assess pupils' competence in reading fluently by using different assessment tools such as exercises, tests and examinations.

(b)   On Writing Skills, teachers should provide adequate exercises to enable pupils identify different pictures, drawings and write their names as well as formulate consonant clusters for improving their writing skills. In addition, pupils should be instructed to practise writing capital letters, copying passages and making the correct use of punctuation marks.

(c)   Teachers should provide adequate exercises on completing missing numbers in sequence, addition by carrying, subtraction by borrowing and solving word problems for the purpose of improving arithmetic skills.

(d)   The Ministry of Education, Science and Technology through its directorate of educational quality assurance and all the education stakeholders at all levels should monitor and evaluate the teaching activities for the 3Rs so as to solve the challenges observed and put forward strategies for the aim of strengthening pupils competence in 3R skills.

(e)   Teachers should make good use of books and other teaching materials such as pictures, drawings and charts while teaching. Moreover, they should improve their teaching and learning materials in accordance with their respective environment.

(f)   The concerned authority should direct teachers, parents/guardians and members of community to improve and supervise pupils' attendance.

Appendix 1: Reading and Arithmetic Skills Assessment Paper

JAMHURI YA MUUNGANO WA TANZANIA
BARAZA LA MITIHANI LA TANZANIA
UPIMAJI WA KITAIFA WA DARASA LA PILI

STADI YA KUSOMA NA KUHESABU

KARATASI YA MWANAFUNZI

Muda: Dakika 20   Januari 2022 asubuhi

Maelekezo

1. Mwanafunzi anatakiwa kujibu maswali **yote kwa mdomo**.

2. Kila mwanafunzi atapimwa kwa **dakika 20**.

3. Msimamizi anatakiwa kujaza taarifa za mwanafunzi katika nafasi zilizo wazi juu ya fomu maalum ya upimaji kwa **kalamu ya wino wa bluu**.

4. Mwanafunzi atakapokuwa amemaliza kusoma na kujibu maswali ya ufahamu na kuhesabu, msimamizi anatakiwa kujaza alama katika skeli ya upimaji kwa kutumia **kalamu ya wino mwekundu**.

Ukurasa wa 1 kati ya 4

Tina na Subira ni marafiki. Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

1. 7 + 2 =

2. 14 + 5 =

3. 21 + 32 =

4. 39 + 52 =

5. 53 + 27 =

Ukurasa wa 3 kati ya 4

6. 8 - 3 =

7. 18 - 7 =

8. 46 - 32 =

9. 47 - 28 =

10. 60 - 32 =

Ukurasa wa 4 kati ya 4

Appendix 2: Reading and Arithmetic Skills Assessment Scale

JAMHURI YA MUUNGANO WA TANZANIA

BARAZA LA MITIHANI LA TANZANIA

Fomu Maalum ya Kujaza Alama za Mwanafunzi katika Upimaji wa
Kusoma na Kuhesabu

Jina la Mwanafunzi_____

Namba ya Mwanafunzi_____

KWA MATUMIZI YA MPIMAJI TU					
STADI YA KUSOMA			STADI YA KUHESABU		
Namba ya Swali	Alama	Saini ya Mpimaji	Namba ya Swali	Alama	Saini ya Mpimaji
1.			1.		
			2.		
			3.		
			4.		
			5.		
2.			6.		
			7.		
			8.		
			9.		
			10.		
Jumla ya Alama					

Ukurasa wa 1 kati ya 9

SEHEMU A

201   STADI YA KUSOMA

1. Kusoma kifungu cha maneno kwa ufasaha, umakini na kasi inayotakiwa (alama 25).

Maelekezo kwa Msimamizi

Weka alama ya **mkwaju (/)** kwa kila neno ambalo mwanafunzi **ameshindwa** kulisoma kwenye kifungu cha maneno. Iwapo uliweka alama ya mkwaju mwanafunzi alipokosea kusoma neno na akarudia kusoma kwa usahihi, zungushia **(Ø)** neno hilo. (Kila neno **moja** sahihi **alama 00½**)

(a) Mwelekeze mwanafunzi kusoma kifungu cha maneno kwa sauti, umakini na haraka kadri awezavyo. Mwanafunzi atakapokuwa anasoma, fuatilia usomaji wake kwa kutumia kifungu cha maneno kilichopo katika **Skeli ya Upimaji**.

(b) Iwapo mwanafunzi atashindwa kusoma neno baada ya **sekunde 3** mwelekeze kusoma neno linalofuata.

Ukurasa wa 2 kati ya 9

(c) Iwapo mwanafunzi atashindwa kusoma **maneno yote** ya sentensi ya kwanza, sitisha zoezi na weka alama ya mabano [ ] katika neno la mwisho kusomwa kisha endelea na stadi ya kuhesabu.

(d) Iwapo mwanafunzi atasema **sijui** wakati akisoma, chukulia kama ni **kosa** kisha weka alama ya mkwaju.

(e) Iwapo mwanafunzi atashindwa kumaliza kusoma kifungu cha maneno ndani ya **sekunde 60**, weka alama ya mabano [ ] katika neno la mwisho alilosoma.

Maelekezo ya Msimamizi kwa Mwanafunzi

Karibu ....·Hujambo?

(a) Hapa kuna kifungu cha maneno, nikisema anza utasoma (mwoneshe mwanafunzi kwa kugusa kwa kalamu kuanzia neno la kwanza kutoka kushoto kwenda kulia katika kila mstari).

(b) Utasoma maneno kwa sauti, umakini na haraka kadri uwezavyo.

(c) Weka kidole kwenye neno la kwanza. Je uko tayari? Anza.

Tina na Subira ni marafiki.

Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Alama: [ ]   Muda uliotumika: [ ]

2. Kusoma kifungu cha maneno kisha kujibu maswali kwa mdomo (alama 25).

Maelekezo kwa Msimamizi

(a) Mwongoze mwanafunzi kusoma tena kifungu cha maneno (mwoneshe kwa kugusa kwa kalamu) kuanzia sentensi ya kwanza kutoka kushoto kwenda kulia katika kila mstari. Baada ya mwanafunzi kusoma ndani ya **dakika 3**, chukua karatasi ya mwanafunzi kisha muulize maswali yaliyopo kwenye **Skeli ya Upimaji**.

(b) Mwanafunzi akitoa jibu sahihi zungushia alama **5**, iwapo atatoa jibu lisilo sahihi zungushia alama **0**. Endapo mwanafunzi atatoa jibu lisilo sahihi na kisha kufanya marekebisho kwa kutoa jibu sahihi, weka mkwaju kwenye alama 0 kisha andika jumla ya alama katika nafasi kwenye jedwali.

(c) Iwapo utamuuliza swali mwanafunzi na akashindwa kujibu ndani ya **sekunde 10**, zungushia alama 0 kisha endelea na swali linalofuata.

Maelekezo ya Msimamizi kwa Mwanafunzi

(a) Utasoma tena kifungu cha maneno (mwoneshe mwanafunzi kwa kugusa kwa kalamu kuanzia sentensi ya kwanza kutoka kushoto kwenda kulia katika kila mstari).

(b) Utasoma maneno kwa sauti, umakini na haraka kadri uwezavyo. Baada ya kusoma nitachukua karatasi yako kisha

Ukurasa wa 5 kati ya 9

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nitakuuliza maswali yanayotokana na kifungu cha maneno ulichosoma. Je uko tayari? Anza.

Tina na Subira ni marafiki.

Wanaishi kijiji cha Ng'alo. Kijiji chao kina shida kubwa ya maji. Siku moja, Tina na Subira walikwenda kisimani kuteka maji. Subira alichukua kata na kujaza ndoo yake. Mara akaanza kupiga kelele, kumbe alikuwa amechomwa na mwiba. Hatimaye, Subira alishindwa kubeba ndoo. Wazazi wake walimpeleka hospitali.

Maswali na Majibu

Kipengele	Maswali na majibu	Alama	
1.	Rafiki yake Tina anaitwa nani? (Subira)	5	0
2.	Tina na Subira wanaishi katika kijiji gani? (Ng'alo)	5	0
3.	Tina na Subira walikwenda wapi? (Kisimani)	5	0
4.	Subira alitumia nini kujaza maji	5	0

	kwenye ndoo yake? **(Kata)**		
5.	Kwanini Subira alipelekwa Hospitali? **(Kwa sababu alikuwa amechomwa na mwiba/ kwa sababu alikuwa ameumia/ ili apate matibabu/ili apate dawa)**	5	0
Jumla ya Alama			

SEHEMU B

203   STADI YA KUHESABU

Maelekezo kwa Msimamizi

Zungushia alama **2** iwapo mwanafunzi atatoa jibu sahihi, zungushia alama **0** iwapo atatoa jibu lisilosahihi. Iwapo mwanafunzi atatoa jibu lisilosahihi na kisha kufanya marekebisho na kutoa jibu sahihi, weka mkwaju kwenye alama **0** kisha andika jumla ya alama katika nafasi kwenye jedwali.

(a) Mwongoze mwanafunzi kujibu maswali ya kujumlisha na kutoa. Mpe karatasi na penseli kisha mwambie kuwa anaweza kutumia kama anataka lakini sio lazima.

(b) Iwapo mwanafunzi atatumia njia isiyoridhisha muulize kama anaweza kutumia njia nyingine.

(c) Iwapo mwanafunzi ataendelea kutumia njia isiyoridhisha au atasimama/atakwama/hatajibu kwa **sekunde 5** endelea na swali linalofuata.

(d) Sitisha zoezi endapo mwanafunzi atakosa maswali **manne ya mwanzo** katika maswali ya kujumlisha endelea na maswali ya kutoa.

(e) Iwapo mwanafunzi atakosa maswali **manne ya mwanzo** katika maswali ya kutoa sitisha zoezi· Endelea na mwanafunzi anayefuata.

Maelekezo ya Msimamizi kwa Mwanafunzi

(a) Hapo kuna maswali ya kujumlisha na kutoa (mwoneshe mwanafunzi kwa mkono swali la 1 hadi la 5 kisha swali la 6 hadi 10).

(b) Utaanza na swali la 1. Utajibu maswali haya kwa mdomo. Unaweza kutumia penseli na karatasi kama unataka lakini sio lazima. Je upo tayari? Anza.

Na·	Maswali na majibu	Alama	
1·	7 + 2 = (9)	2	0
2·	14 + 5 = (19)	2	0
3·	21 + 32 = (53)	2	0
4·	39 + 52 = (91)	2	0
5·	53 + 27 = (80)	2	0

Ukurasa wa 8 kati ya 9

6.	8 - 3 = (5)	2	0
7.	18 - 7 = (11)	2	0
8.	46 - 32 = (14)	2	0
9.	47 - 28 = (19)	2	0
10.	60 - 32 = (28)	2	0
	Jumla ya Alama		

Maoni ya msimamizi

Weka alama ya vema (√) iwapo mwanafunzi:

☐   ametumia vidole au kutali.

☐   ametumia karatasi na penseli.

☐   amejibu maswali yote kwa kichwa.

Appendix 3: Writing Skill Assessment Paper

Jina la Mwanafunzi_____

Namba ya Mwanafunzi_____

JAMHURI YA MUUNGANO WA TANZANIA
BARAZA LA MITIHANI LA TANZANIA
UPIMAJI WA ELIMU YA MSINGI DARASA LA PILI

202   STADI YA KUANDIKA

Muda: Dakika 40   Januari 2022 asubuhi

Maelekezo

1. Karatasi hii ina **maswali matatu**.

2. Andika **Jina lako** na **Namba yako** katika kila ukurasa.

3. Jibu maswali **yote** matatu.

4. Andika **majibu yako yote** kwa kutumia penseli.

KWA MATUMIZI YA MPIMAJI TU		
Namba ya Swali	Alama	Saini ya Mpimaji
1.		
2.		
3.		
Jumla		

Ukurasa wa 1 kati ya 4

Jina la Mwanafunzi_____

Namba ya Mwanafunzi_____

1. **Andika** majina ya **picha** hizi :

(a)		(b)	
	_____		_____
(c)		(d)	
	_____		_____
(e)		(f)	
	_____		_____

Ukurasa wa 2 kati ya 4

(g)	_____	(h)	_____
(i)	_____	(j)	_____

2. **Andika** maneno yafuatayo kwa **herufi kubwa** katika nafasi iliyo wazi katika kila neno.

(a) juisi _____

(b) maji _____

Jina la Mwanafunzi_____

Namba ya Mwanafunzi_____

(c) asha   _____

(d) faida   _____

(e) gurudumu   _____

(f) papai   _____

(g) zabibu   _____

(h) dodoma   _____

(i) nanasi   _____

(j) mwanza   _____

3. **Nakili** kifungu cha maneno kifuatacho na kisha weka alama za uandishi yaani: **nukta (.)**, **mkato (,)**, **alama ya kushangaa (!)** na **alama ya kuuliza (?)** mahali panapostahili.

Musa __ kwa nini wewe umemaliza chakula chote __ Oh __ Mimi sikubali nitakwenda kusema kwa mama na baba __

_____

_____

_____

_____

Ukurasa wa 4 kati ya 4

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Appendix 4: Arithmetic Skill Assessment Paper

Jina la Mwanafunzi_____

Namba ya Mwanafunzi _____

JAMHURI YA MUUNGANO WA TANZANIA
BARAZA LA MITIHANI LA TANZANIA
UPIMAJI WA KITAIFA WA DARASA LA PILI

203   **STADI YA KUHESABU**

<u>**Muda: Dakika 50**</u>   **Januari 2022 asubuhi**

Maelekezo

1. Karatasi hii ina maswali **kumi (10)**.

2. Jibu maswali **yote**.

3. Andika majibu yote kwa **penseli**.

KWA MATUMIZI YA MPIMAJI TU					
Namba ya Swali	Alama	Saini ya Mpimaji	Namba ya Swali	Alama	Saini ya Mpimaji
1.			6.		
2.			7.		
3.			8.		
4.			9.		
5.			10.		
Jumla ya Alama					

Andika namba inayokosekana katika nafasi iliyoachwa wazi katika swali la 1 hadi la 5.

1. 6, 5, 4, _____, 2, 1
2. 2, 5, 7, 9, _____
3. 14, 12, 10, 8, _____
4. 5, 10, 15, 20, _____, 30, 35.
5. 110, 111, _____, 113.

6. Kuku alitaga mayai 7. Ikiwa mayai 2 yalivunjika, je, yalibaki mayai mangapi?

   _____
   _____
   _____
   _____
   _____

   _____

7. James alikuwa na mbuzi 6. Aliongezewa mbuzi 2 na baba yake. Je, jumla ana mbuzi wangapi?

   _____
   _____
   _____
   _____
   _____
   _____

8. Juma alichuma maembe 30. Asha alichuma maembe 40. Jumla walichuma maembe mangapi?

   _____
   _____
   _____
   _____

_____
_____
_____

9.   Asha alipewa pipi 44 na baba yake. Iwapo aliongezewa pipi 17 na dada yake, je, atakuwa na jumla ya pipi ngapi?

_____
_____
_____
_____
_____
_____

10. Kuku ana vifaranga 54. Vifaranga 26 vililiwa na mwewe. Je, alibakiwa na vifaranga vingapi?

_____
_____
_____
_____
_____
_____

Appendix 5: Questionnaire to Head Teachers (Head teachers)

BARAZA LA MTIHANI LA TANZANIA

UPIMAJI WA STADI YA KUSOMA, KUANDIKA NA KUHESABU 2021

HOJAJI LA MWALIMU MKUU

Jina la Shule: ....

Namba ya shule: ....

Mkoa: ....

Wilaya: ....

A: Taarifa za shule kwa ujumla

Tafadhali jaza taarifa kuhusu wanafunzi na walimu wa KKK katika shule yako kwa kuandika katika visanduku/sehemu zilizoachwa wazi.

1. Kuna walimu wangapi wa darasa la 2 wanaofundisha shule hii? ☐

2. Je, kuna walimu wangapi wa darasa la pili waliopo shuleni kwa sasa? ☐

3. Je, walimu wanaofundisha stadi za kusoma Kuandika na Kuhesabu waliwahi kuhudhuria mafunzo ya stadi hizo?
   Ndiyo ☐   Hapana ☐

   Ikiwa jibu ni Ndiyo andika idadi ya waliopewa mafunzo. ☐

4. Je, kuna mikondo mingapi ya wanafunzi wa darasa la 2? ☐

5. Kuna wanafunzi wangapi wa darasa la pili walioandikishwa katika shule hii?
   Kati yao wavulana ni wangapi? ☐   na Wasichana ni wangapi? ☐

6. Je, Kuna wanafunzi wangapi waliohudhuria Shuleni leo? ☐

   Kati yao Wavulana ni Wangapi? ☐   na Wasichana ni wangapi? ☐

Je, kuna wanafunzi walioshindwa kufanya upimaji? Kama wapo waorodheshe.

Na.	Namba ya Mwanafunzi	Sababu Ya Kutofanya Upimaji

B: Taarifa kuhusu vifaa vya kufundishia na kujifunzia

Tafadhali jaza maoni yako kuhusu uwepo wa vifaa vya kufundishia na kujifunzia kwa kuweka alama ya vema (✓) kwenye uchaguzi unaolingana na maoni yako.

Na.	swali	Hafifu	Chini ya Wastani	Wastani Mzuri	Mzuri	Mzuri Sana
(i)	Upatikanaji wa vitabu vya kiada kufundishia stadi za kuhesabu shuleni kwako ni wa namna gani?					
(ii)	Upatikanaji wa vitabu vya ziada kwa ajili ya mazoezi ya stadi ya kuhesabu unaweza kuelezwa kuwa ni:					
(iii)	Uwepo wa vifaa vya kufundisha stadi ya kuhesabu (kama vile vihesabio na vifaa vingine unaweza					

Na.	swali	Hafifu	Chini ya Wastani	Wastani Mzuri	Mzuri	Mzuri Sana
	kuelezwa kuwa ni:					
(iv)	Uwepo wa vifaa vya kufundishia stadi ya kuandika (kama vile vibao na vifaa vingine) unaweza kuelezwa kuwa ni:					
(v)	Je, uwepo wa vitabu vya kiada vya kufundishia stadi ya kusoma unaweza kuuelezeaje?					
(vi)	Je, unaweza kuelezeaje upatikanaji wa vifaa vinavyolenga kuendeleza stadi ya kusoma kama vile vitabu vya hadithi fupifupi kwa watoto wadogo?					

C: Taarifa kuhusu mazingira ya ufundishaji na ujifunzaji

Tafadhali jibu maswali kuhusu mazingira ya ufundishaji na ujifunzaji kwa kuwek alama ya vema (✓) kwenye kisanduku kulingana na uchaguzi wako kuhus ufundishaji na ujifunzaji wa stadi za KKK katika shule yako.

Na.	Swali	Hafifu	Chini ya Wastani	Wastani	Mzuri	Mzuri Sana
(i)	Uwepo wa madawati, viti na meza za kukalia wanafunzi na walimu shuleni kwako wakati wa kujifunza unaweza kuelezwa kuwa ni;					
(ii)	Ikilinganishwa na idadi ya wanafunzi wa					

	darasa la 2 waliopo shuleni kwa sasa, hali ya uwepo wa vyumba vya madarasa inaweza kuelezewa kuwa ni:					
(iii)	Je, upatikanaji wa vyanzo vya maji kwa ajili ya kunywa wanafunzi pamoja na usafi binafsi kama vile kunawa wanapotoka shuleni unaweza kuelezewa kuwa ni:					

D: Changamoto zinazojitokeza wakati wa ujifunzaji wa wanafunzi wa stadi za KKK

Tafadhali jibu maswali kuhusu changamoto zinazojitokeza ambazo zinafanya ujifunzaji wa wanafunzi wa stadi za KKK kuwa mgumu kwa kuweka alama ya vema (✓) katika changamoto inayojitokeza zaidi. (unaweza kuweka vema kwenye changamoto zaidi ya moja).

(i) Umbali wa wanafunzi wengi kutoka shule ilipo ☐

(ii) Wanafunzi kukosa masomo mara kwa mara kutokana na mahudhurio yasiyoridhisha ☐

(iii) Uhaba wa walimu ikilinganishwa na idadi ya wanafunzi ☐

(iv) Kupokea wanafunzi wanaohamia ambao stadi zao za KKK

haziridhishi ☐

(v) Uhaba wa vitendea kazi kama vile vitabu ikilinganishwa na idadi ya wanafunzi ☐

(vi) Changamoto nyinginezo (Zitaje kama zipo) _____

_____

_____

_____

E: Upatikanaji na maoni kuhusu kitabu cha uchambuzi wa matokeo ya upimaji wa mwaka 2019

(i) Je, umepata kitabu chenye taarifa ya uchambuzi wa upimaji wa KKK wa mwaka 2019?

Ndiyo ☐   Hapana ☐

(ii) Je, unafikiri vitabu hivyo vya uchambuzi vimeweza kusaidia walimu katika kuboresha ufundishaji na ujifunzaji wa stadi za KKK?

Ndiyo ☐   Hapana ☐

F: Tarifa Nyinginezo

Je, ni jambo gani ambalo halikuulizwa kwenye dodoso hili kuhusu mazingira ya ufundishaji na ujifunzaji ambalo ungependa Baraza la Mitihani lifahamu? (Toa maelezo mafupi) _____

_____

_____

_____

Jina Kamili la Mwalimu Mkuu ....

Sahihi ....

Asante kwa Ushirikiano Wako!