# Zambia 2008 District Profile for Senanga

## At a glance

### Grades

| | 1-9 | 10-12 |
|---|---|---|
| Female Pupils | 12,548 | 599 |
| Male Pupils | 13,694 | 827 |
| Teachers | 647 | 108 |
| Schools | 115 | 4 |
| Classrooms | 548 | 50 |
| Textbooks | 64,165 | 3,076 |
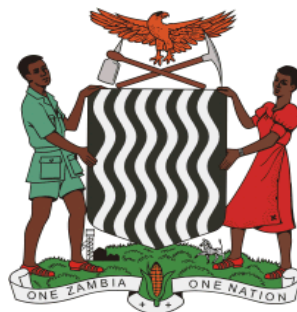
## Basic School

| | Goal | Actual Value |
|---|---|---|
| NIR | | 74% |
| NER | | 96% |
| Survival to G9 | | 27% |
| Pupil-Teacher Ratio | | 43 |
| Teacher Attrition Rate | | 19% |
| % Teachers Qualified | | 90% |
| Pupil-Book Ratio | | 1.8 |

## ANALYSIS

**Indic. 1**

### Are children entering basic school on time?
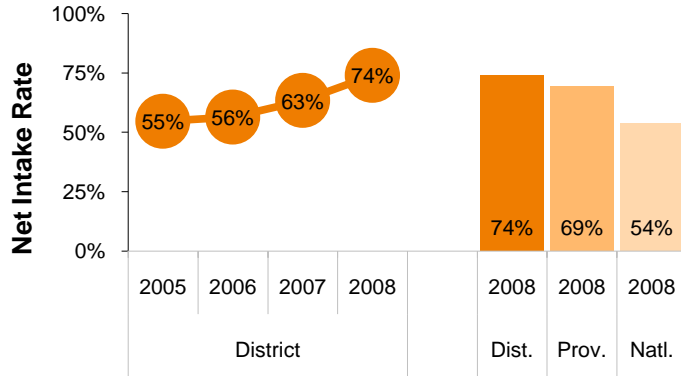


The **Net Intake Rate** is the percentage of seven-year olds who enter school for the first time. It gives us an idea of how many 7-year olds are entering school and how many are not. A higher **NIR** means more seven year olds are entering school on time.
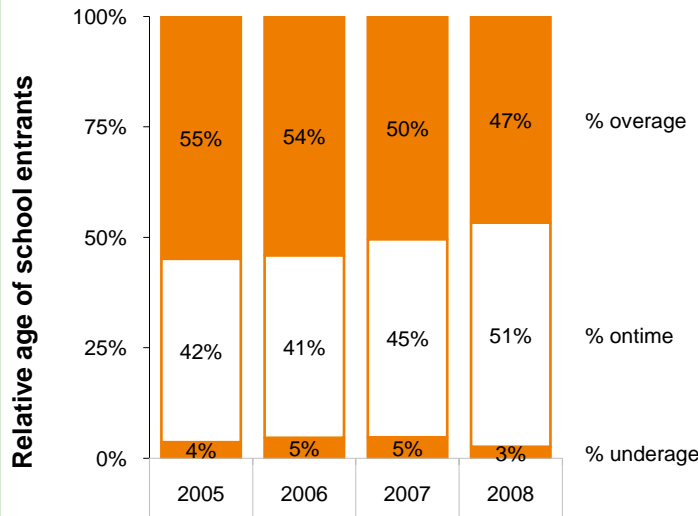
**The Net Intake Rate in Senanga:**

Has increased by 19 percentage points since 2005
Is 20 percentage points above the national value.
Is 6 percentage points below the goal of 80%.

**What is observed and why is it happening?**

**What action is required?**

**Indic. 2**

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



**Since 2005 in Senanga:**

Overage entrants have decreased by 8 percentage points.
Properly aged entrants have increased by 9 percentage points.
Underage entrants have decreased by 1 percentage points.

**What is observed and why is it happening?**

**What action is required?**

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.
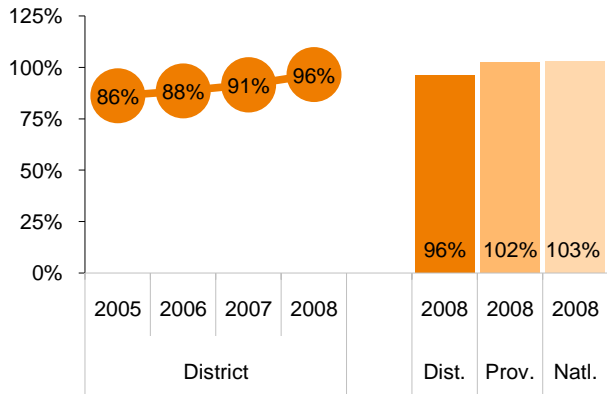
## Are all basic school age children enrolled in basic school?

**Basic NER**

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 more children are attending school at the correct age.

**The Net Enrollment Rate in Senanga:**

Has increased by 10 percentage points since 2005
Is 6 percentage points below the national average.
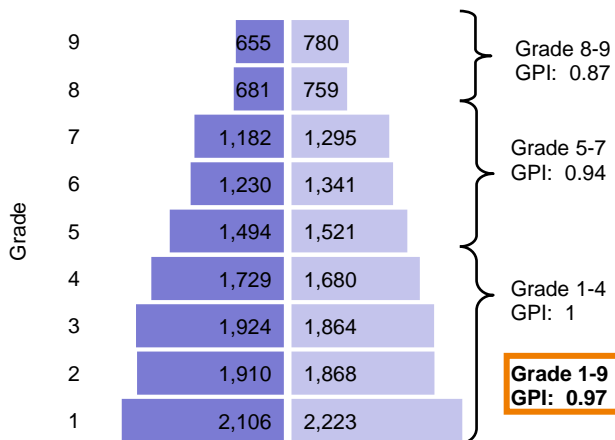Is 16 percentage points above the goal of 80%.

**What is observed and why is it happening?**

**What action is required?**



| | 2005 | 2006 | 2007 | 2008 | | 2008 | 2008 | 2008 |
|---|---|---|---|---|---|---|---|---|
| | 86% | 88% | 91% | 96% | | 96% | 102% | 103% |
| | | | District | | | Dist. | Prov. | Natl. |

## Are girls and boys enrolled in equal numbers?

**Gender Parity Index**

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 Senanga:**

Is within 0.03 of the national goal of 1 for grades 1-9.
Is highest in grades 1-4, with 1 girls per boy.
Is lowest in grades 8-9, with 0.87 girls per boy.



Grade

| Grade | | |
|---|---|---|
| 9 | 655 | 780 |
| 8 | 681 | 759 |
| 7 | 1,182 | 1,295 |
| 6 | 1,230 | 1,341 |
| 5 | 1,494 | 1,521 |
| 4 | 1,729 | 1,680 |
| 3 | 1,924 | 1,864 |
| 2 | 1,910 | 1,868 |
| 1 | 2,106 | 2,223 |

Grade 8-9
GPI: 0.87

Grade 5-7
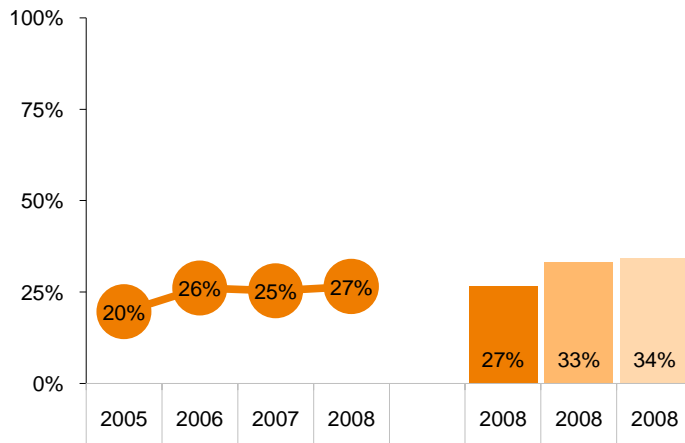GPI: 0.94

Grade 1-4
GPI: 1

**Grade 1-9
GPI: 0.97**

**What is observed and why is it happening?**

**What action is required?**

**Indic. 5**

## How many first-grade pupils will reach grade 9?

Grade 1-9 Multi Grade Survival Rate

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2005 | 2006 | 2007 | 2008 | | 2008 | 2008 | 2008 |
| 20% | 26% | 25% | 27% | | 27% | 33% | 34% |

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.

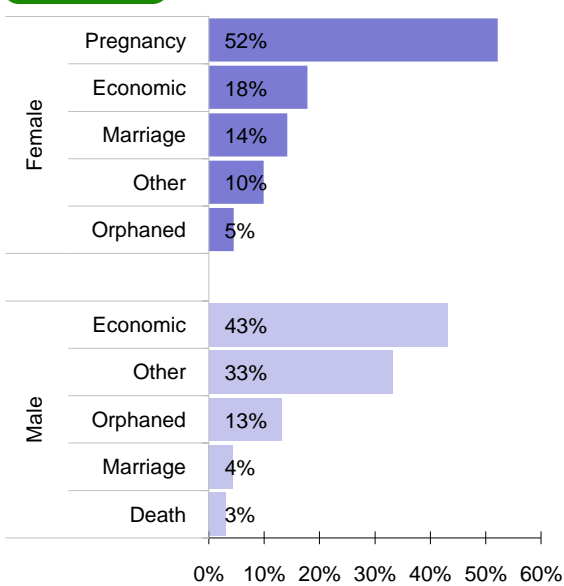**The Grade 1-9 Multi Grade Survival Rate in Senanga:**

Has increased by 7 percentage points since 2005

Is 8 percentage points below the national average.

Is 53 percentage points below the goal of 80%.

**What is observed and why is it happening?**

**What action is required?**

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**Indic. 6**

## Why do children in grades 5-9 drop out before completing basic school?

Female

| Pregnancy | 52% |
| Economic | 18% |
| Marriage | 14% |
| Other | 10% |
| Orphaned | 5% |

Male

| Economic | 43% |
| Other | 33% |
| Orphaned | 13% |
| Marriage | 4% |
| Death | 3% |

0%  10%  20%  30%  40%  50%  60%

**What is observed and why is it happening?**

**What action is required?**

The top reasons that students in grades 5-9 left school as reported by school head-masters. Headmasters may not always know the exact reason.

## Are some Grade 1 students less likely than others to reach higher grades of Basic School?
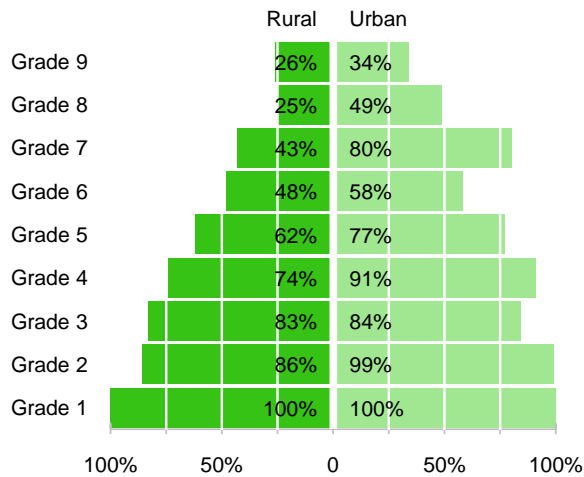
**Indic. 7**

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 Senanga, students are less likely to stay in school through grade 9 if they are female or if they attend a rural or community school.**
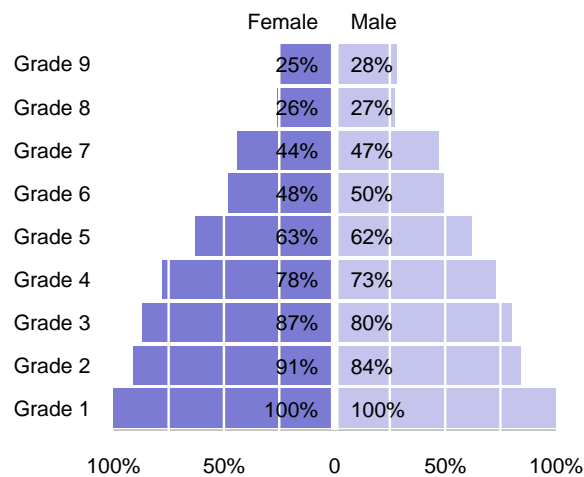
26% of rural school entrants will reach grade 9 as compared with 34% of urban entrants.

25% of female school entrants will reach grade 9 as compared with 28% of male entrants.
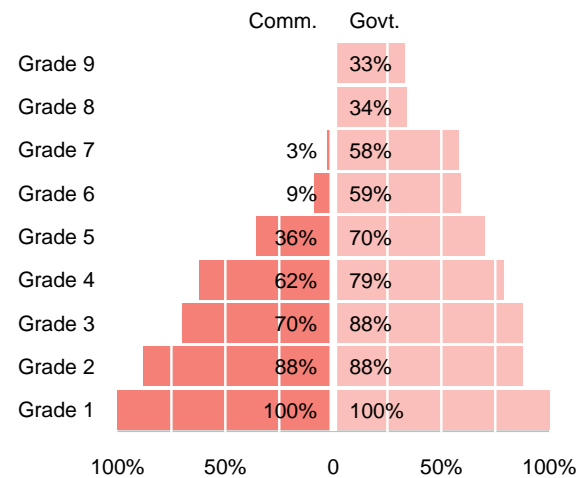
0% of community school entrants will reach grade 9 as compared with 33% of government school entrants.

### Rural / Urban

| Grade | Rural | Urban |
|-------|-------|-------|
| Grade 9 | 26% | 34% |
| Grade 8 | 25% | 49% |
| Grade 7 | 43% | 80% |
| Grade 6 | 48% | 58% |
| Grade 5 | 62% | 77% |
| Grade 4 | 74% | 91% |
| Grade 3 | 83% | 84% |
| Grade 2 | 86% | 99% |
| Grade 1 | 100% | 100% |

100%  50%  0  50%  100%

**What is observed and why is it happening?**

### Female / Male

| Grade | Female | Male |
|-------|--------|------|
| Grade 9 | 25% | 28% |
| Grade 8 | 26% | 27% |
| Grade 7 | 44% | 47% |
| Grade 6 | 48% | 50% |
| Grade 5 | 63% | 62% |
| Grade 4 | 78% | 73% |
| Grade 3 | 87% | 80% |
| Grade 2 | 91% | 84% |
| Grade 1 | 100% | 100% |

100%  50%  0  50%  100%

**What action is required?**

### Comm. / Govt.

| Grade | Comm. | Govt. |
|-------|-------|-------|
| Grade 9 |  | 33% |
| Grade 8 |  | 34% |
| Grade 7 | 3% | 58% |
| Grade 6 | 9% | 59% |
| Grade 5 | 36% | 70% |
| Grade 4 | 62% | 79% |
| Grade 3 | 70% | 88% |
| Grade 2 | 88% | 88% |
| Grade 1 | 100% | 100% |

100%  50%  0  50%  100%

**Indic. 8**

## How do children perform on the Grade 7 exam?

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 609 | 599 | 589 | | 611 | 589 | | 624 | 608 |
| 2008 | 2008 | 2008 | | Rural | Urban | | Comm. | Govt. |
| Dist. | Prov. | Natl. | | District, 2008 | | | District, 2008 | |

*Average G7 Exam Score* (y-axis: 0 to 700)
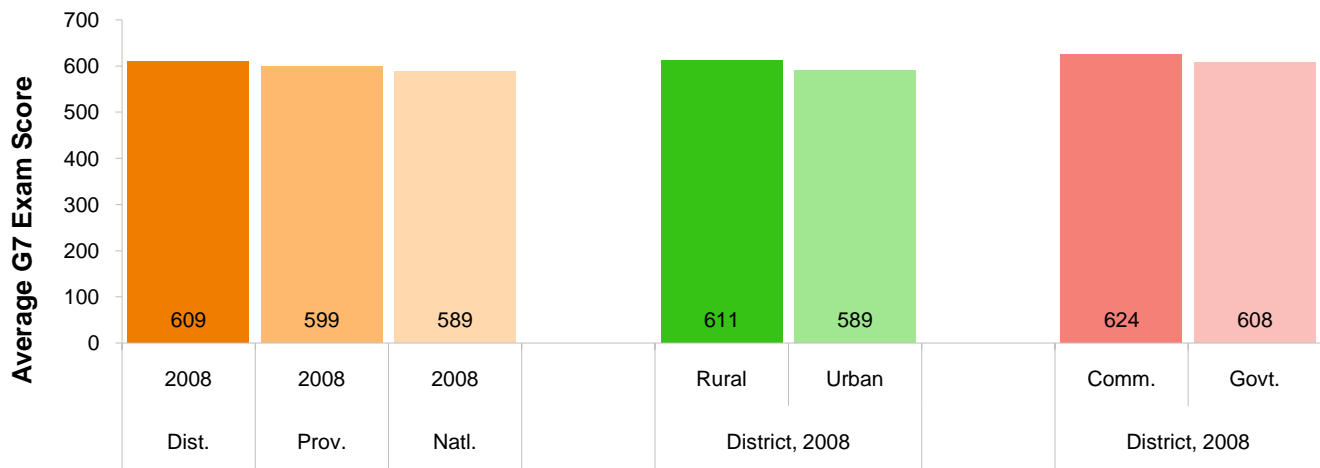
The **Grade 7 Exam** is designed to measure individual students' learning levels at the end of grade 7. Exams are a common measure of learning, though critics argue that students with a high knowledge level could perform poorly if they are not good at taking tests.

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 i n 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.

**The average Grade 7 exam score in Senanga :**

Is 21 points higher than the national average.

Is 22 points higher in rural schools than in urban schools.

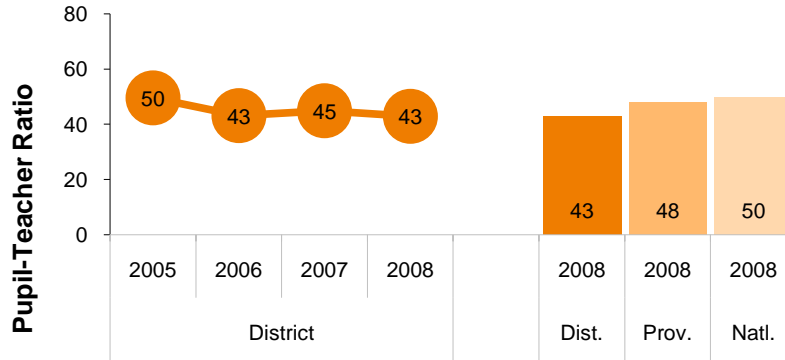Is 15 points longer in community schools than in government schools.

**What is observed and why is it happening?**

**What action is required?**

**Indic. 9**

**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 Senanga:**

Has decreased by 7 pupils since 2005.
Is 7 pupils lower than the national average.
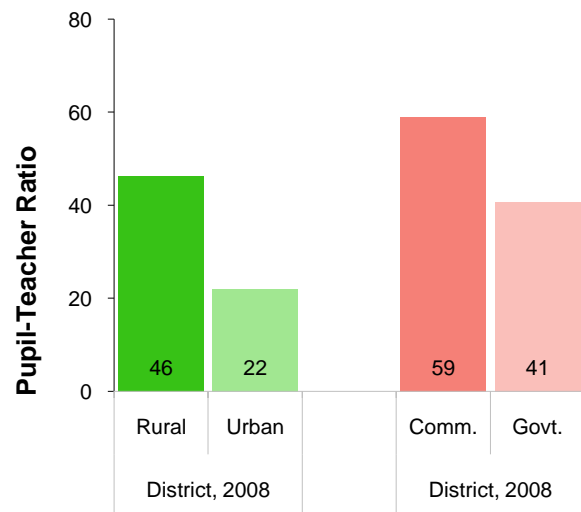Is 23 pupils higher than the national goal

**What is observed and why is it happening?**

**What action is required?**

**Indic. 10**

**How are basic school teachers distributed by school type?**

**What is observed and why is it happening?**



**What action is required?**

**Basic Pupil-Teacher Ratio by School Type:**

PTR in rural schools is 24 pupils higher than PTR in urban schools.

PTR in community schools is 18 pupils higher than PTR in government schools.
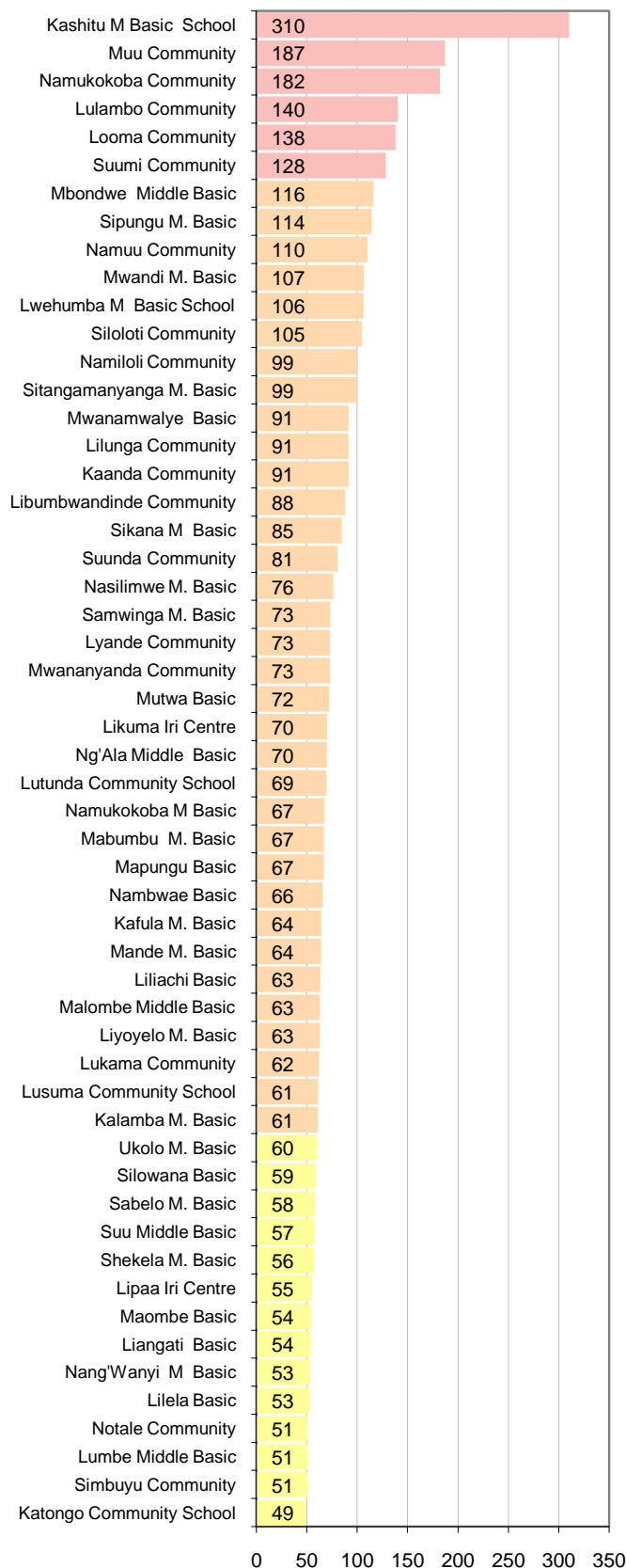
## In which basic schools are pupil-teacher ratios the largest?

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.

### Schools with the highest Grade 1-9 PTR's

| PTR | <= 39 | 40-59 | 60-119 | >= 120 | Total |
|---|---|---|---|---|---|
| # Schools | 31 | 43 | 35 | 6 | 115 |

| School | PTR |
|---|---|
| Kashitu M Basic School | 310 |
| Muu Community | 187 |
| Namukokoba Community | 182 |
| Lulambo Community | 140 |
| Looma Community | 138 |
| Suumi Community | 128 |
| Mbondwe Middle Basic | 116 |
| Sipungu M. Basic | 114 |
| Namuu Community | 110 |
| Mwandi M. Basic | 107 |
| Lwehumba M Basic School | 106 |
| Siloloti Community | 105 |
| Namiloli Community | 99 |
| Sitangamanyanga M. Basic | 99 |
| Mwanamwalye Basic | 91 |
| Lilunga Community | 91 |
| Kaanda Community | 91 |
| Libumbwandinde Community | 88 |
| Sikana M Basic | 85 |
| Suunda Community | 81 |
| Nasilimwe M. Basic | 76 |
| Samwinga M. Basic | 73 |
| Lyande Community | 73 |
| Mwananyanda Community | 73 |
| Mutwa Basic | 72 |
| Likuma Iri Centre | 70 |
| Ng'Ala Middle Basic | 70 |
| Lutunda Community School | 69 |
| Namukokoba M Basic | 67 |
| Mabumbu M. Basic | 67 |
| Mapungu Basic | 67 |
| Nambwae Basic | 66 |
| Kafula M. Basic | 64 |
| Mande M. Basic | 64 |
| Liliachi Basic | 63 |
| Malombe Middle Basic | 63 |
| Liyoyelo M. Basic | 63 |
| Lukama Community | 62 |
| Lusuma Community School | 61 |
| Kalamba M. Basic | 61 |
| Ukolo M. Basic | 60 |
| Silowana Basic | 59 |
| Sabelo M. Basic | 58 |
| Suu Middle Basic | 57 |
| Shekela M. Basic | 56 |
| Lipaa Iri Centre | 55 |
| Maombe Basic | 54 |
| Liangati Basic | 54 |
| Nang'Wanyi M Basic | 53 |
| Lilela Basic | 53 |
| Notale Community | 51 |
| Lumbe Middle Basic | 51 |
| Simbuyu Community | 51 |
| Katongo Community School | 49 |

**What is observed and why is it happening?**

**What action is required?**

## How many basic school teachers leave their posts every year?

**Teacher Attrition Rate**
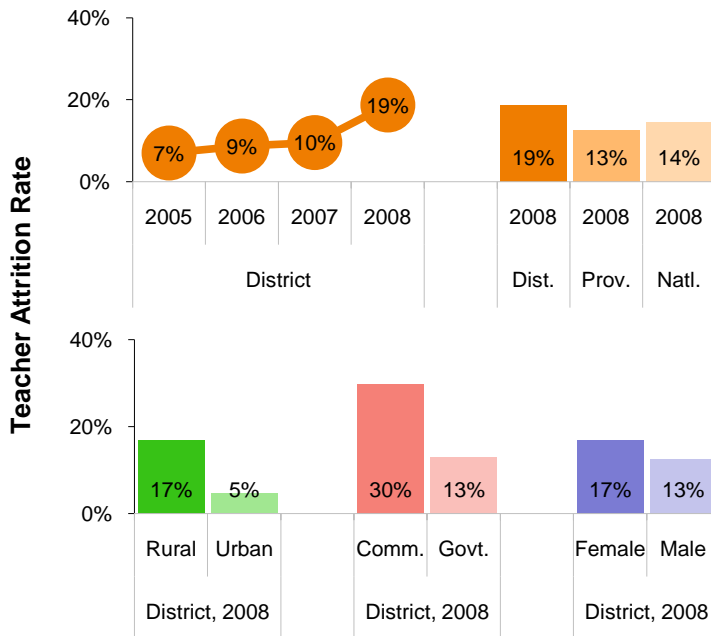


**The Teacher Attrition Rate in Senanga:**

Has increased by 12 percentage points since 2005.
Is similar to the national average.
Is 14 percentage points above the goal of 5%.

Is 12 percentage points higher for rural teachers.
Is 17 percentage points higher for community school teachers.
Is 4 percentage points higher for female teachers.

The **Teacher Attrition Rate** is the percentage of teachers reported to have left their position in the past year. Teachers may have left for another teaching post, or left teaching altogether.

A lower **Teacher Attrition Rate** means that less teachers have left their positions each year.

**What is observed and why is it happening?**

**What action is required?**

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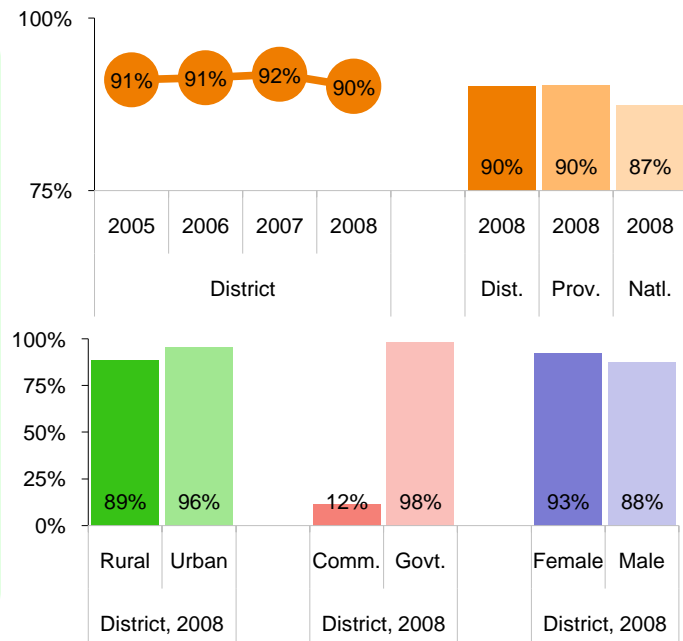## Are basic school teachers qualified to teach?

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.

**The Teacher Qualification Rate in Senanga:**

Has remained constant since 2005.
Is similar to the national average.
Is 10 percentage points avove the goal of 80%.

Is 7 percenage points lower for rural teachers.
Is 87 percentage points lower for community school teachers.
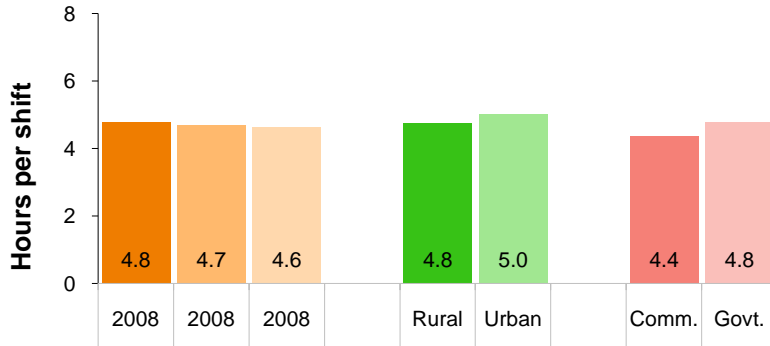Is 5 percentage points higher female teachers.



**What is observed and why is it happening?**
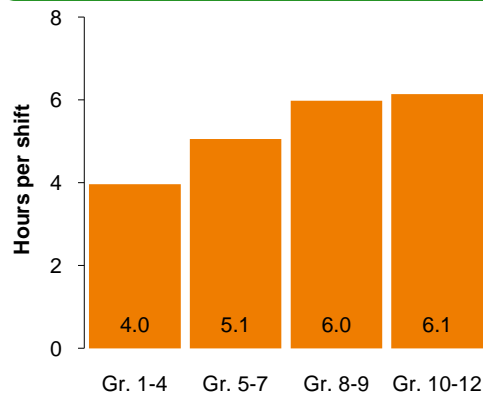
**What action is required?**

## Indic. 14

### Are basic school pupils' shifts long enough?



**The average shift duration in Senanga:**

- Is 0.15 hours longer than the national average.
- Is 0.78 hours longer than the goal of 4 hours.
- Is 0.27 hours shorter in rural schools than in urban schools.
- Is 0.41 hours shorter in community schools than in government schools.
- Is 0.03 hours shorter than the goal of 4 hours in grades 1-4.

**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.
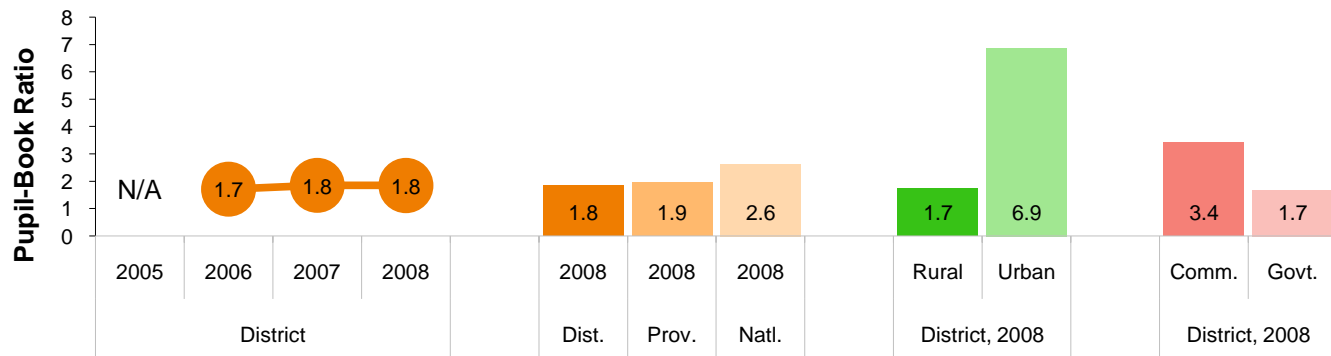


**What is observed and why is it happening?**

**What action is required?**

## 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.

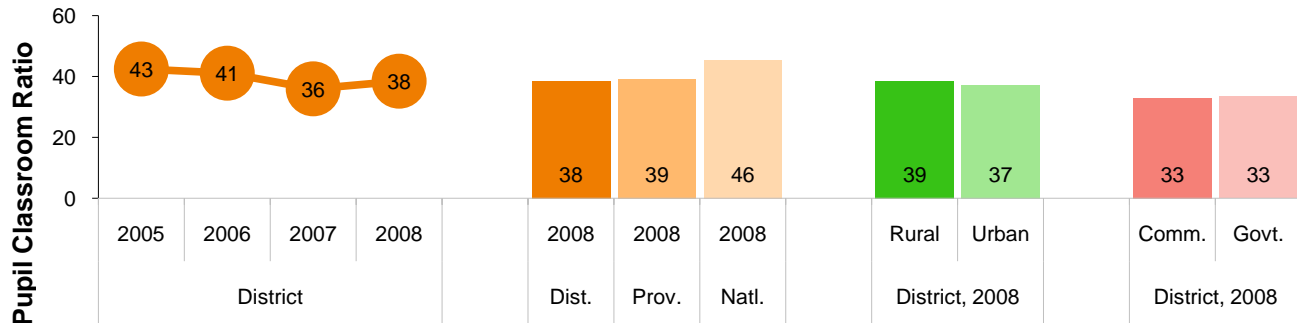**What is observed and why is it happening?**

**What action is required?**

**The pupil book ratio in Senanga:**

- Is 0.8 pupils lower than the national average.
- Is 0.8 pupils higher than the goal of 1.
- Is 5.1 pupils lower in rural schools.
- is 2 pupils higher in community schools.

## Indic. 16 — Are there enough classrooms for basic school pupils?

**Pupil Classroom Ratio**

| Year | District |
|------|------|
| 2005 | 43 |
| 2006 | 41 |
| 2007 | 36 |
| 2008 | 38 |

| | 2008 Dist. | 2008 Prov. | 2008 Natl. |
|---|---|---|---|
| | 38 | 39 | 46 |

| District, 2008 | Rural | Urban |
|---|---|---|
| | 39 | 37 |

| District, 2008 | Comm. | Govt. |
|---|---|---|
| | 33 | 33 |

**What is observed and why is it happening?**

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.
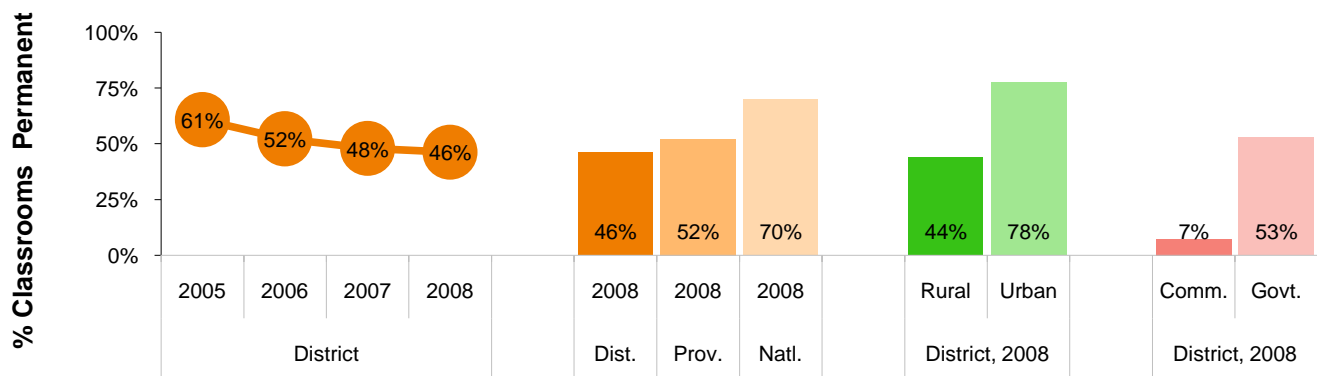
**What action is required?**

The number of pupils sharing each classroom in Senanga:

Is 7 pupils below the national average.
Is 18 pupils above the goal of 20.
2 pupils worse in rural schools than in urban schools.
similar by school type.

## Indic. 17 — Are basic school classrooms in permanent condition?

**% Classrooms Permanent**

| Year | District |
|------|------|
| 2005 | 61% |
| 2006 | 52% |
| 2007 | 48% |
| 2008 | 46% |

| | 2008 Dist. | 2008 Prov. | 2008 Natl. |
|---|---|---|---|
| | 46% | 52% | 70% |

| District, 2008 | Rural | Urban |
|---|---|---|
| | 44% | 78% |

| District, 2008 | Comm. | Govt. |
|---|---|---|
| | 7% | 53% |

**What is observed and why is it happening?**

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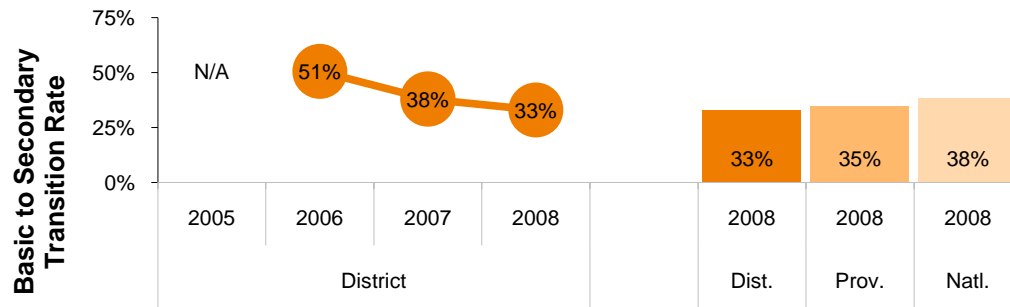
**What action is required?**

The Percentage of classrooms in permanent condition in Senanga:

Is 24 percentage points below the national average
Is 54 percentage points below the goal of 100%
34 percenage points lower for rural schools.
46 percentage points lower for community

**Indic. 18**

### Are students reaching secondary school?

**Basic to Secondary Transition Rate**

N/A — 2005
51% — 2006
38% — 2007
33% — 2008
District

33% — 2008 Dist.
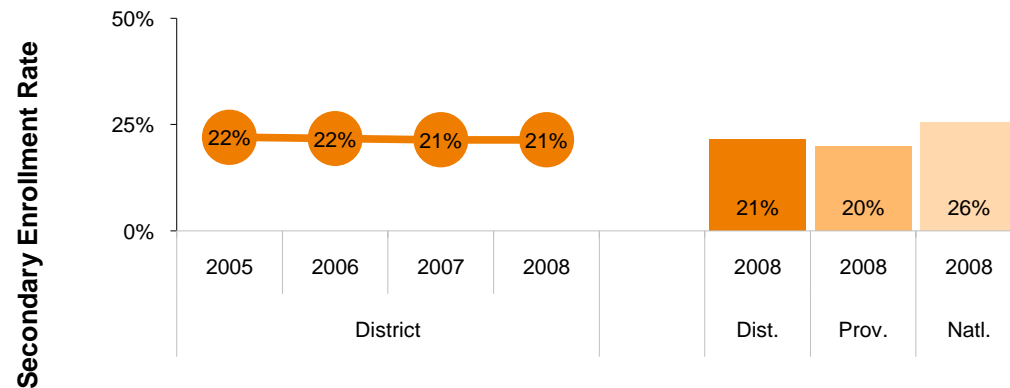35% — 2008 Prov.
38% — 2008 Natl.

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?**

**What action is required?**

**Indic. 19**

### Are all secondary aged children enrolled in secondary school?

**Secondary Enrollment Rate**

22% — 2005
22% — 2006
21% — 2007
21% — 2008
District
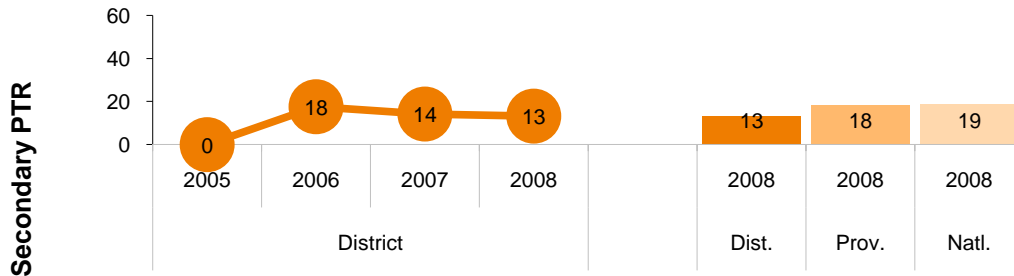
21% — 2008 Dist.
20% — 2008 Prov.
26% — 2008 Natl.

The **Secondary Net Enrollment Rate** is the percentage of secondary-aged children who are enrolled in secondary school. A higher **Secondary NER** means more children are attending school at the correct age.

**What is observed and why is it happening?**

**What action is required?**

**Are there enough secondary school teachers?**

**Secondary PTR**

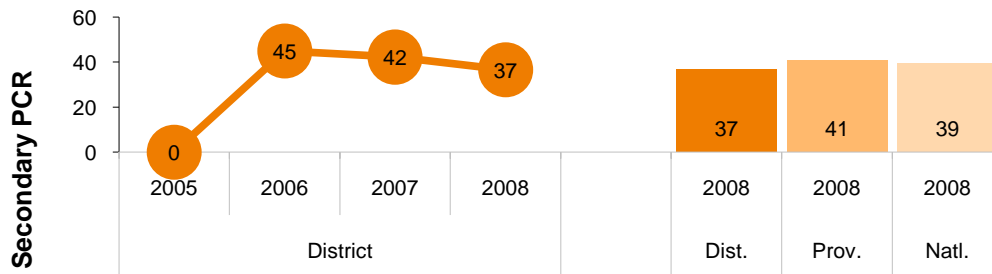| | District | | | | Dist. | Prov. | Natl. |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2008 | 2008 | 2008 |
| | 0 | 18 | 14 | 13 | 13 | 18 | 19 |

The **Secondary Pupil Teacher Ratio** is the average number of secondary pupils for each secondary teacher. A higher **Secondary PTR** means that each teacher is responsible for more pupils.

**What is observed and why is it happening?**

**What action is required?**

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**Are there enough secondary school classrooms?**

**Secondary PCR**

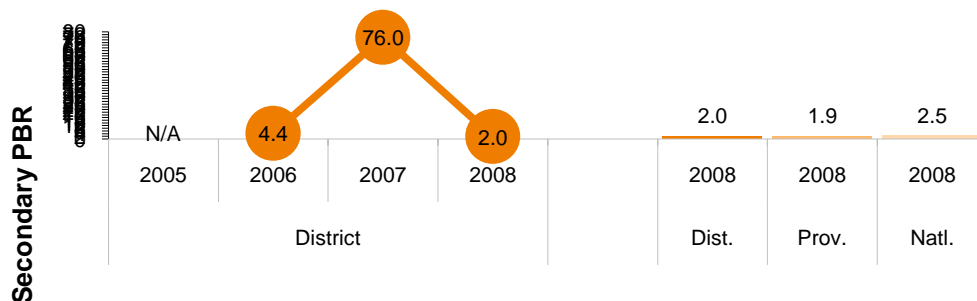| | District | | | | Dist. | Prov. | Natl. |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2008 | 2008 | 2008 |
| | 0 | 45 | 42 | 37 | 37 | 41 | 39 |

The **Secondary Pupil Classroom Ratio** is the average number of secondary pupils for each classroom. A higher **Pupil Classroom Ratio** means a larger number of pupils in each classroom.

**What is observed and why is it happening?**

**What action is required?**

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**Are there enough secondary school math books?**

**Secondary PBR**

| | District | | | | Dist. | Prov. | Natl. |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2008 | 2008 | 2008 |
| | N/A | 4.4 | 76.0 | 2.0 | 2.0 | 1.9 | 2.5 |

The **Secondary Pupil-Book 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?**

**What action is required?**