Introduction

Research into rural–urban inequalities in the supply of education services in sub-Saharan Africa shows the many ways in which rural–urban educational disparities manifest: teacher qualifications are significantly lower among teachers in rural schools; learner–teacher ratios tend to be higher in rural areas; and younger, less qualified and less experienced teachers tend to be posted to rural areas. The research shows a preference among teachers for urban posts. These factors are relevant to the current situation in Namibia.

Namibia is a large and sparsely populated country, with an estimated 2.4 million inhabitants and a population density of only 2.8 people per square kilometre. Distances between towns and cities are long. Over half of the population (52 per cent) live in rural areas.

Remoteness refers to the geographical location of a duty station from a main centre. Remote areas are hard to reach and there is limited availability of basic services and amenities such as water and sanitation, electricity and energy; roads; health facilities; shopping facilities; and general infrastructure.

The Ministry of Education, Arts and Culture (MoEAC) has classified schools into four categories, based on the distance between the duty station of an employee and the nearest urban centre. There are three categories of remoteness: Category 1 is the most remote and Category 3 the least. Teachers in Category 1 schools face the most hardships; hardship for teachers in Category 2 schools is moderate; and while Category 3 schools are still considered to be remote, teachers in those schools face fewer hardships. (Locations in Category 4 are in urban areas with better or excellent services, amenities and infrastructure.)

Poorer outcomes in rural schools across all levels include higher failure, repetition and drop-out rates. The difficult environment in schools in remote areas is a deterrent for teachers. Teacher preferences for an urban location mean there are high rates of teacher turnover in remote areas.

In 2009, the Namibian government introduced a financial incentive to attract and retain teachers in these areas. This brief focuses on the effectiveness of this incentive, and assesses the feasibility of providing teacher housing as an alternative.

About this brief

This brief:
- looks at the educational challenges in remote areas, which include:
  - lower enrolment
  - lower rates of learner retention
  - higher failure, repetition and drop-out rates
  - shortage of qualified teachers at the pre-primary and primary level
  - a higher learner–teacher ratio
- discusses government’s attempts to attract qualified teachers through:
  - financial incentives
  - the provision of teacher housing
- concludes that the provision of housing is the preferable and more cost-efficient option
- makes recommendations in relation to the provision of housing.
The challenges faced by learners and teachers in remote rural schools include quality, access and school commute time. Learners in some regions walk for more than 10 kilometres to reach school every morning. This becomes particularly challenging for learners with disabilities and young learners in terms of accessing education, despite education being free and compulsory. Distance to schools has in many cases resulted in learners having to use boarding facilities (such as hostels), which are not always conducive environments, especially for the very young and those with special needs and disabilities.

Other challenges include the lack of or inadequate access to technology to enhance teaching and learning, the high percentage of unqualified and underqualified teachers, the lack of opportunities for teachers’ continuous professional development, retaining qualified teachers, and high failure and dropout rates. The cost of providing technology to rural schools is particularly high, due to the lack of electricity to access the internet in these schools.

The teacher incentive scheme introduced in Namibia in 2009 has worked to some extent in attracting and retaining qualified teachers in rural regions. However, these schools have not seen a significant improvement in learning outcomes, the progression of learners to higher grades and improved performance in school examinations.
Lower enrolment and higher failure rates, repetition rates and drop-out rates

Failure, repetition and drop-out rates are generally higher among learners in remote schools compared to those in less remote schools. Figure 1 shows that the progressive attrition of learners throughout the school system is heightened in Category 1 and 2 schools. This is, however, partly because some learners will move to schools in the less remote areas for higher grades as many of the remote schools do not continue up until Grade 12. This trend is especially evident at the start of secondary school, where there is a clear spike in Grade 8 in Category 3 and 4 schools. It has to be emphasized that these trends are tentative; in the absence of an individual learner tracking system, proxy indicators have to be used to gauge the extent of regional variance in different categories of remoteness.

Figure 1: Learner survival rates, 2011 to 2018

Learner retention is lower in more remote areas

Enrolment rates in remote schools have been lower in category 1, 2 and 3 schools compared to urban schools in Category 4. The performance of primary school learners in these remote rural schools is considerably worse than that of their peers in urban schools. Studies have shown that Grade 5 and Grade 7 learners in non-remote schools have performed considerably better in Standardized Achievement Tests than their peers in remote schools. Less well-performing learners in remote schools are also less likely to complete the full cycle of education, indicating that there may not be the same levels of support for learners who are underperforming.

Lower pass rates in Grade 10 in more remote areas

Looking at the trend of Grade 10 passes for each remoteness category from 2008 to 2013, (with 23 points as the pass mark), it is evident that learners in remote schools generally underperform compared to learners enrolled in less remote schools.

Other factors associated with remoteness that also impact on teaching and learning include: limited access to electricity and water; less availability of important teaching and learning tools, such as worksheets and textbooks; less access to new information; and the lack of communication technologies and other teaching and learning aids. This would clearly affect the learning environment and short-term outcomes and, in turn, impact on overall learner performance. Without these forms of support, it seems then that learners in remote areas would need particularly strong and well-qualified teachers.

There is also a link between remoteness and learner performance. For example, between 2008 and 2012, learners from schools in Category 1 performed worse in Grade 10 examinations than those in Category 4. This again is in part due to the fact that well-performing learners may be choosing to move to better-performing schools in less rural locations for their external examination years.

Primary school teachers in remote areas are less qualified

There are still regional disparities in the level of qualifications among primary school teachers across the regions in Namibia. It appears that teachers in regions where many schools are considered to be in remote rural areas are less qualified than those in less remote areas. For example, the percentage of teachers with a formal qualification is 66.6 per cent in the Kunene region, 67.1 per cent in Kavango West, and 70.2 per cent in //Kharas. Significantly, Khomas (where there are no Category 1 and Category 2 schools) is the region with the highest proportion of adequately trained primary teachers, with 89.2 per cent of teachers having a formal qualification. The attrition rate of teachers was also high in these regions between 2014 and 2015, at 14.3 per cent in //Kharas, 11.9 per cent in Kavango West and 13.3 per cent in Kunene.
Remote areas need qualified teachers, particularly at the pre-primary and primary levels

In line with the MoEAC’s policy on inclusive education, the ministry’s current strategic plan calls for inclusive and equitable access to quality education for all children. The introduction of Universal Primary Education (UPE) in 2013 and Universal Secondary Education (USE) in 2016 aims to ensure that all learners in Namibia benefit from the same inclusive quality education. A key component of quality education is qualified and dedicated teaching staff.

Deterrents to teachers moving to remote areas

A 2014 study on the impact of incentives for recruiting and training qualified teachers in Namibia’s remote schools has shown that learner–teacher ratios have declined, while the proportion of teachers with postgraduate teacher qualifications has been rising. However, as the discussion above shows, there are still significant gaps. Factors that may act as deterrents to teachers moving to remote areas include the lack of or limited basic amenities and infrastructure such as ablution facilities, water, electricity, decent housing, paved roads, internet connectivity and cell phone reception. Lack of adequate housing may also contribute to reduction in teacher morale and motivation, which will equally have an impact on the teaching and learning outcomes. Where teacher housing is not provided, teachers are often left with no alternative but to live in informal shacks, especially in the most rural schools.

The need for qualified teachers is greatest in pre-primary and primary schools

While there is a shortage of qualified teachers at all levels in remote areas, the shortage of qualified pre-primary teachers is most acute in these areas. Addressing this is a current priority of the MoEAC. It is therefore expected that the bulk of the 2019 cohort of qualified graduates in pre-primary education will be deployed in rural schools.
Government incentives to attract qualified teachers to remote areas

Government is attempting to address the shortage of qualified teachers through incentives in the form of financial compensation and the provision of teacher housing.

Financial incentive scheme
To address the challenge of poor learning outcomes, as well as the overall shortage, in 2009, the then Ministry of Education (MoE) introduced a financial incentive scheme to attract qualified teachers to remote schools.9 To qualify for this remoteness allowance, a teacher must be a qualified teacher stationed at a school that is classified as falling under one of the three categories of remoteness. All teachers who meet the requirements are assigned a remoteness category and are paid a remoteness allowance accordingly.

Figure 2 shows the three remoteness categories and the monthly allowance paid to an individual teacher.

However, it is not clearly established whether the financial incentive has successfully managed to attract qualified teachers to remote schools, given the current shortage of qualified teachers, particularly at the pre-primary and primary levels.10

The construction of teacher housing
In addition to financial incentives, the MoE undertook to construct teacher houses in remote schools as a further incentive. However, only an average of 32 per cent11 of all schools have teacher housing facilities. Figure 3 shows the proportion of schools with teacher housing facilities per region in 2016. The ministry is currently prioritizing the renovation or construction of teacher houses where new schools are being built in remote communities in all regions.
There are two forms of incentives: financial incentives and staff housing.

The greatest housing need is in the most rural and remote regions, such as 88% Kavango West, 80% Kavango East, and 80% Omusati.

Figure 4 shows that the greatest housing need is in the most rural and remote regions, such as Kavango West (88 per cent), Kavango East (80 per cent) and Omusati (80 per cent). These regions also have high levels of poverty. For example, in 2009/10, Kavango accounted for the largest regional share of poverty, at 22 per cent.
To assess whether the government should focus on providing housing to teachers rather than providing financial incentives, the cost of teacher housing is compared to the cost of teacher incentives. The 2014 impact report found that while the incentives as a concept are appreciated by teachers, the real value of these incentives has been eroded, and the teachers themselves put more value on the ‘lived experience’ of teaching in remote areas. Respondents stressed the importance of the standard and quality of housing.12

Figure 5: Budget for construction of teacher housing facilities in N$ million, 2014/15–2017/18

Figure 5 shows the budget13 allocated to the construction of teacher housing nationally between 2014/15 and 2017/18. There is clearly a declining trend. Most notable is the decline between 2016/17 and 2017/18, which reflects the currently constrained economic climate.

Regarding the cost of providing housing, the 2014 impact report noted: “Assuming housing is needed for half of Category 1 teachers at an average unit cost of N$0.5 million (the high cost is to provide water), the cost of providing housing would be only N$200 million (US$18.8 million). Thus it is possible to provide all Category 1 teachers with housing within five years by spending about N$40 million (US$3.8 million) per year on their housing.”

The actual expenditure data on the construction of houses is not available. The MoEAC disburses funds to regions for the construction of teacher houses and considers this to be expenditure on its part. The regions then spend the funds on the construction of houses based on the approved budget. However, regions do not provide data on their actual expenditure on teacher houses. This lack of accountability is a cause for concern: without effective reporting, the use of public funds can easily be mismanaged.

Figure 6 compares the budget for the construction of teacher housing facilities and expenditure on the financial incentive for 2014/15 and 2015/16. Evidence suggest that financial incentives themselves have not had a significant impact on the performance of learners in remote schools.14 This suggests that offering housing instead of financial incentives should not have negative implications for learner outcomes. The fact that housing is viewed as the more valuable provision, coupled with the fact that the provision of housing costs less, suggests that funding of teacher houses should be prioritized over financial incentives.

### Figure 5: Budget for construction of teacher housing facilities in N$ million, 2014/15–2017/18

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget (N$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/15</td>
<td>87</td>
</tr>
<tr>
<td>2015/16</td>
<td>92</td>
</tr>
<tr>
<td>2016/17</td>
<td>80</td>
</tr>
<tr>
<td>2017/18</td>
<td>40</td>
</tr>
</tbody>
</table>


### Figure 6: Budget for construction of teacher housing facilities and expenditure on the financial incentive 2014/15–2015/16 (N$ million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget (N$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/15</td>
<td>87</td>
</tr>
<tr>
<td>2015/16</td>
<td>168</td>
</tr>
<tr>
<td>2016/17</td>
<td>250</td>
</tr>
</tbody>
</table>

Construct teacher housing in the most under-served and remote areas. Given the limited budget, the provision of teacher housing should be targeted to specific under-served areas and schools, particularly primary schools where the need for qualified teachers is greatest.

There should be a strong focus on teacher housing in primary schools. Primary schools host pre-primary classes in addition to primary grade classes. Improving teacher housing facilities can also help attract qualified teachers at the pre-primary level.

Strengthen partnerships with the private sector to construct teacher accommodation in regions where they are constructing schools or adding classrooms to existing schools.

Regions must include data on housing construction in their annual reports. The MoEAC should make it compulsory that each region report on the number of teacher housing units constructed, the renovation and upgrading of existing houses, and the expenditure per housing unit against the approved budget. This will improve both accountability and efficiency in the use of public funds.

Endnotes
1 Bennell, P. and Akyeampong, K. ‘Teacher Motivation in Sub-Saharan Africa and South Asia’ Researching the Issues 2007, Department for International Development.
4 ‘The impact of incentives for the recruitment and retention of qualified teachers in Namibia’s remote schools, 2014.’ (Publication of the findings of a study commissioned by the MoEAC and overseen by UNICEF)
5 ‘The impact of incentives for the recruitment and retention of qualified teachers in Namibia’s remote schools, 2014.’ (Publication of the findings of a study commissioned by the MoEAC and overseen by UNICEF)
6 ‘The impact of incentives for the recruitment and retention of qualified teachers in Namibia’s remote schools, 2014.’ (Publication of the findings of a study commissioned by the MoEAC and overseen by UNICEF)
9 ‘The impact of incentives for the recruitment and retention of qualified teachers in Namibia’s remote schools, 2014.’ (Publication of the findings of a study commissioned by the MoEAC and overseen by UNICEF)
10 See Assessment of Teacher Training and Development Needs to Ensure ‘Education for All’, 2013.
11 Education Management Information System (EMIS), 2016.
12 ‘The impact of incentives for the recruitment and retention of qualified teachers in Namibia’s remote schools, 2014.’ (Publication of the findings of a study commissioned by the MoEAC and overseen by UNICEF)
13 Expenditure data were not available at the Ministry of Education, Arts and Culture.
14 ‘The impact of incentives for the recruitment and retention of qualified teachers in Namibia’s remote schools, 2014.’ (Publication of the findings of a study commissioned by the MoEAC and overseen by UNICEF)