## Zambia 2008 District Profile for Mpulungu

|  | Grades |  |
| ---: | ---: | ---: |
|  | $\mathbf{1 - 9}$ | $\mathbf{1 0 - 1 2}$ |
| Female Pupils | 9,548 | 179 |
| Male Pupils | 9,668 | 259 |
|  |  |  |


| Teachers | 268 | 24 |
| :---: | :---: | :---: |
| Schools | 73 | 3 |
| Classrooms | 275 | 35 |
| Textbooks | 69,000 | 4,312 |



|  | Goal | Actual Value |
| :---: | :---: | :---: |
| NIR | 80\% | 63\% |
| NER | 110\% | 117\% |
| Survival to G9 | 50\% | 15\% |
| Pupil-Teacher Ratio | 60 | 71 |
| Teacher Attrition Rate | 5\% | 25\% |
| \% Teachers Qualified | 50\% | 78\% |
| Pupil-Book Ratio | 1 | 3.2 |

## ANALYSIS

### 1.1 Overview

Mpulungu District with the only port in Zambia, is located in the northern part of the Northern Province of the Republic of Zambia. The district shares local boundaries with Mbala in the east, Mporokoso in the south and Kaputa in the south-west. It shares international boundaries with Tanzania in the north-east and DRC in the west and Burundi in the north-west .It is 203 km from provincial headquarters (kasama)

The Office of the District Education Board Secretary (DEBS) was established in 1998. Being new, the district faces a number of challenges that affect the provision of quality education. These include poor infrastructure: out of 36 GRZ schools and 36 community schools, only 9 schools are in permanent structure; the rest are in pole and mud or dilapidated. However, in 2008 the district was given K1, 620,000, 000 by the Government to construct 27 new classrooms, which now are completed. Other challenges are early marriages, staff shortage, transport impediments, devotion to fishing or selling fish by children at the expense of learning and long distances to and from full basic schools which are very few, very poor or non-available at all in some areas.

### 1.2 Demographic Profile

The district covers an area of approximately 11,000 square kilometres with a population of about 87,000 people. In 2008 , the district net enrolment ratio was at $117 \%$ against the national goal of $110 \%$. Though the district managed to beat the Net Enrolment of national goal ,most of these children drop out of school as they reach grade 9 due to various reasons stated above, the district child survival rate to grade 9 was at $15 \%$ against national goal of $50 \%$. Therefore, the enrolment from grade 1-9 was only 19216 pupils and from grade 1012 were only 438 pupils. Hence there is need to collaborate with stakeholders in order to find solution of how we can retain children in school.

### 1.3 Social Economic Status

Mpulungu is divided into plateau and rift valley. The plateau rolls to the south, south-east and south-west. The climate is cool on the plateau. People's main occupation is subsistence agriculture. Crops grown there include maize, groundnuts, beans and rice. The rift valley, which accommodates Lake Tanganyika, is at very low altitude (approximately 900 m below sea level) with climate that is hot and humid. The main occupation is fishing on commercial and subsistence levels. As a matter of fact, fishing is the district's major economic activity.

### 1.4 Stakeholders and Government Departments

Being a new district, the demand for education in Mpulungu is so high that Ministry of Education alone cannot meet it. Therefore, a number of stakeholders have been brought on board in the provision of education. Among these are members of the community who constitute the membership of the District Education Board and Parent Teacher Associations (PTA's in schools as well as Faith Based Organisations (FBOs). The District Education Board also collaborates with other Government departments such as Health, Agriculture, Forestry, local government, Community Development and Social Welfare to implement education programmes in the district.
or dilapidated. However, in 2008 the district was given K1, 620,000, 000 by the Government to construct 27 new classrooms, which now are completed. Other challenges are early marriages, staff shortage, transport impediments, devotion to fishing or selling fish by children at the expense of learning and long distances to and from full basic schools which are very few, very poor or non-available at all in some areas.

### 1.2 Demographic Profile

The district covers an area of approximately 11,000 square kilometres with a population of about 87,000 people. In 2008 , the district net enrolment ratio was at $117 \%$ against the national goal of $110 \%$. Though the district managed to beat the Net Enrolment of national goal ,most of these children drop out of school as they reach grade 9 due to various reasons stated above, the district child survival rate to grade 9 was at $15 \%$ against national goal of $50 \%$. Therefore, the enrolment from grade 1-9 was only 19216 pupils and from grade 1012 were only 438 pupils. Hence there is need to collaborate with stakeholders in order to find solution of how we can retain children in school.

### 1.3 Social Economic Status

Mpulungu is divided into plateau and rift valley. The plateau rolls to the south, south-east and south-west. The climate is cool on the plateau. People's main occupation is subsistence agriculture. Crops grown there include maize, groundnuts, beans and rice. The rift valley, which accommodates Lake Tanganyika, is at very low altitude (approximately 900 m below sea level) with climate that is hot and humid. The main occupation is fishing on commercial and subsistence levels. As a matter of fact, fishing is the district's major economic activity.

### 1.4 Stakeholders and Government Departments

Being a new district, the demand for education in Mpulungu is so high that Ministry of Education alone cannot meet it. Therefore, a number of stakeholders have been brought on board in the provision of education. Among these are members of the community who constitute the membership of the District Education Board and Parent Teacher Associations (PTA's in schools as well as Faith Based Organisations (FBOs). The District Education Board also collaborates with other Government departments such as Health, Agriculture, Forestry, local government, Community Development and Social Welfare to implement education programmes in the district.

### 1.5 Transport and Communications

Transport is another challenge that faces the DEBS office. The roads to Ponkwe and Kamukwamba basic schools, for example, are so swampy and water-logged throughout the year that only a four-wheel-drive Land Cruiser could find its way out. Thanks to Government for the new NISSAN twin cab, although it still falls short of the power to drive through the district's water logged roads. The two old NISSAN vans have since outlived their usefulness.

The office has no boat to access schools along Lake Tanganyika and Lufubu River. As a result, the DEBS operates on borrowed boats from other departments - the police, ZRA and fisheries department! Field work almost comes to a standstill when the other departments are using their boats. Therefore, there is need for MOE to provide a boat to Mpulungu DEBS office to enable staff to access some schools along the lake and the river in question and help provide necessary interventions.

Communication is another challenge the district is facing. The only 2 networks - ZAIN and MTN - only cover a few urban schools. The rest are in remote areas where there is no network. In 2005 and 2006 the district was using radio messages to communicate with remote schools, but these radios are no longer working, compounding the challenge of poor communication in remote schools.

### 1.6 Research

In November 2008, a research was conducted to assess the performance of the education system in general and learning achievement among pupils in particular. This research, the 2008 National Assessment Survey, was specifically purposed to provide empirical evidence on the learning achievement levels and how the levels are changing overtime, in relation to education inputs and processes.

The target group comprised Grade 5 teachers and Grade 5 pupils at Chitimbwa and Musende basic schools, 20 randomly sampled pupils per school. The sampled pupils did a questionnaire followed by objective tests in life skills, Zambian language, English and Mathematics. In addition to doing their teacher questionnaire, the teachers were also subjected to the same objective tests as their pupils did. For their part, the school head teachers completed a head teacher's questionnaire. The data collected from the field are confidential until they are analysed

### 1.5 Transport and Communications

Transport is another challenge that faces the DEBS office. The roads to Ponkwe and Kamukwamba basic schools, for example, are so swampy and water-logged throughout the year that only a four-wheel-drive Land Cruiser could find its way out. Thanks to Government for the new NISSAN twin cab, although it still falls short of the power to drive through the district's water logged roads. The two old NISSAN vans have since outlived their usefulness.

The office has no boat to access schools along Lake Tanganyika and Lufubu River. As a result, the DEBS operates on borrowed boats from other departments - the police, ZRA and fisheries department! Field work almost comes to a standstill when the other departments are using their boats. Therefore, there is need for MOE to provide a boat to Mpulungu DEBS office to enable staff to access some schools along the lake and the river in question and help provide necessary interventions.

Communication is another challenge the district is facing. The only 2 networks - ZAIN and MTN - only cover a few urban schools. The rest are in remote areas where there is no network. In 2005 and 2006 the district was using radio messages to communicate with remote schools, but these radios are no longer working, compounding the challenge of poor communication in remote schools.

### 1.6 Research

In November 2008, a research was conducted to assess the performance of the education system in general and learning achievement among pupils in particular. This research, the 2008 National Assessment Survey, was specifically purposed to provide empirical evidence on the learning achievement levels and how the levels are changing overtime, in relation to education inputs and processes.

The target group comprised Grade 5 teachers and Grade 5 pupils at Chitimbwa and Musende basic schools, 20 randomly sampled pupils per school. The sampled pupils did a questionnaire followed by objective tests in life skills, Zambian language, English and Mathematics. In addition to doing their teacher questionnaire, the teachers were also subjected to the same objective tests as their pupils did. For their part, the school head teachers completed a head teacher's questionnaire. The data collected from the field are confidential until they are analysed by the Examinations Council of Zambia. The results of this assessment survey are yet to be published in a national assessment survey report by the Ministry of Education.
by the Examinations Council of Zambia. The results of this assessment survey are yet to be published in a national assessment survey report by the Ministry of Education.

Issue \#1: Progress in primary school enrolment in Mpulungu


The Net Intake Rate is the percentage of seven-year olds who enter school for the first time. It gives us an idea of how many 7 -year olds are entering school and how many are not. A higher NIR means more seven year olds are entering school on time.

## The Net Intake Rate in Mpulungu:

- Has increased by 11 percentage points since 2005
- Is similar to the national value.
- Is 17 percentage points below the goal of $80 \%$.


## What is observed and why is it happening?

- Net Intake Rate has increased by $11 \%$ since 2005 , this was due to national policy on enrolment to enrol all the school going age children in 2007 and 2008
- The Net Intake Rate was $17 \%$ points below the national goal, this was due to poor staffing in rural schools. In 2005 Most of the rural and remote schools were manned by only volunteer teachers. Also parents were avoiding to enrol a child at the right age because child cannot cover along distance to the nearest school .But the opening of community schools in areas there was no school for the past 4 years has enabled the Net intake rate to go up.


## What action is required?

-Continue sensitisation of stake holders on the importance of enrolling the child at the right age

- construction of new schools in areas where the population is high but the nearest school is more than 8 km away to the village
-Improve staffing in schools.

Indic. 2 Of all the children who enter school for the first time, how many are the correct age?


This graph shows the percentage of new school entrants who are on-time (age 7), overage (older than 7) and underage (younger than 7). A high percentage of overage entrants means a lower NIR, but is acceptable because it means that older children are receiving an education. Once all the older children have been cycled through school, the percentage of overage entrants should decrease and the percentage of on time entrants should increase. If underage pupils are entering in large percentages, they are taking spaces from older pupils.

What is observed and why is it happening?
Overage entrants have decreased by 7\%points this is because of opening of new community schools in areas where the population was high but no school, this began absorbing the overage entrants
-properly aged entrants have increased by 3\% points this is because of opening of community schools in areas where the population was high but no school, children began accessing education at right age -Underage entrants have increased by 4\% this is because some head teachers and teachers were enrolling their children before they reach the right age

## What action is required?

-sensitisation against enrolment of under age children
-improving the learning environment in community schools because all of them area grass thatched and by volunteer teachers

Indic. $3 \quad$ Are all basic school age children enrolled in basic school?
The Basic Net Enrollment Rate is the percentage of basic-aged (ages 7-15) children who are enrolled in basic school (grades 1-9). A higher Basic NER means

Basic NER more children are attending school at the correct age.

The Net Enrollment Rate in Mpulungu:

- Has increased by 27 percentage points since 2005
- Is 14 percentage points above the national average.
- Is 7 percentage points above the goal of $110 \%$.


What is observed and why is it happening?
-Net enrolment rate has increased by $27 \%$ points since 2005.
-14 percentage points above the national average.
$-7 \%$ points above the goal of $110 \%$
This is because in 2007 and 2008 there have been national policies on enrolment to enrol all the school going age children and also improved staffing in schools

## What action is required?

to improve pupi/classroom ratio by constructing more classrooms at least 62 classrooms per year in the next 2 years.
-construction of more staff houses in remote areas at least 30 houses per year


The Gender Parity Index is the ratio of female to male pupils. A GPI larger than one mean there are more females than males in school. A GPI smaller than one means there are less females per male in school. A GPI of 1 is desirable because it means there is an equal number of males and females in school.

The Gender Parity Index in Mpulungu:

- Is within 0.03 of the national goal of 1 for grades 1 9.
- Is highest in grades $8-9$, with 2.05 girls per boy.
- Is lowest in grades $5-7$, with 0.73 girls per boy.


## What is observed and why is it happening?

-High drop out rate of girl child from grade 4 to 5 due to early marriages.
-high drop out rate of girl child at grade 7 to 8 due to long distances from middle basic school to upper basic school

## What action is required.

- Continue sensitisation of stakeholders on the impotence of girl child education.
-Upgrading of middle basic schools to upper basic school at least 10 schools per year
- construction of weekly boarding facilities in zone schools such as Vyamba, Chinakila, Kavumbu, Chitimbwa, Kopeka, Isoko and (No Suggestions)

ISSUE \#2: Efficiency in Mpulungu
Indic. 5
How many first-grade pupils will reach grade $9 ?$


The Grade 1-9 Multi Grade Survival Rate is the percentage of pupils enrolled in grade 1 during the current school year who are expected to reach grade 9 , no matter how many years It is estimated using data from a single year. A higher survival rate means more pupils are expected to reach grade 9 and less drop out.

The Grade 1-9 Multi Grade Survival Rate in Mpulungu:

- Has remained constant since 2005.
- Is 19 percentage points below the national average.
- Is 35 percentage points below the goal of 50\%.


## What is observed and why is it happening?

-Has remained constant since 2005
$-19 \%$ points below the national average goal
$-35 \%$ points below the goal of $50 \%$
This is because of poor staffing in remote areas, poor infrastructure and long distances to nearest upper basic schools

## What action is required?

-Sensitisation of stakeholders on importance of education
-improve staffing in remote areas
-upgrade middle basic schools to upper basic schools
-improve infrastructure in remote/rural schools
-Improve road network to retain teachers in remote schools


Are some Grade 1 students less likelv than others to reach hiaher arades of Basic School?
Indic.
These pyramids compare the multi-grade survival rates for a grade 1 pupil from different education situations. When one group has a lower survival rate to a particular grade, pupils from that group are less likely to reach that grade.

In Mpulungu, students are less likely to stay in school through grade 9 if they are female or if they attend a rural or community school.

- $15 \%$ of rural school entrants will reach grade 9 as compared with $18 \%$ of urban entrants.
- $12 \%$ of female school entrants will reach grade 9 as compared with $19 \%$ of male entrants.
- 0\% of community school entrants will reach grade 9 as compared with $22 \%$ of government school entrants.





## What is observed and why is it happening?

-15\% of rural school entrants will reach grade 9 as compared with $18 \%$ of urban entrants this because most grade 7 pupils fail in urban areas due to inadequate places in grade 8 ,but rural school have few grade 7 pupils as compared to those in urban. $-12 \%$ of female school entrants will reach grade 9 as compared with $19 \%$ of male entrants because of early marriages, parents avoid allowing female pupils to walk long distances.

- 0\% of community school entrants will reach grade 9 as compared with $22 \%$ of government school entrants this is because of poor staffing, no trained teachers and poor infrastructure


## What action is required ?

-to increase school places in grade 8 in urban schools -Continue sensitising parents on the importance of girl child education especially in community schools -Improve infrastructure in community schools -trained teachers should be sent to community schools

Indic. 8 How do children perform on the Grade 7 exam?


The Grade 7 Exam is designed to measure individual students' learning levels at
the end of grade 7. Exams are a common measure of learning, though critics
argue that students with a high knowledge level could perform poorly if they are not good at taking tests.

Exam scores are tabulated according to wher the test is taken rather than where a pupil attends school. For example, if a community school pupil travels to a government school to take the exam, then their score is recorded as a government school score. Because of this, the Urb./Rur and Comm./Govt. scores in the graph may not reflect learning levels properly.

Not all grade 7 pupils sit for the exam, which means that exam scores may not be representative of the learning level of all grade 7 pupils. If high achieving pupils take the exam and low achieving pupils avoid it, then the average scores represent the learning level of high achievers more than that of low achievers.

## What is observed and why is it happening?

- The average grade 7 exam score is 11 points lower than the national average this is because of poor staffing in schools.
- is 0 points lower in rural schools than in urban schools this is because of poor staffing in rural school - is 0 points shorter in community schools than in government because in community schools there is poor staffing and no trained teachers


## What action is required?

- improve infrastructure in community schools and also send trained teachers in these schools -Improve staffing in rural in health centres to curb exodus of teachers

Indic. $9 \quad$ Are there enough basic school teachers for all pupils?


The Basic Pupil-Teacher Ratio is the average number of basic pupils to each basic teacher. A higher PTR means that each teacher is responsible for more pupils.

The Pupil-Teacher Ratio in Mpulungu:

- Has decreased by 1 pupils since 2005.
- Is 21 pupils higher than the national average.
- Is 11 pupils higher than the national goal $\rightarrow f$ an


## What is observed and why is it happening?

- Pupil teacher ratio has decreases by $1 \%$ since 2005 this is because of teacher recruitment for the past 4 years
- 21 pupils higher than the national average this is because most teachers get transfer $s$ from mpulungu district to Lusaka and copperbelt
-11 pupils higher than the national goal because of mass transfers from rural areas to urban because of poor social amenities


## What action is required?

-improve the condition of teachers in remote areas by collaborating with stakeholders

- improve social amenities in rural areas
-Improve road network so that teachers can easily go where they want
-Improve health facilities


## Indic. 10 <br> How are basic school teachers distributed by school type?

## What is observed and why is it happening?

-Pupil teacher ratio in rural schools is 23 higher than Pupil teacher ratio in urban school, this is because in urban school there are better social amenities than in rural areas Pupil teacher ratio in community schools is 3 pupils higher $\underset{\sim}{\text { U }}$ than pupil teacher ratio in government schools because no trained teachers are sent in community schools

## What action is required?

-Improve social amenities in rural areas

- improvement of infrastructure especially teachers' houses
- inclusion of community schools on staff establishment
- introduction of rural retention scheme for teachers serving in remote areas.


District, 2008
District, 2008

## Basic Pupil-Teacher Ratio by School Type:

- PTR in rural schools is 23 pupils higher than PTR in urban schools.
- PTR in community schools is 3 pupils higher than PTR in government schools.

This page lists the 50 basic schools with the highest G1-G9 pupil-teacher ratios. The schools with the highest ratios are listed first and have the greatest need for assistance. In a school with a PTR of 60 or less, learning is possible. In a school with a PTR of more than 60, learning is difficult. In a school with a PTR of 120 or more, learning is nearly impossible. Schools with high PTR's may be in need of additional classrooms and other resources as well as teachers.



What is observed and why is it happening? Teacher attrition has increased by 9\% since 2005 this is because teachers recruited from other provinces especially copperbelt and Lusaka easily run away The reason is that there is poor infrastructure and poor social amenities in rural areas What action is required?

- improve social amenities
- improve infrastructure
- provide rural retention scheme to teachers serving in remote areas
--When recruiting teachers, first priority should be given to applicants who are familiar with the district.

Indic. 13
The Teacher
Qualification Rate is
the percentage of teachers who are known to have a teaching degree, diploma, or certificate. If a teacher's qualification is unknown, they are counted as unqualified.

## A higher Teacher

Qualification Rate
means more teachers are qualified to teach.

## Are basic school teachers qualified to teach?

## The Teacher Qualification

 Rate in Mpulungu:- Has increased by 3 percentage points since 2005. - Is similar to the national average.
- Is 28 percentage points avove the goal of $50 \%$.
- Is 16 percenage points lower for rural teachers.
- Is 93 percentage points lower for community school teachers.
- Is 15 percentage points higher female teachers.



What is observed and why is it happening - Teacher qualification rate has increased by $3 \%$.
-16 \% points lower for rural teachers - 93\% points lower for community school teachers
This is because of introduction of PTDDL and other distance learning programmes in the district has enabled most teachers to do diploma by distance ,but rural teachers and community school teachers have little access to the resource centres

## What action is required?.

To improve on resource centres in remote areas so that teachers can have access to these centres.

Indic. 14
Are basic school pupils' shifts long enough?


Shift duration is the average number of hours out of a school day that a pupil attends school. Higher values mean pupils spend more time learning. 4-6 hours per day is recommended by the Ministry of Education. Shift duration is lower when schools use multiple shifting.

## What is observed and why is it happening?

-it is 0.17 hours shorter than the national average - it is 0.33 hours longer in rural schools than in urban schools because in rural schools
 there are fewer pupils hence enough classroom accommodation to stay longer in classrooms though glass thatched. -it is 0.57 hours shorter in community schools than in government schools because in community schools there is very poor staffing at times all grades can be taught by one untrained teacher
What action is required? - to send trained teachers in these schools or re introduce pupil teachers who should be sent to these schools. -Improve infrastructure in community and government schools so that teachers can be attracted to work in these schools

District, 2008

Indic. 15
Are there enough math books for basic school pupils?


The Basic Pupil-Book Ratio is the number of primary pupils for each book. A higher Basic PBR means more pupils share each book. This graph uses the PBR for Math books as an indication of the PBR across all subjects. Other subjects are equally important and BPR's for these subjects are available in Ed*Assist.

The pupil book ratio in Mpulungu:

- Is 0.5 pupils higher than the national average.
- Is 2.2 pupils higher than the goal of 1 .
- Is 1 pupils higher in rural schools.
- is 1 pupils lower in community schools.


## What is observed and why is it happening?

-Pupil book ratio is 0.5 higher than the national average -pupil book ratio is 2.2 higher than the national goal of 1 - is 1 pupils higher in rural schools

- is 1 pupil lower in community schools

This is because books procured in the past 3 years not enough to cater for the growing enrolment in the district and also poor storage in community and rural government school because of poor infrastructure

## What action is required?

-procurement of more books
-improve infrastructure in schools.

## Indic. 16

 Are there enough classrooms for basic school pupils?

## The Basic Pupil Classroom Ratio is the

 average number of basic pupils for each classroom. A higher Pupil Classroom Ratio means a larger number of pupils in each classroom. In schools that practice multiple shifting, the pupil-classroom ratio is not the same as the pupil class ratio.-54 pupils better in community schools than in government
-this is happening because pupil classroom ratio is lower in community schools because of poor infrastructure.

The number of pupils sharing each classroom in Mpulungu:

- Is 6 pupils above the national average.
- Is 12 pupils above the goal of 40 .
- 9 pupils worse in rural schools than in urban schools.
- 54 pupils better in community schools than in government schools.


## What action is required?

-sanitation is needed
-sending trained teachers to community schools -expansion of infrastructure

Are basic school classrooms in permanent condition?


## What is observed and why is it happening?

-is 17 percentage point above the goal of $50 \%$
-26 percentage points lower for rural school
-The opening of community schools which have a lot of temporary classroom has contributed to the drop between 2005-2008

## What action is required?

-Construction of more classrooms.

The Percentage of Classrooms in Permanent Condition is the percentage of classrooms that are reported to be permanent rather than temporary or incomplete.

The Percentage of classrooms in permanent condition in Mpulungu:

- Is 17 percentage points below the national average
- Is 3 percentage points above the goal of $50 \%$
- 26 percenage points lower for rural schools.
- 60 percentage points lower for community schools.

Indic. 18
Are students reaching secondary school?


The Basic to
Secondary Transition
Rate is the percentage
of students in the last
grade of basic school
(grade 9) who reach
the first grade of
secondary (grade 10).
A higher rate means
more pupils are being
promoted to secondary.

What is observed and why is it happening
-An increase of 22\% from 2005-2008
-In 2006 the intake rate dropped from 11\%-1\% because parents did not believe that it was a recognised secondary school, hence transfer their children to other schools.

## What action is required?

-Construction of a boarding school is needed, this is to cater for pupils who are coming far places but do not have relatives in the district


What is observed and why is it happening?
-An increase from 2005-2008 although not higher than the provincial and national goal.

- This happened because of the opening of a day high school.


## What action is required?

-construction of a boarding school is needed.

Indic. 20 Are there enough secondary school teachers?


What is observed and why is it happening?
-The number of pupil teacher ratio increased
-This increase was due to the location of the school which is in the urban area, hence the attraction of teachers to certain facilities.
What action is required?
-To maintain the teachers and other incentives.


## What is observed and why is it happening?

-The pupil classroom ratio increased from 16\% in 2006 to $96 \%$ in 2007
Because the enrolment increased but inadequate classrooms .how ever pupil classroom dropped after construction of 3 additional classrooms.
What action is required?
-To build more classroom blocks.

Indic. 22 Are there enough secondary school math books?


The Secondary PupilBook Ratio is the number of primary pupils for each book. A higher Secondary BPR means more pupils share each book. This graph gives the BPR for Math books, but ratios for the other subjects are equally important.

## What is observed and why is it happening?

-The pupil book ratio in secondary schools increased in 2007 due to the increase of pupils to secondary schools

What action is required?
-Procurement of more books to reduce on pupil book ratio.

