

AFRICA HUMAN DEVELOPMENT SERIES



Teachers for Rural Schools

Experiences in Lesotho, Malawi,
Mozambique, Tanzania, and Uganda

Aidan Mulkeen and Dandan Chen, Editors



THE WORLD BANK



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Foreword

Achieving universal primary education and “Education for All” (EFA) is one of the development priorities within the context of the Millennium Development Goals. In many Sub-Saharan African countries, one of the key challenges is to provide good-quality basic education to the 10–20 percent of primary school-age children who are still out of school. Among these out-of-school children, the most difficult to reach are living in rural and remote areas. In recent years, large investments have greatly improved school infrastructure and access, but finding effective ways of supplying teachers to schools in rural and remote areas remains a key policy concern. To examine the issues related to providing teachers for rural schools, five countries—Lesotho, Malawi, Mozambique, Tanzania, and Uganda—prepared national case studies and, along with representatives from Zambia, came together for a workshop on “Policy, Planning, and Management of Rural Primary School Teachers” in Lesotho in May 2005. Building on the national reports, this workshop considered the challenges of teacher provision in rural areas and examined the viable policy options.

Teacher deployment policy and practice result in marked inequities in teacher distribution, leaving small primary schools in remote locations less well served. This problem is difficult to resolve, as teachers are frequently unwilling to locate in rural areas. Many countries report the presence of unemployed teachers in urban areas and vacant positions in rural areas. African countries have used a variety of measures to address these challenges, including incentives for teachers who locate in rural areas and mechanisms to recruit local people as teachers.

Small schools, which are necessary to serve small communities, present particular challenges to the efficiency of teacher utilization. Existing practices may leave some teachers, particularly those in the higher

grades, with very small numbers of students. Multigrade instruction offers a viable alternative, but this is rarely integrated into policies and supported with appropriate teacher training, school curricula, and instructional materials for the teaching strategy to develop.

Isolated schools present challenges for teacher supervision and support. Classroom teachers need continuing professional support and supervision, but provision is hampered by logistical difficulties. Some countries are turning to localized systems of support and supervision to ensure coverage in remote areas. Many countries are also trying to strengthen in-school support and monitoring systems, including training head teachers and senior staff, to reduce the need for external supervision.

This publication is based on case studies of the issues affecting rural teachers in five countries. These case studies provide rich insights into the policy options and the potential and drawbacks that they offer. We hope that the experiences of these countries will provide valuable lessons in overcoming the constraints and tackling the challenges of improving teacher management to achieve EFA goals.

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Abbreviations

ADPP	<i>Ajuda de desenvolvimento de povo para povo</i> [Humana People to People] (Mozambique)
CFPP	<i>Centro de formação de professores primários</i> [primary teacher training college] (Mozambique)
COSC	Cambridge Overseas School Certificate
DAPP	Development Aid from People to People
DFID	Department for International Development (U.K.)
DRT	District resource teacher
DTEP	Distance Teachers Education Programme (Lesotho)
EFA	Education for All
EMIS	Education Management Information System (Malawi)
EP1	Lower primary grades 1–5 (Mozambique)
EP2	Upper primary grades 6–7 (Mozambique)
ES1	Lower secondary grades 8–10 (Mozambique)
ES2	Upper secondary grades 11–12 (Mozambique)
ESDP	Education Sector Development Programme (Tanzania)
ETP	Education and Training Policy (Tanzania)
GDP	Gross domestic product
GER	Gross enrollment rate
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
IMAP	<i>Instituto de magistério primário</i> [primary teacher training college] (Mozambique)
JCE	Junior Certificate Examination (Malawi)
LCE	Lesotho College of Education
M	Maloti (Lesotho's currency)
MIITEP	Malawi Integrated In-service Teacher Education Programme
MK	Malawi Kwacha (currency)

MOET	Ministry of Education and Training (Lesotho)
MSCE	Malawi School Certificate Examination
Mt	Meticais (Mozambican currency)
NER	Net enrollment rate
PEA	Primary education adviser
PEDP	Primary Education Development Plan (Tanzania)
PIEP	Primary In-service Education Programme (Lesotho)
PQTR	Pupil-qualified teacher ratio
PSLCE	Primary School Leaving Certificate Examination
PTR	Pupil-teacher ratio
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
T Sh	Tanzania shillings (currency)
TSC	Teaching Service Commission (Lesotho)
TSD	Teaching Service Department (Lesotho)
TTC	Teacher training college (Malawi)
TUM	Teachers Union of Malawi
U Sh	Uganda shillings (currency)
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UP	Universidade Pedagógica [pedagogical university] (Mozambique)
US\$	United States dollars (currency)
WEC	Ward education coordinator (Tanzania)
ZIP	<i>Zona de influencia pedagógica</i> [school clusters] (Mozambique)

Executive Summary

As countries in Sub-Saharan Africa expand access to primary education, the remaining out-of-school children are often in hard-to-reach rural areas. Provision of educational services for these children presents a series of problems, in particular, related to the deployment and management of teachers in rural schools. To examine the issues, representatives from six countries—Lesotho, Malawi, Mozambique, Tanzania, Uganda, and Zambia—came together for a workshop on “Policy, Planning, and Management of Rural Primary School Teachers,” which was held in Lesotho in May 2005. Building on national reports prepared by each country, this workshop identified the main challenges in teacher provision as being in the areas of teacher deployment, teacher utilization, and teacher management. The workshop then examined the viable policy options for addressing the challenges in each of those areas.

CHALLENGES AND ISSUES

Low educational attainment remains a key constraint on fighting poverty in Sub-Saharan Africa. The 25 countries at the bottom of the human development index of the United Nations Development Programme are in Sub-Saharan Africa. The average educational attainment of adults is only three years—half the historical minimum threshold for sustaining economic growth. Without first improving this base of human capital, these countries cannot attain the level of growth needed to reduce poverty and reach the Millennium Development Goals.

Positive developments have been evident during the past decade in Sub-Saharan Africa. In many countries, better macroeconomic and education policies have been adopted, governance has improved, and civil strife

has diminished, laying the foundations for building the needed growth in education. Data for recent years show a turnaround in education: the gross enrollment rate in Sub-Saharan Africa increased from 78 percent in 1998–99 to 84 percent in 2000–01 and to 91 percent in 2002–03, reflecting broad-based growth in access not seen since the 1970s. However, key challenges remain, including (a) enrolling the last 10–15 percent of out-of-school children, including a growing number of HIV/AIDS orphans (one of every 10 African children by 2010); (b) improving learning outcomes; and (c) reducing dropout rates.

The degree to which the African countries can address the remaining challenges hinges on their ability to deal with the issues facing rural primary schools. Many factors contribute to the low educational participation and learning outcomes in rural areas. On the demand side, rural children may be less interested in attending school due to high opportunity costs and low returns. Parents in rural areas often have a relatively low level of education and, as a result, may attach a low value to schooling and be less able to help their children learn. Further, homes in rural areas are often ill equipped to allow children to study, often lacking facilities such as electricity. Rural households are also less able to mitigate the impact of HIV/AIDS on household conditions, resulting in high dropout rates among children from the affected households.

In many cases, government's supply-side interventions aimed at providing universal primary education also fail to narrow the urban-rural gap. The largest public investment in primary education—the provision of teachers—is facing several difficulties in meeting the need for teachers in rural areas. These difficulties lie in *deploying teachers* to rural schools and improving the efficiency and effectiveness of *teacher utilization* and *teacher management* in rural areas.

DEPLOYMENT OF TEACHERS TO RURAL SCHOOLS

In many countries, urban areas have qualified teachers who are unemployed, while rural areas have unfilled posts. This pattern of simultaneous surplus and shortage is strong evidence that the problem of finding teachers for rural schools will not be solved simply by producing more teachers. There are quite a few constraints on teacher deployment to rural schools.

The rural-urban disparity in living conditions is the major constraint on attracting teachers to rural areas. Many countries report that teachers express a strong preference for urban postings because living conditions in general are so much better in urban than in rural areas. Teachers often

express concerns about the quality of accommodations; the working environment, including classroom facilities and school resources; and access to leisure activities and public facilities in rural areas.

Limited opportunities for professional advancement in rural areas also discourage teachers. Urban areas offer teachers easier access to further education and training, while rural areas offer limited opportunities to engage in developmental activities such as national consultations, including those with representative organizations. Teachers in rural areas may even find it more difficult to secure their entitlement to professional development from regional educational administrations and must overcome many obstacles, including corruption by officials.

Diversified local languages and ethnicities can also create barriers for teachers' immersion in rural communities. Deployment is further complicated by the presence of multiple ethnic or linguistic groups within a country. Teachers may be reluctant to locate in an area where the first language is different from their own. For example, in Malawi, student teachers come from various ethnic groups with different first languages, which can pose problems for their deployment in areas with a different dominant language group. Similarly in Ghana, the first language is not a criterion for teacher posting but may be very relevant to the experience of teachers. Where a teacher is not fluent in the language spoken locally, he or she may feel isolated professionally and socially.

Socioeconomic background may also make teachers reluctant to be deployed to less-developed parts of the country. This is particularly the case when the overall access to tertiary education is limited and the majority of higher education students are from the better-off urban families.

There are also specific difficulties of placing female teachers in rural schools. Female teachers may be even less willing to accept a rural posting than their male counterparts, resulting in rural areas having fewer female teachers than urban areas. In some cases, posting single women to unfamiliar areas may cause cultural difficulties and even be unsafe. For an unmarried woman, posting to an isolated rural area may also be seen to limit her marriage prospects. In some countries, single women are not posted to rural areas as a matter of policy. For a married woman, a rural posting may mean separation from her family, as her husband may be unwilling or unable to move for cultural or economic reasons.

The gender distribution of teachers has important implications for gender equity in school enrollment. Across Sub-Saharan Africa, enrollment and retention are lower for girls than for boys. The underrepresentation of girls tends to be greatest in rural areas and the most disadvantaged

communities. While a number of measures can be shown to have an impact on the retention of girls in school, one of the important factors is the presence of female teachers. Female teachers can help to make the school environment more supportive and nurturing for girls. Many girls in Africa are forced to drop out of school because school administrators are insensitive to gender issues. In addition, the presence of females in positions of responsibility and leadership in schools is an important factor in creating positive role models for girls.

Health and HIV/AIDS concerns also contribute to teachers' unwillingness to work in rural schools. Living in rural areas often involves poor access to health care. The prevalence of HIV in rural areas and the lack of medical facilities have made rural postings even less attractive to teachers. The importance of HIV for teachers should not be underestimated. Across Africa, an estimated 260,000 teachers, 9.4 percent of the total employed in 1999, could die of AIDS-related illnesses over the next decade. In South Africa, HIV testing of more than 17,000 teachers revealed that 12.7 percent were HIV positive, and the prevalence rates were higher among rural teachers and among younger, less experienced teachers. For teachers using antiretroviral treatment, reliable access to medical facilities is even more critical.

In some cases, teachers who are ill are posted to urban centers to allow them access to medical services. Although they do little to enhance the teaching in urban areas, their absence from rural areas further enhances the rural-urban divide. In Ghana, poor health is the most common reason given for early transfer. In Uganda, the policy is that teachers with health problems should be posted to schools near medical facilities. Mozambique is considering a similar policy.

TEACHER UTILIZATION

The distance to school is a major barrier to children's attendance. A school mapping study in Chad showed that enrollment fell very rapidly as distance to school increased. In fact, when the school was 1 kilometer from the village, enrollment was less than half that seen when the school was located within the village. Children in Chad may be particularly sensitive to distance because of the dispersed population and traditional rivalries between villages. However, recent data from Lesotho suggest that 69 percent of children who had never been to school lived more than a 30-minute walk from a school.

Provision of schools near children's homes would involve establishing a greater number of small schools. A study calculated that a population of

980 people is required to make full use of a primary school of seven classes with 35 pupils in each class, assuming that all children in the area attend school. Yet in countries like Sierra Leone, more than 65 percent of the population lives in settlements of less than 900 people. Clearly, a school with an enrollment capacity of 245 students (35 students in seven classes) cannot be a suitable modality for the provision of education in rural areas with such dispersed populations.

Small schools present challenges for the efficient use of teachers. Small school populations result in small class sizes. Where there is significant student dropout, class size gets even smaller, particularly in higher grades. In addition, teacher specialization in subjects can drive the pupil-teacher ratio even lower.

TEACHER MANAGEMENT

The physical remoteness of a school may encourage absenteeism. In some countries, the need to travel to collect pay is a major cause of teacher absenteeism. For example, in Lesotho, most rural teachers leave the school to collect their salary check at the end of each month. This can involve an absence of up to three days, leaving the school deserted or with only one teacher left behind to maintain order. Many rural teachers are posted in locations away from their family or their home area, increasing the pressure to take extended weekend breaks to visit home. When the government makes it possible for teachers to receive their salary through their bank, teachers still have to travel to withdraw money and buy commodities. Medical problems could involve an absence of three or four days for teachers in remote areas.

Monitoring of teachers is also more difficult in rural areas. First, school principals often travel to district offices to make administrative arrangements. In Uganda, for example, head teachers often leave their school to negotiate teacher transfers or to ensure that their teachers receive their salary increments. The more remote the school, the longer the head teacher is away from the school for these purposes. Second, remote schools are less likely to be visited by external inspectors. In Malawi, for example, absenteeism is more frequent in remote schools where the atmosphere is more relaxed and visits by inspectors are less frequent. Third, the monitoring of teachers by the local community is often weaker in remote rural areas. Residents of remote communities tend to be less well educated and more disadvantaged economically and socially. As a result, they feel less empowered to challenge the authority of teachers.

Teacher disciplinary measures are often limited by cumbersome systems for dealing with difficulties in remote areas. In Uganda, teachers who misbehave are given a warning by the head teacher. If they misbehave again, first they receive a formal warning from the inspector of schools and then the case is referred to the district service commission. Poor communication with rural schools can make these processes slow, diminishing their effectiveness. Furthermore, in some countries, the existing practice of transferring misbehaving teachers to remote rural areas without adequate supervision further aggravates the situation in rural schools.

Teachers in remote schools are also more likely to be the direct victims of administrative failures, which undermine teacher morale and damage the system. One frequently mentioned administrative failure is the delay in paying teachers' salaries and allowances. Teachers in rural schools often feel neglected by the authorities and perceive that they are treated unfairly regarding access to promotion, transfers, and other benefits. Such perceptions result in lower morale among rural teachers.

PROMISING SOLUTIONS

Incentives can be used to encourage teachers to locate in rural areas. Teacher housing is one of the most frequently used incentives and, although it can be expensive to provide, is clearly required in areas where suitable housing is not available for rent. The availability of safe housing is particularly important in encouraging female teachers to locate in rural areas. Access to housing is necessary, but not sufficient, to ensure that teachers locate in rural schools. Additional incentives in the form of bonus payments or hardship allowances are often paid. However, the impact of financial incentives is often limited by the small scale of the additional payment and poor targeting. To be effective, incentives need to be significant in scale, carefully targeted to remote schools, and tied to remaining in the post (teachers who transfer to another school should not retain the hardship allowance). In Zambia, the incentive payment is calculated on a sliding scale, based on distance from the nearest tarred road.

Recruiting local people as teachers may help to address the deployment problem. In Lesotho, where the selection of teachers is done by school management, schools are able to employ local people who are more likely to accept the post and remain in it. This results in recruitment of less-qualified teachers in rural schools but provides a stable cohort of teachers even in the most remote schools.

Teacher utilization in small schools can be improved by the use of multigrade teaching and cluster schools. Multigrade teaching can be very effective, but in Africa it is frequently seen as an emergency measure. With proper training, multigrade teaching could improve the efficiency of teacher utilization in small rural schools. Cluster schools allow the youngest children to be taught near their homes, while older children move to a larger school. However, this often results in high student attrition at the point where they are expected to move to the larger school. Even with these possibilities for improving efficiency, policy makers could reasonably expect small schools to operate with lower pupil-teacher ratios than larger schools and would have to refine teacher allocation policies to reflect this reality.

The high cost of transport makes it difficult to manage remote schools from a central headquarters, but three solutions are promising. First, in-school management systems could be strengthened. Head teachers need stronger managerial skills and a greater awareness of their responsibilities as school managers; senior teachers could be asked to take responsibility for both mentoring and supervising colleagues. Second, decentralized supervision and support systems could provide a mechanism for institutionalizing regular visits by a senior official to the head teacher. Third, given appropriate support and training, communities could be involved in monitoring their school.

Teacher Deployment, Utilization, and Management: Policy and Practice

Since the early 1990s the global community has recognized the importance of universal education, both as an enabler of economic growth and as a foundation for healthy and democratic societies. Since the adoption of these goals, the number of schools has exploded throughout the developing world, and more children are in school than ever before.

Despite the progress made, many countries will not reach the targets. Africa presents a particular problem. As most countries in other regions are set to reach the targets, the problem of missed schooling is increasingly concentrated in Africa. The 25 countries at the bottom of the human development index of the United Nations Development Programme are in Sub-Saharan Africa. The average educational attainment of adults is only three years—half the historical minimum threshold for sustaining growth. Without first improving this base of human capital, Sub-Saharan African countries cannot attain the level of growth needed to reduce poverty and reach the Millennium Development Goals. The Education for All (EFA) monitoring report shows that a majority of African countries may be seriously off track with regard to their quest for EFA by 2015 (UNESCO 2005).

After a period of stagnation in the 1980s and early 1990s, participation in education has made great strides in the last decade. In many countries, better macroeconomic and education policies have been adopted, and there is better governance and less civil strife—the foundations for building the needed growth in education. Data for recent years show a turnaround in education in African countries: the gross enrollment rate (GER) increased from 78 percent in 1998–99 to 84 percent in 2000–01 and to 91 percent in 2002–03, reflecting broad-based growth in access not seen since the 1970s (see figure 1.1). These positive developments give hope that progress in the Sub-Saharan African countries during the period 2005–15 may resemble the strong performance in the 1960s and 1970s.

Figure 1.1 Gross Enrollment Rate in Primary Education in Sub-Saharan Africa, 1960–2002



Source: World Bank Development Data Platform database.

More than 90 percent of children in African countries enter school, two-thirds of them reach the final grade, and half of those master the expected basic skills. This has shifted the challenges for reaching the overall goal of universal primary education from simply increasing admission generally to (a) enrolling the last 10–15 percent of out-of-school children, including a growing number of HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) orphans (one of every 10 African children by 2010); (b) improving learning outcomes; and (c) reducing dropout rates.

The degree to which the African countries can address these challenges hinges on their ability to deal with the issues facing rural primary schools. In particular, countries need to pay much more attention to issues related to teacher training, support, deployment, management, and utilization, which are critical if all of those still out of school are to be admitted and the quality of education is to be improved overall.

Maintaining progress will require continuing the reforms to (a) implement cost-effective methods of enrolling poor and disadvantaged children (for example, lowering the direct and indirect costs of education); (b) improve quality (for example, providing training materials, using improved instructional methods, instituting better planning and management); and (c) extend the provision of secondary education for primary school graduates.

THE PROBLEM OF RURAL SCHOOLS

In general, enrollment has expanded more rapidly in urban than in rural areas, and as countries approach universal enrollment, the children who never attend school are often those in the least developed rural areas. Many factors contribute to lower educational participation in rural than in urban areas. Some of these factors are on the demand side of education, while others are on the supply side.

On the demand side, rural children may be less interested in attending school. First, the opportunity costs of attending school are often higher in rural areas (Lockheed and Verspoor 1991: 158). Many rural households depend on their children for help at busy times of the agricultural year such as during the harvest. Schools are usually designed to follow a rigid schedule in terms of both time of the day and term dates and often expect children to be in school during busy periods in the agricultural calendar (Taylor and Mulhall 2001: 136).

Second, parents in rural areas often have a lower level of education and may attach a lower value to schooling. This perceived lack of relevance of schooling may be enhanced by a rigid curriculum, often designed for a context (and sometimes culture) removed from that in rural areas. Rural schools rarely adapt the curriculum to make use of local examples or to link the curriculum to local needs (Taylor and Mulhall 2001).

Third, even when parents place a value on schooling, they may be less able to help their children to learn. Parents in rural areas are less likely to be educated themselves and thus have less ability to provide educational support for their children. Some report that they are embarrassed to discuss school topics with their children because of their own lack of knowledge. Further, homes in rural areas are often ill equipped to meet the educational needs of children and often lack facilities like electricity (Taylor and Mulhall 2001).

In summary, children in rural areas may be considered more difficult to educate. They are likely to have less parental encouragement to go to school and more alternative demands on their time. When they attend school, they may find the curriculum less relevant to their lives, and they may receive less support for their learning from the home environment.

On the supply side, governments may find it more difficult to supply quality educational services in rural areas. Three factors combine to weaken the quality of teaching in rural areas. First, in many African countries, teachers prefer to teach in urban areas. As a result, rural schools may be left with empty posts or have longer delays in filling posts. Even if posts

are filled, rural schools may have fewer qualified teachers, if the better qualified teachers have a greater choice of jobs. Sometimes the rural schools have less experienced teachers, as the more experienced teachers find ways to obtain a post in a more desirable school.

Second, teachers in rural schools may teach less than their counterparts in urban areas. Any trip away from the rural area—to visit a doctor or family member, collect pay, and attend in-service training—may involve long journeys and missed school days. In addition, where teachers walk long distances to school, they tend to start class late and finish early. As transport difficulties often make supervisory visits from inspectors less frequent in isolated schools, there is little to prevent a gradual erosion of instructional time during the school year.

Third, even when teachers are teaching, the quality of their work may be lower. Rural teachers often have less access to support services than their urban counterparts and fewer opportunities to attend in-service courses. In some cases, they may have difficulty accessing books and materials. In addition, parents tend to be less educated and therefore less likely to monitor the quality of teaching or to take action if the quality of teaching is poor.

The combination of these demand and supply factors means that children in rural areas are the most difficult to engage in education and also receive a lower-quality education. It is hardly surprising, then, that rural areas show lower participation in education and lower achievement (see table 1.1). Addressing this disparity is a major challenge for education policy makers. Some action may be taken to address the demand-side issues. Parental perception of education might be enhanced through awareness-raising activities, and curricula could be modified and made more appropriate. However, it is clear that much of the solution lies on the supply side—that is, in ensuring adequate numbers of appropriately trained, motivated, and engaged teachers in rural schools.

GETTING TEACHERS TO RURAL SCHOOLS: DEPLOYMENT ISSUES

The problem of teachers is often considered a problem of numbers. While there is no doubt that many countries face challenges of teacher supply, there are equally serious challenges of teacher deployment. In many countries, urban areas have qualified teachers who are unemployed, while rural areas have unfilled posts. This pattern of simultaneous surplus and shortage is strong evidence that *the problem of teachers for rural schools will not be solved simply by producing more teachers*. Policies are needed to ensure that teachers reach the schools where they are needed.

Table 1.1 Summary of Rural-Urban Differences in Schooling in Five Countries

Indicator	Lesotho	Malawi	Mozambique	Tanzania	Uganda
Teacher qualification	In the lowlands, 24 percent are unqualified; in the mountains, 51 percent are unqualified.	Data show no rural-urban differences. (However, more detailed categorization might change this.)	Significant differences between and within provinces. In Maputo City, 8 percent of teachers are untrained; in Manica Province, 58 percent are untrained.	Better-qualified teachers are in urban areas: 68 percent of grade A teachers are in Dar es Salaam, and 39 percent are in Lindi.	Some, mainly rural and insecure, areas have many vacancies and use untrained teachers.
Pupil-teacher ratio and pupil-qualified teacher ratio	There is little variation in PTR, but great variation in teacher qualifications: 24 percent of teachers are not qualified in the lowlands; 51 percent are not qualified in the mountains.	Average PTR is 44 in urban areas and 77 in rural areas. Differences are even greater in some remote zones, such as Kalulu (139).	PTR is 54 in Maputo and 67 in Manica. PQTR is 59 in Maputo and 162 in Manica.	Average PTR is 58. PTR is 53 in Dar es Salaam and 74 in Kigoma.	Average PTR is 56.
Student achievement	Repetition rates are higher and SACMEQ test results are lower in rural schools.	SACMEQ results for reading and math are lower in rural schools.	School test results do not show differences, but SACMEQ reading and math results are lower in rural schools.	SACMEQ results for reading and math are lower in rural schools.	SACMEQ results for reading and math are lower in rural schools.
Teacher gender	Almost 80 percent of teachers are female. Even in mountain areas, 70 percent of teachers are female.	82 percent of urban teachers are female, compared with 31 percent of rural teachers.	About 80 percent of teachers are female. Female teachers are reluctant to accept postings to rural schools.	Female teachers are concentrated in urban schools and scarce in rural schools.	It is difficult to attract and retain females at remote rural schools.

Source: Data are from the five country reports in the current volume.

Note: PTR = pupil-teacher ratio; PQTR = pupil-qualified teacher ratio; SACMEQ = Southern and Eastern Africa Consortium for Monitoring Educational Quality.

In many countries, teachers express a strong preference for urban postings. In Ghana, more than 80 percent of teachers said they prefer to teach in an urban school (Akyeampong and Lewin 2002: 346). Teachers may prefer an urban posting for a number of reasons. One is that the quality of life may not be as good in rural as in urban areas. Teachers have expressed concerns about the quality of accommodation (Akyeampong and Stephens 2002: 269–70), classroom facilities, school resources, and access to leisure activities (Towse and others 2002: 645). A second major concern is related to health. Teachers may perceive that living in a rural area involves a greater risk of disease (Akyeampong and Stephens 2002: 269–70) and less access to health care (Towse and others 2002: 645).

Teachers may also see rural areas as offering fewer opportunities for professional advancement. Urban areas offer easier access to further education (Hedges 2000). In addition, teachers in rural areas are less likely to have opportunities to engage in other developmental activities or in national consultations, including those with representative organizations. Teachers in rural areas may even find it more difficult to secure their entitlements from regional educational administrations, sometimes to the extent of having to put up with obstacles or corruption by officials.

The problem is further exacerbated in countries where the majority of new teachers come from a different background than the students. In Ghana, teachers tend to come from a higher socioeconomic background than the average for the country as a whole (Akyeampong and Stephens 2002) and to be disproportionately from an urban area. Hedges (2002: 364) describes their reluctance to accept a rural position:

There is a profound fear among newly trained teachers with a modern individualistic outlook that if you spend too much time in an isolated village without access to further education, you become “a village man,” a term which strongly conveys the perceived ignorance of rural dwellers in the eyes of some urban educated Ghanaians.

GENDER

Deployment patterns also have implications for gender equity. Across Sub-Saharan Africa, enrollment and retention in school are lower for girls than for boys. The underrepresentation of girls tends to be greatest in rural areas and among the most disadvantaged communities. While a number of measures can be shown to have an impact on the retention of girls in school, one of the important factors is the presence of female teachers (Bernard 2002). Female teachers can help to make the school environment safer for girls. Many girls in Africa are forced to drop out of school

because school administrators are insensitive to gender issues, including sexual abuse and intimidation (PANA 2003). In addition, the presence of females in positions of responsibility and leadership in schools is an important factor in creating positive gender role models.

Female teachers may be even less willing to accept a rural posting than their male counterparts, and rural areas may have fewer female teachers than urban areas (Göttelmann-Duret and Hogan 1998: 21–22). In some cases, posting single women to unfamiliar areas may cause cultural difficulties and even be unsafe (Rust and Dalin 1990; VSO 2002: 34). For an unmarried woman, posting to an isolated rural area may also be seen to limit her marriage prospects (Hedges 2000). In some countries, such as Ghana, single women are not posted to rural areas as a matter of policy (Hedges 2002: 358). For a married woman, a rural posting may mean separation from her family, as the husband may not move for cultural or economic reasons (Gaynor 1998). Where women have been posted to rural areas, they “may come to see themselves as having been treated unfairly by the system and thus seek early transfers” (Hedges 2002: 358).

HIV/AIDS

Although HIV/AIDS is a threat in all areas, it is becoming a greater threat in rural areas than in cities. “More than two-thirds of the population of the 25 most-affected African countries lives in rural areas. . . . Information and health services are less available in rural areas than in cities. Rural people are therefore less likely to know how to protect themselves from HIV and, if they fall ill, less likely to get care” (FAO 2005).

The prevalence of HIV in rural areas and the lack of medical facilities have made rural postings even less attractive to teachers (Smith and McDonagh 2003: 35). The importance of HIV for teachers should not be underestimated. Across Africa, an estimated 260,000 teachers, 9.4 percent of the total employed in 1999, could die of AIDS-related illnesses over the next decade (Bennell, Hyde, and Swainson 2002). In South Africa, HIV testing of more than 17,000 teachers revealed that 12.7 percent were HIV positive, and the prevalence rate was higher among rural teachers and among younger, less experienced teachers (CSA 2005).

In some cases, teachers who are ill are posted to urban centers, where they can obtain access to medical services. Although these teachers do little to enhance the teaching in urban areas, their absence from rural areas exacerbates the rural-urban divide (Kelly 2000: 68). In Ghana, poor health is the most common reason given for early transfer (Hedges 2002). In Uganda, the policy is that teachers with health problems should be posted to schools near medical facilities. Mozambique is considering a similar policy.

LANGUAGE AND ETHNIC GROUPS

Deployment is further complicated by the presence of multiple ethnic or linguistic groups within a country. Teachers may be reluctant to locate in an area where the first language is different from their own. In Malawi, teachers come from different tribes with different first languages, which can pose problems for their deployment in areas with a different dominant language. Similarly in Ghana, the first language is not a criterion for posting but may be very relevant to the experience of teachers (Coultas and Lewin 2002). Where a teacher is not fluent in the language spoken locally, he or she may be isolated, professionally and socially, in the area (Brodie, Lelliott, and Davis 2002).

DEPLOYMENT CASE STUDIES

Countries deal with the challenge of deployment in different ways, as illustrated by the cases of Mozambique, Malawi, and Lesotho.

Mozambique. Decisions regarding teacher deployment are made at the provincial level. Each province trains, recruits, and deploys its own teachers. The graduates from each provincial teacher training college are required to teach in their home province. Recruitment of newly qualified teachers is normally automatic, but provinces may have insufficient funds to recruit all of the newly qualified teachers.

Teacher training capacity is distributed unevenly. Maputo City District trains more teachers than it requires, and teachers are allowed to volunteer for transfer to another province. However, only 107 teachers agreed to transfer in 2004. This imbalance is reflected in striking differences between the provinces (table 1.2). In Maputo City, only 8 percent of EP1 (early primary) teachers were untrained, compared with 62 percent in Niassa. Rural provinces have both a higher pupil-teacher ratio (PTR) and a higher ratio of pupils to qualified teacher (PQTR). This reflects a greater number of unfilled posts and a greater proportion of untrained teachers in rural areas.

Further issues related to teacher deployment arise *within* provinces. Newly qualified teachers are assigned to schools based on needs identified at the provincial level. Many teachers are happy to work in provincial towns but reluctant to work in the more isolated areas within a province. Ministry officials report that female teachers, in particular, are unwilling to accept rural posts. Teachers assigned to isolated schools frequently refuse to accept the posting. Teachers who refuse a posting are not employed, but they often apply later for other posts that become vacant.

The deployment system is not working effectively. Although the system is designed to ensure an adequate supply of teachers in each province, there are inequalities in distribution both between and within provinces. The logical distribution of teachers within provinces is undermined by the

Table 1.2 Teachers and Training in Mozambique, by Province, 2004

Province	Number of pupils	Number of trained teachers	Total number of teachers	Percentage of teachers who are untrained	Pupil-teacher ratio	qualified teacher ratio
Cabo Delgado	242,105	1,663	3,036	45	80	146
Gaza	233,633	1,751	3,939	56	59	133
Inhambane	241,818	1,931	3,705	48	65	125
Manica	223,738	1,382	3,318	58	67	162
Maputo Cidade	164,388	2,782	3,022	8	54	59
Maputo Província	192,614	2,174	3,474	37	55	89
Nampula	487,989	3,998	7,189	44	68	122
Niassa	160,228	1,251	3,262	62	49	128
Sofala	242,808	2,304	3,070	25	79	105
Tete	251,621	2,183	3,924	44	64	115
Zambézia	630,622	3,929	6,286	37	100	161
Total	3,071,564	25,348	44,225	44	69	121

Source: Mozambique Ministry of Education, annual school survey, 2004.

inability to enforce deployment. Teachers who are given an undesirable deployment can refuse the post and later apply for and be assigned to a post in an urban area.

Malawi. Since the introduction of free primary education in 1994, teacher recruitment has been done by hiring untrained temporary teachers, who are later trained through the Malawi Integrated In-service Teacher Education Programme (MIITEP).¹ This recruitment is done centrally, and the teachers are deployed to schools on the basis of need. Candidates are not recruited for specific locations, and there are no specific recruitment policies for selecting teachers for rural areas. There has been high demand for teacher training, and the admissions requirements have been rising.

Under the MIITEP system, teachers are deployed at the point of recruitment, with the intention being to post teachers to rural schools where the need is greatest. However, many teachers, particularly female teachers, find reasons to argue that they should not be sent to a rural area, often basing the argument on marriage. If the husband is located in an urban area, the teacher usually is not compelled to leave the area.

Even after deployment, teachers are able to request transfers to other areas. For female teachers, transfer is often requested on the basis of marriage (there have even been reports of women faking a marriage in order to obtain a transfer). It is rare to find female teachers in rural areas, unless they are with their husband (usually both spouses are teachers). Male teachers are sometimes able to get a transfer because they are pursuing further studies and need access to electricity. Teacher illness is

another major justification for movement. In Malawi, antiretroviral treatments are available free to individuals with HIV, but only a limited number of hospitals can dispense them or even diagnose HIV. There is no formal arrangement allowing sick teachers to move to areas near a hospital. However, for humanitarian reasons, district education managers often allow transfers owing to illness.

Overall there is a good deal of teacher movement. In 2004 more than 4,000 teachers, or 10 percent of the teacher population, transferred to another school. Much of the movement is initiated by the teachers themselves. Teachers who want to move may face long delays but may eventually get to move where they want. Teachers who are influential or who have pressing humanitarian reasons for moving (such as marriage or illness) may be able to get themselves redeployed to an urban area.

In some cases, teachers have been able to get a transfer even where there is no vacancy in the school to which they are moving. As a result, some urban schools are significantly overstaffed, and teachers have a relatively light workload. With continual teacher-initiated movement and no regular supply of new teachers, there is an oversupply of teachers in desirable areas and a shortage in less desirable areas. In one extreme example, a school in Blantyre has 20 classrooms and 111 teachers, of whom 90 are female. It is acknowledged that the system of teacher deployment is not functioning equitably, and pupil-teacher ratios vary widely between urban and rural areas. While rural areas average 77 pupils per teacher, urban areas average 44.

Female teachers are highly overrepresented in urban areas, possibly reflecting the ability to transfer on the grounds of the husband's location. In urban areas, 82 percent of teachers are female, compared with only 31 percent of teachers in rural areas (see table 1.3). However, there is little to suggest that teachers in rural areas are less well educated.

Table 1.3 School Data in Malawi, by Urban or Rural Location, 2004

Indicator	Rural	Urban	Total
Number of schools	4,932	171	5,103
Number of pupils	2,896,356	270,430	3,166,788
Number of teachers			
Male	26,002	1,100	27,102
Female	11,803	5,047	16,850
Total	37,805	6,147	43,952
Percentage of teachers who are female	31	82	38
Pupil-teacher ratio	77	44	72

Source: Malawi Ministry of Education data.

Table 1.4 School Data for Six Rural Zones in Malawi, 2004

Location	Number of schools	Number of pupils	Average school size	Number of teachers	Pupil-teacher ratio
Ching'ombe (near Lilongwe)	15	15,387	1,026	355	43
Songani (near Zomba)	21	18,574	884	321	58
Chikala (near Zomba)	16	13,900	869	175	79
St. Pauls, Zomba (remote rural)	6	3,955	659	28	141
Kalulu, Nsanje (remote rural)	8	5,956	745	43	139
Chilipa, Mangochi (remote rural)	22	11,910	541	102	117

Source: Malawi Ministry of Education data.

These national data are based on a general classification of schools as either rural or urban. However, rural schools close to urban centers are much more attractive than isolated rural schools. Data for six zones (of which three are close to population centers and three are in remote rural areas) show that remote rural areas have much higher pupil-teacher ratios (see table 1.4).

Lesotho. Lesotho has some very mountainous areas where travel is difficult, infrastructure is poor, and the climate is inhospitable. Because the population is dispersed, schools in mountain areas are generally smaller than schools in urban areas.

Teacher deployment is based on the local hiring of teachers. The ministry "grants" teachers to schools in response to school population and budget considerations. Once the school is granted a teaching position, the school management committee can select the teacher to fill the position. Once the teacher is identified, the papers are sent to the Teaching Service Commission for ratification, and the process for the payment of salary by the government is started.

This local hire system has a number of implications. Teachers are not sent to schools. Instead, they apply to schools where they would be willing to work. Schools do not have a problem with teachers refusing postings, as individuals unwilling to work in rural areas do not apply for posts in those areas.

The local hire system is more open to local influence than a central deployment system. Although posts are advertised, many schools have a person in mind before they begin the selection process. In some cases, this results in a local person being appointed in preference to an outsider. There have even been cases of qualified teachers being rejected by communities wishing to hire a local (but unqualified) teacher.

One effect of this system is that most teaching posts are filled, and there is relatively little variation in the pupil-teacher ratio between rural

Table 1.5 Percentage of Unqualified Teachers in Lesotho, by Gender and Ecological Zone, 2004

Ecological zone	Female	Male	Total
Lowlands	21	39	24
Foothills	35	58	39
Mountain	47	60	51
Senqu River Valley	26	59	35

Source: Lesotho Ministry of Education and Training data.

and urban areas. However, qualified teachers can compete more easily for jobs in urban areas, and so many of the rural schools recruit unqualified teachers. The school census data reveal that only 24 percent of teachers in lowland areas are unqualified, compared with 51 percent in mountain areas (see table 1.5).

These general figures mask even greater shortages of qualified teachers in the most isolated schools. One district resource teacher outlined the supply of teachers in nine rural schools for which he had responsibility (table 1.6). Less than one-third of the teachers in these schools were qualified. These isolated schools typically had only one qualified teacher (the principal), and two of the schools had no qualified teacher at all.

A second effect of this system is that it has encouraged the growth in the number of volunteer teachers in rural schools. Typically local people (usually girls) with a secondary education but no job volunteer to teach

Table 1.6 Teacher Data for Nine Rural Schools in Lesotho, 2005

School	Number of pupils	Number of qualified teachers (including principal)	Number of unqualified teachers	Number of volunteer teachers (unpaid)	Pupil-teacher ratio	Pupil-qualified teacher ratio
A	70	1	0	3	70	70
B	278	1	4	0	56	278
C	292	1	3	0	73	292
D	365	4	4	0	46	91
E	123	1	4	0	25	123
F	382	1	5	0	64	382
G	100	0	4	0	25	n.a.
H	68	0	2	0	34	n.a.
I	250	2	1	0	83	125
Total	1,928	11	27	3	51	175

Source: Lesotho Ministry of Education and Training data.

Note: n.a. = not applicable; there were no qualified teachers in the school.

for free in the local school, in the hope that, when a position arises, they will get the job. Although this free labor has been helpful to schools generally, tensions may arise when a job does not materialize or is awarded to another person.

A further difficulty with the system is that the ministry finds it difficult to transfer teachers from schools where numbers are falling. The construction of new schools in rural areas is causing a fall in attendance in some of the older schools. Where a school is perceived to be of poor quality, parents may move their children to a nearby school or withdraw them altogether, causing falling enrollment in some schools. School authorities are reluctant to allow a teacher to be transferred out of a school. In particular, church authorities may be sensitive about the erosion of their schools and resist teacher transfer.

TEACHER DEPLOYMENT SYSTEMS

The cases presented in this section illustrate the main methods of teacher deployment. In practice, two systems exist: deployment by a central authority and deployment by a “market system” (Lewin 2000: 30). In Malawi and Mozambique, deployment is centrally planned, at the national level in Malawi and at the provincial level in Mozambique. In Lesotho, a market system operates: teachers select the schools to which they apply, and schools are free to select their own teachers.

Centralized Planning. Centralized deployment has been a long-standing model in many countries in Sub-Saharan Africa and is widely believed to allow the rational deployment of teachers (Penrose 1998). Central planning has the advantage of being far from local pressures and being easier to make fair and transparent. However, highly centralized systems depend on the quality of information they receive from schools and tend to suffer from congested decision making and inattention to the individual needs of education staff (Göttelmann-Duret and Hogan 1998; Rust and Dalin 1990).

The major weakness of centralized systems is that they are often undermined in practice by an inability to implement rational deployment. Teachers may circumvent the Ministry of Education’s posting policy by claiming fictitious health problems, exploiting poor record keeping, or just failing to take their assigned posting (Hedges 2000). Teachers who fail to take up a rural posting present a difficulty for policy makers. If they are allowed to take up a desirable post later on, they undermine the posting system. If they are not, then the system loses the resource of a trained teacher (see box 1.1).

BOX 1.1 EXAMPLE OF A TEACHER DEPLOYMENT DILEMMA

Two teachers, A and B, would like to work in an urban area but are posted to a rural area. Teacher A accepts the post and moves to the rural area. Teacher B refuses the post and remains unemployed. Later, a position appears in a desirable location, and both teachers apply. This presents a difficult choice. If the post is given to A, the rural post becomes vacant and is difficult to fill. If the post is given to B, then B has achieved the goal more quickly than A by refusing to take the rural post. The message is observed by others, and any teacher who can afford a period of unemployment quickly understands that the fastest way to reach the desired post is by rejecting offers of a rural posting.

The inability to implement planned deployment has serious consequences. In Ghana, a recent survey of 262 newly trained teachers posted to four rural districts showed that 115 failed to arrive at their post. This widespread failure to accept a rural post undermines the rational posting system and contributes to a lack of conviction among administrators that significant progress can be made in addressing patterns of unbalanced deployment (Göttelmann-Duret and Hogan 1998; Hedges 2000).

Many countries have considered decentralizing the teacher hiring process to the local level. In terms of teacher deployment, decentralization brings both benefits and risks. The more local the system, the more likely it is to keep in touch with the needs of the schools and to respond quickly and flexibly to those needs. However, a local structure of deployment may also be vulnerable to the undue influence of powerful individuals, especially in countries with weak administrative capacity at the district and local levels (Hallak 1990). In many instances in Africa, administrators operating at the local level are exposed to the pressure of influential personalities in local communities, and it is not unusual to see their decisions being biased. Improved systems of “checks and balances” are needed to ensure countrywide equity, justice, and efficiency in teacher deployment (Göttelmann-Duret and Hogan 1998: 43).

Market System. In the market system, teachers are not sent to schools; instead, they apply for posts in a specific school. This system removes from the central authorities the burden of deploying teachers. By searching for jobs in the open market, teachers in effect deploy themselves. This gives each school more autonomy in selecting its teachers. Schools are more likely to select teachers who will accept the position and often

recruit local people. However, “market effects” occur, and the most desirable (best qualified) teachers tend to get the most desirable jobs. In Lesotho, the practical effect of the market system is that most schools are able to fill their teaching posts, but more of the teachers in isolated schools have lower qualifications.

STRATEGIES TO REDRESS DEPLOYMENT IMBALANCES

Policy makers have used a number of strategies to redress the imbalances in teacher deployment. The main strategies are (a) incentives for teachers locating in rural areas, (b) forced transfer of teachers, and (c) targeted recruitment.

Incentives. Some countries have attempted to make working in rural areas more attractive by offering incentives (see table 1.7). In some cases, these may be financial incentives, in the form of a hardship allowance, travel allowance, or subsidized housing. In other areas, the incentives may be nonmonetary, including special study leave or better training opportunities (Craig, Kraft, and du Plessis 1998; Gaynor 1998: 17).

In Mozambique, financial bonuses are awarded to teachers who locate in rural areas. Schools are placed into four categories of location, ranging from urban schools to the most isolated schools, and teachers are paid a salary bonus, depending on the location of the school. Although the bonus payments appear attractive, they are weakened by two factors. First, the payment depends on both location and teacher qualification. For teachers with a low qualification (the bulk of primary teachers), there is no bonus at all. For teachers with a mid-level qualification, the difference between teaching in a provincial town and a remote school is relatively

Table 1.7 Incentives to Encourage Teachers to Move to Rural Areas, 2005

Lesotho	Malawi	Mozambique	Tanzania	Uganda
Flat bonus of 275 maloti per month is given to locate in a mountain area.	No incentives are given for locating in a rural area, but they are being considered. Education data show a strong correlation between housing and the presence of female teachers.	Bonuses can be up to 100 percent of salary, but they are paid only to highly qualified teachers. Most primary teachers get no additional pay to move to rural areas.	None. Incentives available in the 1980s were abolished in the 1990s. In the Primary Education Development Plan, priority is given to housing for rural teachers, but this is not implemented in practice.	Hardship allowance of 20 percent of salary for “hard-to-reach” areas was introduced in 2001 for qualified teachers only. Difficulties arise in determining which schools are hard to reach.

Source: Country ministries of education.

small (only 14 percent of salary). Second, teachers who teach two shifts receive a bonus of 60 percent of their basic salary. Because two-shift schools are located in urban areas with high population density, teachers in towns and cities are more likely to take home additional earnings from this bonus.

In Lesotho, a hardship allowance is paid as a flat fee of 275 maloti per month (about US\$47), equivalent to 20 percent of the salary for an unqualified teacher but only 10 percent of the salary for a teacher with a diploma qualification. This is generally acknowledged to be too small to encourage the more highly qualified teachers to locate in remote areas. As one district resource teacher explained, even the cost of travel to collect the monthly paycheck and of commodities, especially fuel, could outweigh the value of this bonus. Further, the hardship allowance is determined by very general classifications of schools. Teachers in remote rural areas in the lowlands do not receive the allowance, while teachers in towns in mountain districts do.

These cases highlight two general lessons concerning the use of incentives. First, the incentives need to be substantial to outweigh the social and economic costs of living in an isolated area. Second, incentives require a fair system of classifying schools. General classifications may provide bonuses to teachers working in small towns while doing relatively little to increase the supply of teachers in the most isolated schools.

Finally, incentive schemes can be outweighed by counterincentives from urban schools. In Mozambique, urban schools are more likely to offer two-shift teaching, which carries a salary bonus. In other countries, schools in richer communities are able to raise money from parents through voluntary contributions or parent-teacher associations. These extra resources can be used to provide additional benefits, or even additional salary, for teachers.

A second major incentive for teachers to locate in rural areas is the provision of teacher housing. Where teachers cannot live near the school, they are likely to spend a lot of time traveling, often to the detriment of their school work. Housing is particularly important for female teachers. In Malawi, official education data reveal a strong association between the availability of housing in an area and the presence of female teachers in the school. Similarly in Uganda, a recent study on teacher attrition considers the provision of housing to be a key factor in ensuring teacher retention, especially in rural areas. In 2005, 15 percent of the school facilities grant was allocated to the construction of teacher housing.

In Mozambique, the ministry does not normally provide housing, although the practice has been to put a director's house at some schools.

In addition, some nongovernmental organizations and even local communities have constructed teacher housing in an attempt to make rural locations more attractive. In Lesotho, teacher housing is not normally provided, but some nongovernmental organizations and community groups have provided accommodations.

Although good-quality housing near the school can be a significant incentive for teachers, particularly for female teachers, it can be expensive to provide, especially if the government is also responsible for maintaining the property. There may also be difficulties in repossessing a house for use by a new teacher, particularly where the teacher occupying the house has died or fallen ill, leaving his or her family in a precarious financial position.

Forced Deployment. There have also been attempts to address the issue by compelling teachers to relocate to rural areas (Göttelmann-Duret and Hogan 1998: 39). Although this strategy has little financial cost, it may damage teacher morale and lead to high turnover of staff. In South Africa, an effort to force the redeployment of teachers to poorer, rural areas was unsuccessful. South Africa's predominantly female teaching force was not mobile enough to respond to school staffing needs. When strongly encouraged to relocate, large numbers of key science and math teachers left teaching (Garson 1998). As a consequence, there was a significant drop in the number of graduates choosing to apply to teacher training colleges because teaching was seen as an embattled profession, "where one is likely to be redeployed or moved" (Samuel 2002: 408–09).

In some countries, such as Malawi and Zambia, forced relocation to rural areas is sometimes used as a punishment for teachers who misbehave. Justified as a punitive measure, this aggravates the risk of locating troublesome teachers in the schools that are farthest from supervision and possible help or remediation (VSO 2002: 30).

Some countries have used models where deployment to rural areas is related to career progression. Typically, these require newly trained teachers to work for a number of years in a rural area or teachers seeking a promotion to work for a period in a rural area (Göttelmann-Duret and Hogan 1998: 39). Successful implementation of such systems depends on careful management. Even if successful, this would concentrate the least experienced teachers in the rural areas. There is some evidence that young, newly qualified teachers have more difficulties in rural areas and achieve poorer results (Daun 1997). Despite these difficulties, systems where a defined period in a rural area is required may be an effective strategy for getting qualified teachers in rural schools. Teachers may be more likely to

accept a rural post if they see it as temporary and a path to a more desirable job.

Targeted Recruitment. An alternative strategy may be to recruit student teachers from within each region, in the hope that personal history and family connections will entice them to teach in their home area after they attain their teacher certification. The presumption is that those individuals will have familial roots in the area and be more willing to return to and remain in these rural settings (Craig, Kraft, and du Plessis 1998).

One of the attractions of this approach is that if teachers become established within their own community, they may gain extra benefits from the proximity of relatives, which may help to ensure their social stability over the long term. Working close to one's extended family may provide some level of financial support and subsidy (Black and others 1993). However, some countries, such as Malawi, report that teachers do not want to work in their own village, because their family may place too many demands on them. Some people from rural areas would prefer to be in their home district, but not in their home village.

Various researchers have challenged the assumption that teachers recruited from a rural area want to return to their own community (Azam 2001; Rust and Dalin 1990). Educated members of a disadvantaged minority group may view their education as a means of social mobility and may have no desire to remain in the community once qualified. In Lesotho, Azam (2001) reports, "It is hard to attract people to rural areas, as the conditions are difficult. . . . Young people, even those from rural areas, want to come down from the highlands as soon as they can. Even those who come on study leave try hard to stay in Maseru."

The targeted recruitment strategy is most frequently used to recruit teachers from specific geographic regions or ethnic-linguistic groups. However, it may also be possible to focus teacher recruitment on teachers from particular socioeconomic backgrounds. Hedges (2002: 360) reports that teachers from poorer backgrounds are more likely to value the relative security of the teaching profession and to take up their posting.

However, this strategy often involves a tradeoff between entry qualifications and rural roots (Lewin 2002). If it is necessary to adjust the recruitment system to favor teachers from a particular area, and if the system is based on merit, then the adjustment will entail recruiting teachers of lower quality than before.

Alternative Models. Less conventional solutions have been attempted in some countries. In Ghana, a policy that involves posting newly qualified teachers in pairs seems to work well: "Those posted with another

teacher . . . seemed to draw strength from the ready-made friendship, especially in hostile communities, even if they had not known each other beforehand" (Hedges 2002: 360). Another strategy in Ghana involves linking rural deployment with a teacher education outreach program, with the aim of helping female teachers to feel safe and have a greater sense of control over their deployment (Hedges 2000).

TEACHER UTILIZATION

The single most important determinant of primary school enrollment is the proximity of a school to school-age children. Studies have repeatedly shown that distance from school is a critical factor in determining whether or not children, especially girls, attend school (Lockheed and Verspoor 1991: 146).

Planners often choose school locations using a theoretical maximum walking distance. In Lesotho, the aim is to have a school within 3 kilometers of each child's home. In Malawi, the expected walking distance is 5 kilometers. However, there is increasing evidence that even a 3-kilometer walk may be a major barrier to attendance. A school mapping study in Chad carried out as part of the rural access initiative shows that enrollment falls very rapidly as distance to school increases (World Bank 2004b). In fact, when the school is 1 kilometer from the village, enrollment is less than half what it is when the school is located within the village. Children in Chad may be particularly sensitive to distance because of the dispersed population and traditional rivalries between villages. However, recent data from Lesotho suggest that 69 percent of the children who have never been to school live more than 30 minutes from a school (World Bank 2005).

The provision of schools near children's homes involves the provision of a greater number of small schools. In Mozambique, the average school size in rural areas is 100–200 students, while the average in Maputo City is 1,600 students. Small schools have the opportunity to engage more closely with the community (Sigsworth and Solstad 2001). Location close to the community can be used to enhance enrollment and attendance. In rural Ethiopia, a study found that home visits by teachers are an important factor in raising enrollment (Verwimp 1999).

Unfortunately, small schools present challenges for efficient teacher utilization (see box 1.2). Where there is significant dropout, large schools can adjust the number of classes in each grade to maintain a consistent pupil-teacher ratio. Where the school is smaller and has only one teacher for each grade, the dropout pattern may result in large numbers of pupils in the early grades and low numbers in the later years.

BOX 1.2 THE CHALLENGE OF EFFICIENT UTILIZATION IN SMALL SCHOOLS

The following table shows two schools. School A has 465 pupils, with smaller numbers in the older grades. School B has half the number of pupils and the same pattern of dropout. School A arranges 10 teachers to allow roughly equal class sizes. School B has only one teacher for each class and a less equitable, but more favorable, pupil-teacher ratio.

Grade or indicator	School A		School B	
	Number of pupils	Distribution	Number of pupils	Distribution
Grade 1	150	3 classes of 50	75	1 class of 75
Grade 2	110	2 classes of 55	55	1 class of 55
Grade 3	80	2 classes of 40	40	1 class of 40
Grade 4	55	1 class of 55	28	1 class of 28
Grade 5	40	1 class of 40	20	1 class of 20
Grade 6	30	1 class of 30	15	1 class of 15
Total	465	10 teachers	233	6 teachers
Pupil-teacher ratio	46		38	
Largest class	55		75	
Smallest class	30		15	

This inherent difficulty with small schools is compounded by other factors. First, as noted earlier, rural schools are more likely to have problems filling teaching positions, and so these schools tend to have higher overall pupil-teacher ratios and more unqualified teachers. Second, experienced teachers may use their seniority to get assigned to the smallest classes, leaving the largest classes to the least experienced or least qualified teachers. To address this problem, ministry guidelines in Lesotho specify that the most experienced teachers should be assigned to the lower grades, but this is not always followed in practice. Third, the rate of dropout may be higher in rural schools than in urban schools, leaving even smaller classes in the higher grades and greater numbers in the lower grades. And fourth, the internal deployment of teachers within schools is complicated by teacher specialization. In many countries, primary teachers are trained either for specific grades (as in Malawi) or for specific subjects (as in Mozambique).

MULTIGRADE TEACHING

The figures above illustrate the difficulties of efficient teacher deployment in a “full-size” school (that is, where there is one teacher for each grade). However, even schools on this scale may be too large to serve the needs of rural communities. One study calculated that the smallest community that could support a full-size school (grades 1–7) was 980 people and even that was assuming a pupil-teacher ratio of 35:1 and 100 percent enrollment. Yet in countries like Sierra Leone, more than 65 percent of the population lives in settlements of less than 900 people (Lockheed and Verspoor 1991: 158). Clearly, the model of “full-size” schools is not an efficient solution to the provision of rural education in areas of dispersed settlement.

Smaller schools can be provided using a variety of strategies, including incomplete schools, biannual intake, and multigrade teaching. In the six countries studied here, biannual intake is not practiced, as it is believed that parents would be unwilling to delay their children’s enrollment in school. However, there are many incomplete schools, and multigrade teaching is widely practiced. Teacher absenteeism and illness further increase the use of multigrade approaches, as teachers frequently combine classes to cover for an absent colleague.

Multigrade teaching normally involves one teacher teaching two grades at the same time. In some cases, more than two grades are mixed. In some very remote areas, the viable model may be the one-teacher school, the most extreme form of multigrade instruction. In Uganda, school attendance is very low in the Karamoja region, despite the construction of schools. In response, the government has introduced a program named Alternative Basic Education for Karamoja, where children study under trees wherever they take animals to graze, supervised by a single teacher in each school.

How Multigrade Works. Experienced multigrade teachers use a variety of strategies to manage multiple groups of students at the same time. One strategy is to use older children as teaching assistants, drawing them in to help their younger classmates. A second strategy is to make small modifications in the sequencing of the curriculum, to allow whole-class teaching. Thus dealing with second and third grades, the teacher could teach a story from the third-grade curriculum to both groups the first year and teach a story from the second-grade curriculum the following year. In this way, all children learn both stories as they pass through the system, but the sequence is altered to allow easier whole-class teaching. This depends, of course, on the cooperation of inspectors and end-of-year examinations. A third strategy is to use teaching materials to allow one group to work alone, while the teacher works with the other group.

Experienced multigrade teachers use a mix of all these strategies and move seamlessly through several strategies throughout the day (Pridmore 2004). The class might work together on a song or story or divide into groups for work on mathematics; later the older children might help the younger ones with reading. However, the successful operation of this blend of methods depends on teachers who are skilled in handling multigrade classes, the availability of teaching materials, and the flexibility of the curriculum to make minor adjustments to accommodate the needs and requirements of multigrade instruction.

The use of multigrade teaching without additional training and teaching materials is likely to put additional strain on teachers and reduce the quality of learning. As one study (Benveniste and McEwan 2000: 42) notes,

Multigrade teaching may require more work than single-grade instruction. Demands on teacher resources, both cognitive and emotional, are greater. Curriculum design and organization require attentive preparation and greater coordination. This is particularly the case if teachers do not have access to specialized materials, such as self-instructional textbooks, to support their preparation. Motivating students and maintaining their concentration is harder. Teachers are responsible for more subjects and cannot repeat lessons from year to year.

Quality of Multigrade Teaching. Widely used in developed countries, multigrade teaching appears to offer similar quality to conventional “monograde” configurations. Some have even argued that it may have advantages over monograde teaching, as it allows for interactions with children of different ages (Sigsworth and Solstad 2001). However, it is not perceived to be a desirable alternative to single-grade teaching in most developing countries (Benveniste and McEwan 2000: 40).

One successful model of the use of multigrade teaching in a developing country is provided by the *escuela nueva* (new school), an approach in Colombia. By 1987, more than “89 percent of teachers preferred the *escuela nueva* over traditional rural schools, despite the fact that only 45 percent had voluntarily affiliated themselves to the program” (Rojas and Castillo 1988, in Benveniste and McEwan 2000: 41). In Uganda, a pilot project experimenting with multigrade teaching is operating in the Kalangala District, where island communities require small schools. This pilot project, including teaching resources and specialist teacher training, is reporting good results.

However, multigrade teaching is often practiced in rural schools where teachers have neither specialist training nor materials appropriate for that

teaching strategy. In Mozambique, more than 1,700 classes are described as “mixed” (at least two grades), but multigrade instruction is not yet included in the design of the curriculum or in the training of teachers. In Lesotho, multigrade instruction is widely practiced, but it is not normally included in the program for initial teacher education, and the curriculum assumes single-grade classes. In Malawi, some rural schools are multigrade, but there are no formal guidelines on instruction, and multigrade instruction is not included in the teacher training curriculum.

OTHER TEACHER UTILIZATION PRACTICES

The following summarizes the practice in teacher workload, teacher assignment, multishift teaching, and other strategies to optimize the use of teachers in five countries.

Teaching Load. In Lesotho, primary school teachers have the same official working hours, from 8:00 a.m. to 2:30 p.m., with some local variations. Teachers teach the entire curriculum without subject specialization. In Malawi, schools operate from 7:30 a.m. to 12:00 noon for infants (a 4.5-hour day), with longer hours for the older classes. Normally a teacher is assigned one class for a load of 22–27.5 hours per week, depending on the age of the class. In Mozambique, teachers work a standard 25 hours per week, teaching only one shift. In multishift schools, a teacher may teach two shifts and get 60 percent of the normal pay for the second shift. In Tanzania, the primary school teacher teaches between 20 and 30 hours per week in a normal, single-stream school. Where the number of teachers ranges only from two to five per school, the teaching hours rise to more than 30 hours per week per teacher. In Uganda, a primary school teacher, rural or urban, works a maximum of 27 hours per week. Many rural schools have a shorter school day owing to long walking distances to and from school. Some teachers in small rural schools teach fewer hours in order to do other work (such as gardening) to supplement their income.

Teacher Assignments. In Lesotho, some schools assign their qualified and experienced teachers to the lowest grades, but in others the experienced teachers teach the older children. In schools enrolling 800 pupils or fewer, the principal also teaches class. In Malawi, head teachers normally teach class in small schools and even in some of the bigger schools. In Mozambique, all head teachers, regardless of school size, teach class in addition to their administrative responsibilities. The dispersed school-going population in rural areas makes for average school sizes of only 100–200 students (compared with the average of 1,600 students in Maputo City). Supplying teachers for these small rural schools is made more difficult by teacher specialization (teachers who specialize in a

subject often must travel to several schools to complete their 25-hour load). More recently, teachers are trained to specialize in two or three subject areas (out of 11 in the curriculum), but in the field, this has resulted in requiring four teachers to cover all of the subject areas of grades 6 and 7. In Uganda, head teachers combine teaching with school management, as there is no policy on the minimum number of pupils required to constitute a class or level and because an absent teacher cannot be replaced easily by another teacher due to the tight rules on the maximum number of teachers who may be assigned to each school.

Double-Shift Session. In Mozambique, many rural schools run a single shift, from 7:30 a.m. to 12:30 p.m., with some afternoon classes, mainly for the older grades. (Urban schools often operate two or three shifts.) In Tanzania, pupils in the primary grades 1–2 spend 3.5 hours per day in a double-shift session. Pupils in grades 3–7 spend 7.5 hours per day in a double-shift session (5–6 hours per day in a single-session school). In Uganda, teaching in shifts has not been fully embraced, but the program is being piloted.

Mixed Classes, Cluster Schools. In Mozambique, outside of the capital city, 3 percent of all classes are mixed—that is, the classes are combined so that the teacher effectively teaches two grades at the same time. Where there are insufficient teachers, the remaining teachers try to cover the empty classes, to avoid complaints from parents. Where the classes are too big to share one room, the teacher visits two separate classes during the same period. Alternatively, the students are divided up and sent to the classes of the remaining teachers. These classes are not formally multi-grade classes, as teaching strategies and methods for multigrade classes are not yet included in the curriculum design or in teacher training.

The cluster school strategy in Mozambique centers on a “complete school” that teaches grades 1–7. This central school provides support for “satellite” schools in the cluster of schools, so that students can progress from lower primary grades 1–5 in satellite schools to upper primary grades 6–7 in the complete school. (However, the clusters are geographically quite large, with satellite schools up to 20 kilometers away from the complete school. This distance is one of the factors that causes very large dropout rates at the end of grade 5.)

TEACHER MANAGEMENT

Managing teachers in remote areas presents additional difficulties. One concern is that teacher absenteeism may be higher in rural areas. In Uganda, some teachers in small rural schools reportedly commit fewer hours to classroom teaching in favor of their private endeavors, such as

farming, perhaps as a means of supplementing their income. This pattern is likely to be repeated in other countries.

The physical remoteness of the school may encourage absenteeism. In some countries, the need to travel to collect pay is a major cause of teacher absenteeism. In Lesotho, most rural teachers leave the school to collect their paycheck at the end of each month. This can involve an absence of up to three days, leaving the school deserted, with only one teacher left behind to maintain order. The government is planning to make it possible for teachers to be paid through a bank. However, teachers will still have to travel to withdraw money and buy commodities, but they may be able to spread this out over a period of time, taking alternate trips, to reduce the impact on the school. Similarly in Uganda, teachers are generally paid through their bank account, but where there are no banks, teachers are paid in cash, and many still have to travel long distances to collect their pay.

Medical problems have a greater impact in isolated areas. A visit to a doctor that might take a day in an urban area can involve an absence of three or four days in a remote location.

Many rural teachers are posted in a location away from their family or their home area. Travel to and from remote rural areas can be time-consuming. If the school is in a remote location, trips often involve absences on Fridays or Mondays.

Monitoring of teachers is also more difficult in rural areas, for a number of reasons. First, school principals often travel to district offices to make administrative arrangements. In Uganda, the head teacher is responsible for arranging salary increments and adjustments for each teacher. The more remote the school, the longer the head teacher is away from the school for these purposes. Second, remote schools are less likely to be visited by external inspectors. In Malawi, absenteeism is more frequent in remote schools, where the atmosphere is more relaxed and visits by inspectors are less frequent. Third, the monitoring of teachers by the local community is often weaker in remote rural areas. Members of the local community may place a lower value on education, may be less well educated themselves, and may feel less able to challenge the authority of teachers.

It is unfair to see teacher management difficulties entirely in terms of policing teacher misbehavior. System failures also undermine teacher morale and damage the system. These include failure to pay teachers on time and delays in effecting promotions and transfers. Teachers in rural schools often feel neglected by the authorities and perceive that they are treated unfairly regarding access to promotion, transfers, and other benefits. Such perceptions may foster lower morale among rural teachers.

One of the particularly unwelcome consequences of poor monitoring and disciplinary systems is that rural schools may be more open to child abuse than urban schools. The literature suggests that child abuse is associated with power and authority (Nhundu and Shumba 2001: 1522). In rural areas, students' poverty and respect for teachers place teachers in a particularly strong position of power over children. In many African countries, the small proportion of female teachers in rural schools further adds to the opportunity. In rural areas, many cases of child abuse may not reach the official record, especially when rural teachers are influential members of the local community and are well known by the local police (Nhundu and Shumba 2001: 1528). One study of sexual abuse by teachers finds that incidents of sexual abuse are highest among teachers with the least teaching experience (Nhundu and Shumba 2001: 1530).

Teacher discipline is often limited by cumbersome systems for dealing with difficulties. In Uganda, teachers who misbehave are given a warning by the head teacher. If they offend again, they first receive a formal warning from the inspector of schools; if the behavior persists, the case is referred to the district service commission. Poor communication with rural schools can slow down these processes, diminishing their impact. Relatively few teachers are actually dismissed for disciplinary offenses. In Mozambique in 2005, seven teachers were dismissed and 23 were suspended out of a total teaching force of 46,000. In Malawi in 2005, only 10 out of 44,000 teachers were dismissed.

In the context of relatively weak disciplinary systems, the practice of transferring misbehaving teachers to remote rural areas may have the effect of placing them in locations where they are prone to further misbehavior (owing to less frequent supervision), but with consequences less obvious to management.

QUALITY OF EDUCATION: INSPECTION AND SUPPORT SYSTEMS

The management of teachers goes beyond ensuring attendance. Teacher management is also concerned with ensuring that teachers deliver the best education possible. There is some evidence to suggest that the quality of teachers may be lower in rural than in urban areas. One study of rural schools in Ethiopia, India, Sri Lanka, and Tanzania finds that rural classrooms are very passive: "Pupils in the 'average' schools visited in this research were rarely required to participate actively in lessons, other than to repeat by rote what had been said by the teacher or to sing and clap" (Taylor and Mulhall 2001: 141). In addition, teachers made little use of local materials and did little to make the curriculum relevant to local

conditions: "Teachers said that they felt wary about moving away from what was laid down on the printed page, even though they might be surrounded by rich and varied resources outside the classroom and school environment. The rigidity of primary school curricula and examinations seemed to discourage teachers from moving beyond the boundaries of the subject area" (Taylor and Mullhall 2001: 144).

There is ample evidence that good-quality teaching makes a difference. Projects stressing active learning methods have shown marked improvement in learning achievement. Analysis of the READ projects in South Africa shows that where teachers use a series of basic pedagogical skills to improve reading, there is a consistent improvement in literacy scores (Schollar 2001). Similar gains in literacy have been reported in Sri Lanka, where significant gains in reading (approximately three times those of control groups) were achieved following the "book flood" project, which trained teachers to use a shared reading method for 15–20 minutes a day (Kuruppu 2001).

Rural children may experience a poorer quality of teaching for a number of reasons. First, parents and teachers may have lower expectations of what rural children can achieve. Second, more of the teachers in rural areas are untrained and may be unfamiliar with the desired teaching methods. A study of teacher confidence in Botswana finds that unqualified teachers are significantly less confident than qualified teachers and that years of experience are not associated with increased confidence (Nleya 1999). Third, rural teachers may be less likely to receive in-service training or have the support of inspection or educational support services.

Inspection. While most countries have inspection services, these are often limited in both the number of schools they visit and the quality of the support and guidance they can provide. In Uganda, the aspiration is that each school will be visited once each term, but this is often restricted by a lack of transport and the other tasks that inspectors are required to undertake.

In Tanzania, each school is required to be inspected at least once in two years. In districts where the number of schools is small, all schools are inspected yearly. In districts with more than 80 schools, 50 percent of schools have to be inspected. Schools in rural areas are less likely to be inspected because of lack of transport, geographic factors (isolation, floods, poor infrastructure), and financial difficulties.

In Lesotho, the Schools Inspectorate Final Report for 2002 (Lesotho, MOET 2002) concludes, "School inspection is most unlikely to be contributing in any way to the quality of education provided in Lesotho's schools." Inspections are limited by transport difficulties, while the

quality of inspection is limited by the expertise of the inspectors. Most inspection visits do not include an evaluation of the quality of education and provide little information on quality to the school or the ministry. In view of these weaknesses, and in particular the difficult transport, remote rural schools are unlikely to receive inspection visits with any regularity.

There have also been criticisms of the quality of inspection. In Ghana, inspection has become so ritualized in some cases that it involves only an inspection of lesson notes. As one teacher described it (Hedges 2002: 360),

So sometimes . . . they [other teachers] will prepare lesson notes, but they will not intend to teach. . . . Someone is in our staff, he will prepare [lesson notes] sometimes . . . and he has a big bundle of notes, and he just transfers the notes. . . . So in this way the supervisors are stressing on the lesson notes, the teachers will take advantage, prepare lesson notes and not teach, and go away.

Support. Increasingly, countries are supplementing inspection services with local support services, designed to provide pedagogical support for teachers. In Uganda, a network of coordinating center tutors provides support for teachers and delivers an in-service teacher education program for untrained teachers at local coordinating centers.

In Tanzania, ward education coordinators (WECs) supervise and manage teachers in their assigned area. One WEC usually supervises and supports between two and eight schools. Local teacher resource centers provide support to clusters of schools.

In Mozambique, ZIP (*zona de influencia pedagógica* [school clusters]) coordinators also provide some pedagogical support, but they travel by bicycle and may not get to the most isolated schools regularly. District officials and inspectors are supposed to provide support, but they also lack transport. Insufficient transport means that remote schools are visited less frequently.

In Lesotho, district resource teachers (DRTs) were established specifically to provide support for remote schools. Each DRT is assigned to provide support, particularly for untrained teachers, in a cluster of remote schools. However, even within the clusters, schools are often geographically spread out, and in practice few schools receive more than two visits a year.

SUPPORT WITHIN THE SCHOOL: HEAD TEACHERS AND MENTORS

Even when specialist support services are organized and provided, it is difficult and expensive to provide monitoring and support to every teacher

on a regular basis. One solution is to have the school monitor and provide support for teachers.

Many countries are developing monitoring tools for use at the school level. In Tanzania, every primary school has an attendance registry, and teachers have to sign in daily. Teachers also sign a form showing what they taught in each class. In Uganda, teacher attendance is recorded, using the teacher attendance registry indicating arrival and departure for both morning and afternoon sessions. In Malawi, a recently issued policy requires all teachers to sign in to record their attendance.

In Uganda, teacher performance is monitored at the school level. Head teachers are expected to monitor teacher performance constantly and to provide a formal appraisal on an annual basis. This may prove to be a very effective method of appraising teachers. One U.S. study finds that the head teacher's perceptions of the school's teachers are very accurate and better predictors of student achievement than either teacher experience or education (Jacob and Lefgren 2005).

There is also increasing emphasis on the provision of pedagogical support within the school. This is sometimes done by asking a senior teacher to act as a mentor for an inexperienced teacher. Mentorship models are a particularly efficient method of providing support for inexperienced teachers, as they avoid the problems of transport and allow regular contact (Yarrow and others 1999). Mentoring has the advantage of having teachers with daily classroom experience provide the support, which inexperienced teachers may see as more useful than formal training, which may be theoretical.

Traditionally, many head teachers and senior teachers have not played an active role in offering pedagogical support, but this is changing. In Malawi, a recent Department for International Development project provides leadership training for one head teacher and two senior teachers in each school. These senior staff members are expected to provide support for inexperienced teachers. In Mozambique, each teacher is given responsibility to act as a pedagogical assistant. The pedagogical assistant observes the class of another teacher and provides a written comment, which the teacher signs to acknowledge that he or she has read it.

SUMMARY OF KEY ISSUES

Lower participation in education and poorer educational outcomes in rural areas are the result of a combination of factors. On the demand side, children may have less interest in school, more alternative demands on their time, and less support from the home. These difficulties are

compounded by inequalities on the supply side, with poorer educational services for rural children. This chapter has discussed three sets of teacher-related issues that weaken the provision of education in rural areas:

1. Teacher deployment practices leave fewer teachers, more unfilled posts, and more unqualified teachers in rural areas.
2. Teacher utilization practices result in larger classes at early grades. In other cases, teachers without adequate preparation and materials are left trying to handle multigrade teaching. At the same time, qualified teachers may be found working with very small classes.
3. Teacher management systems, when limited, result in higher absenteeism and shorter working hours in rural areas. Because the systems to ensure and develop the quality of teaching (inspection and support services) are often weaker in rural areas, the weakest teachers receive the least support.

One of the recurring patterns in the countries studied in this report is that the rural-urban disparities are not adequately monitored and analyzed. Substantial disparities exist among districts, but these do not always receive sufficient attention in education reports. Furthermore, even larger disparities are masked by the very general classifications used to collect the data. As noted earlier, some countries use provinces or districts as the unit of analysis, thus merging very isolated schools with small town schools. There is a clear need for both a better categorization of schools and a more systematic monitoring of the situation of rural schools.

DEPLOYMENT

Teacher deployment to rural schools presents a major challenge. Uneven patterns of deployment, with surpluses in certain schools and shortages in others, exist even in countries with a sufficient number of teachers (Lewin 2000: 30). Shortages of qualified teachers further exacerbate the deployment problems, as teachers have a greater opportunity to avoid undesirable posts. There are two major deployment systems: a central deployment system and a free-market system. While both have merits and demerits, there is widespread acknowledgment that neither ensures an equitable distribution of teachers in remote schools. While many countries offer financial incentives for teachers to locate in rural areas, these have a limited impact and are not sufficient to counteract the perceived advantages of an urban location.

There is a need to develop deployment policies that ensure that sufficient numbers of teachers are assigned to remote schools. Successful

strategies seem likely to require a combination of accurate information about deployment and teacher movements and policies that require or encourage rural location. Some of the promising options include the following:

- Recruit local teachers from the open market. With in-service training delivered through distance education, a local person can become a teacher without leaving his or her home area. This option could build a stable teaching force in rural areas.
- Require newly qualified teachers to serve some time in remote schools before taking up urban jobs. Young, newly qualified teachers tend to be more mobile than older teachers and may be willing to move to a remote school, especially if they see it as a temporary move. Combined with a system of scholarships for teacher training, this option could provide a channel for people from poor rural backgrounds to complete teacher training and return to their home area. This requirement should also be disclosed clearly to the pre-service teacher training entrants, so that those unwilling to accept a rural post may self-select themselves out of teaching. Putting this option into operation will require good information and management.
- Recognize teachers' preferences in deployment. Some teachers may be more willing to move to their home area than to other rural areas. This is particularly true where various languages are spoken. Teachers who are married will value the possibility of being placed in a "tandem posting" or at least being posted close to their spouse. Posting newly qualified teachers with a classmate may help the newcomer to settle into an area.
- Provide incentives. If substantial enough to outweigh the advantages of employment in an urban location, incentives can have an impact. To get the best value, incentives need to be targeted carefully to the most remote schools.
- Make support services work well. Ensuring that administrative processes do not discriminate against teachers in remote schools will help to reduce the relative disadvantage of working in a rural location. Efficient systems of payment (including awarding of increments) and equitable access to opportunities for further study, promotion, or transfer can reduce the disincentive to locate in a rural area.

UTILIZATION

Teacher utilization presents particular challenges in rural areas. Geography and limited transport require small schools, but small schools are

inherently inefficient in teacher utilization. An acceptable overall pupil-teacher ratio in a small school can mask large differences in class size. The larger classes tend to be in the younger grades, leading to poor performance in the crucial early years and subsequent dropout. Teacher utilization is further complicated by teacher specialization, which may result in less efficient use of teachers.

There is a need to develop policies to ensure the efficient use of teachers. Guidelines for the appropriate use of teachers and incentives to implement them could have a significant impact. In particular, it may be important to set limits on teacher specialization in small schools and the use of very small classes. Amalgamating small classes and using multi-grade instruction in the upper grades may be appropriate even in schools where there is one teacher for each class, because this approach would allow smaller classes and maximum teacher support to individual pupils in the lower grades.

There is little doubt that the efficient use of teachers in the smallest schools will require multigrade teaching. This can work well when teachers are properly trained in the techniques, supported with teaching materials, and allowed flexibility in use of the curriculum. Much could be done—in the design of the curriculum, the development of materials, and the training of teachers—to improve the quality of multigrade teaching.

MANAGEMENT

The quality of education in rural areas is diminished by poor management and support. At the administrative level, more is needed to ensure proper attendance and teacher behavior. More challenging is the need to monitor and foster good-quality teaching in general and to guide young, untrained teachers in particular.

Existing inspection and support systems are insufficient to ensure quality. Transport problems and other logistical constraints mean that visits are infrequent. Some countries strive to achieve annual inspection visits, but even this frequency is too low to achieve a meaningful difference in quality. Even when inspectors visit, they tend to focus on administrative issues rather than the quality of teaching and learning, and, in some cases, they may not have the capacity to address these issues adequately. Local support services offer part of the solution, but they too suffer from patchy coverage, limited transport, and infrequent visits.

Providing sufficient monitoring and support from central services is very costly, both in personnel and transport. One likely solution lies in

strengthening management within the school. The following directions are promising:

- Develop monitoring tools that can easily be used within schools
- Provide training for head teachers and senior teachers that specifically equips them to mentor other teachers and focus on the quality of teaching (head teachers, in particular, often see their role as purely administrative)
- Focus inspection visits on quality and build the capacity of inspectors to make a meaningful contribution
- Streamline administrative procedures within the education ministry to enable head teachers to spend less time dealing with the ministry and more time managing their school.

Finally, at the ministry level, it is important to include the rural-urban divide in routine monitoring of the education system. When schools are classified appropriately in terms of their geographic isolation, issues related to gender, attrition, repetition, and learning may become evident. Careful monitoring of these issues will help to keep the rural-urban divide on the policy agenda and foster both the formulation and the evaluation of policy measures to alleviate the divide.

NOTE

1. This process is expected to change with the reintroduction of a college-based teacher training program in September 2005. Under this new arrangement, teachers will be sent to college, and once they have completed the first year of training, they will be deployed to schools.

Country Report: Lesotho

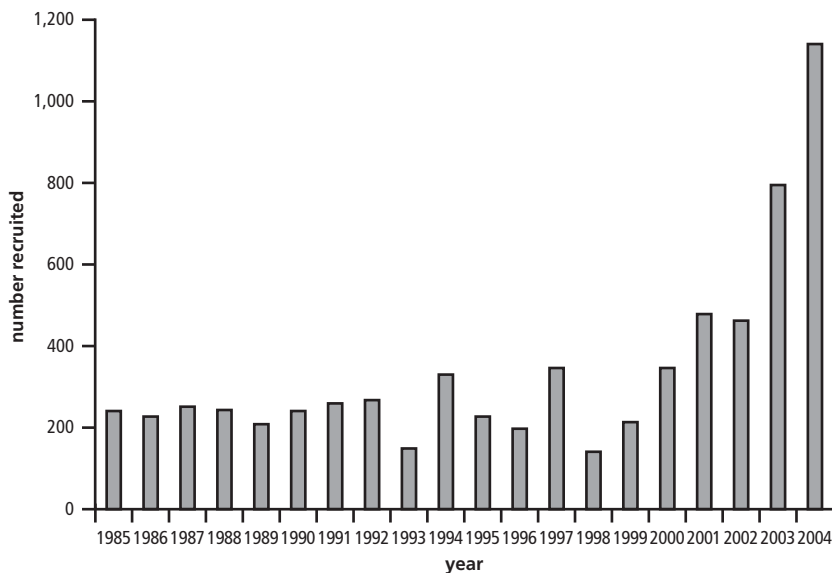
Lesotho's system of primary education consists of seven grades, aimed at children from 6 to 12 years old. Primary education is not compulsory, but it has been expanding rapidly, especially since the introduction of free primary education from 2000. Of the 1,350 primary schools registered in 2003, most are owned by churches, as follows: Roman Catholic, 38 percent; Evangelical, 36 percent; and Anglican, 12 percent. Other churches own a small percentage.

The government has been building schools, mainly in rural areas. There are now 120 government schools, most newly built. There are also schools established by communities, which, because they are supported by the government, are sometimes difficult to distinguish from government schools. Under the education laws of Lesotho, teachers on the government payroll are employed by the Teaching Service Commission (TSC), on which the three major Christian denominations are strongly represented.

Except in a few private schools, teacher salaries are paid by the Ministry of Education and Training (MOET). The government also pays the cost of building some church schools. Whereas under the policy of free primary education, fees are gradually being abolished as the state covers the major part of the costs, schools sometimes request voluntary contributions from pupils. There is often considerable pressure to pay. The funds from these contributions may be used to pay for other school costs, including salaries for teachers. Nonetheless, since the introduction of free primary education, the number of teachers in private schools has decreased considerably.

TEACHER DEMAND AND SUPPLY

The population of Lesotho was estimated at 2 million in 2000. Based on population projections, it is estimated that the population in the primary school-age cohort will rise until 2010 and then decline slightly in the following years.

Figure 2.1 Number of Teachers Recruited Annually, 1985–2004

Source: Lesotho, Ministry of Education and Training data.

In 2003 the total primary enrollment of 429,720 translated to a gross enrollment rate (GER) of 126 percent and a net enrollment rate (NER) of 85 percent among a primary school-age population of 490,000. If the GER remains constant, this figure will decline slightly as the size of the school cohort diminishes. The Strategic Plan of the MOET has a target GER of 100 percent by 2015. If this ambitious target is reached, the primary school population will decline considerably by 2015.

However, the ministry has also set targets for reducing the pupil-teacher ratio (PTR). When free primary education was introduced, the target ratio was 60:1. By 2004, the target ratio was 50:1, and by 2005, this had been adjusted to 40:1. To achieve this goal, the government is adding an average of 350 new teaching positions each year and even more in some years (see figure 2.1). If the PTR is to reach 40:1, additional teachers will be needed. Based on the GER, a peak of an additional 11,529 teachers will be needed by 2015, and the number needed will decline slowly afterward (see table 2.1).

The increase in recruitment since 2000 is part of a deliberate effort by the government to increase enrollment and reduce the PTR. The sharp increase in the number of teachers on the payroll in 2003 and 2004 is due to the effort to fill new positions created since 2000 and vacancies arising in the same period.

Table 2.1 Projected Demand for Teachers in Lesotho, 2005–30

Indicator	2005	2010	2015	2020	2025	2030
Population (thousands)	2,142	2,224	2,309	2,395	2,497	2,609
Primary school-age population (ages 6–12)	335,558	388,000	366,000	354,000	350,000	350,000
Gross enrollment rate	126	126	126	126	126	126
Derived primary school population per GER	422,800	488,880	461,160	446,040	441,000	441,000
Number of teachers needed, based on GER	9,395	10,864	11,529	11,151	11,025	11,025
GER target, per strategic plan	126	115	100	100	100	100
Derived primary school population per GER target	422,800	446,200	366,000	354,000	350,000	350,000
Pupil-teacher ratio, assuming a target of 40:1 by 2015	45	40	40	40	40	40
Number of teachers needed, based on target GER	9,395	9,916	9,150	8,850	8,750	8,750

Source: Author's calculations based on World Bank population projections.

Note: GER = gross enrollment rate.

PROFILE OF THE TEACHING FORCE

The size of the teaching force is difficult to determine precisely, as various sources provide different figures. The Education Management Information System, which provides data on the number of teachers available in schools (regardless of their terms of employment and excluding absentees) based on an annual school census, reports that there were 8,908 teachers in 2003 and 9,836 teachers in 2004. The teaching force is predominantly female (80 percent). In mountain areas, there are slightly more male teachers than in the other areas, but even there, women account for more than 70 percent of the teacher population (see table 2.2).

Table 2.2 Percentage of Teachers and Pupils Who Are Female, by Location, 2004

Location	Pupils	Teachers
Foothills	49	79
Lowlands	48	83
Mountain	53	71
Senqu River Valley	50	74
Total	50	79

Source: Lesotho, Ministry of Education and Training.

Table 2.3 Attrition of Primary School Teachers, by Cause and Data Source, 2004

Cause	Treasury payroll data	Teaching service report
Death	80	117
Resignation	76	149
Retirement	55	104
Dismissal	1	10
Other causes	46	0
Total	258	380

Source: Lesotho, Ministry of Education and Training data.

Note: The payroll figures differ from those of the Teaching Service Department report because of the considerable time lag in reporting cases between these two government departments.

Attrition from the teaching force seems relatively low (see table 2.3). The Teaching Service Department (TSD) reports that there are relatively few alternative job opportunities. Traditionally, many male teachers left to seek employment in the mines of South Africa, but this has become less frequent, as the opportunities in that sector have diminished. According to the TSD, attrition may be lower among primary teachers who are less educated and have fewer alternative sources of employment. In fact, many teachers remain in service until retirement age. Retirement is compulsory at age 65, and more teachers request extension of service than seek early retirement. Estimates of attrition vary between 258 and 380 teachers a year, representing between 3 and 4 percent of the teaching force.

The HIV (human immunodeficiency virus) infection rate is high, particularly among women in the 15–24 age group (see table 2.4). This is reflected in a death rate of approximately 1 percent of teachers annually.

TEACHER SUPPLY

The supply of newly qualified teachers is very limited (see table 2.5). The main source of qualified teachers is the Lesotho College of Education

Table 2.4 HIV Infection Rates in Lesotho

Infected population	Percent
Women, ages 15–24 ^a	51
Men, ages 15–24 ^a	23
Overall ^b	29

Sources: UNICEF (2003) and World Bank data.

a. 2001.

b. 2003.

Table 2.5 Qualified Teachers, 1999–2003

Year	Total number of teachers	Number of qualified teachers	Percentage of teachers who are qualified
1999	8,225	6,416	78
2000	8,578	6,362	74
2001	8,762	6,558	75
2002	8,908	6,466	73
2003	9,294	6,259	67

Source: Lesotho, Ministry of Education and Training data.

(LCE), which operates a full-time, three-year course for school completers known as the Diploma in Primary Education. This course is designed for 250 students per year, but because of limited capacity, it has not reached that number. In 2004 there were 183 candidates for graduation. This means that the total number of newly qualified teachers each year does not meet the demands arising from teacher attrition alone or from the need to expand the teaching force. The impact of this has been that, as the teaching force has expanded, the proportion of untrained teachers has increased. Between 1999 and 2003, the total number of primary teachers increased by 1,000, but the number of qualified teachers fell by 150, leaving nearly one-third of the total number of teachers untrained. In summary, Lesotho is not producing enough newly qualified teachers to meet the demands of the primary education system.

The LCE also offers two programs that provide training for unqualified teachers. The Diploma in Primary Education is a two-year, full-time course for teachers with some experience, usually teachers with lower-level qualifications. In 2004, 60 teachers graduated from this course. The Distance Teachers Education Programme (DTEP) is a part-time course for in-service teachers. It is offered through distance education, using a combination of residential sessions, text materials for self-study, and meetings with tutors in locations around the country. In its first year the program took in 500 teachers. A further 100 teachers with COSC (Cambridge Overseas School Certificate, an upper secondary education) started at the beginning of the second year. This pattern has continued, with unqualified teachers starting in year one and others joining in year two. The course is fairly new, and the first graduates emerged in 2006. There has been some dropout, and in 2005 there were 536 in year three, out of 600 initially admitted. Although the academic requirements for entry are lower than for the conventional course, the curriculum is designed to parallel the full-time course.

One of the unusual features of Lesotho's system of primary teachers is the presence of unpaid "volunteer" teachers in some schools. The 2004 school census reported a total of 354 such teachers. Typically they are young school completers who cannot find a job and who volunteer to teach in the local school in the hope that they will be employed if a vacancy arises and that they will gain the requisite experience to be admitted to the DTEP.

RURAL TEACHERS

There are particular problems in rural areas. Lesotho has some very mountainous areas where travel is difficult, infrastructure is poor, and the climate is inhospitable. The MOET is trying to reach children in these remote areas, starting with a sophisticated school mapping exercise. The aim is to provide a school within 3 kilometers of every child, the equivalent of about one hour's walk. With a dispersed population, schools in rural areas are generally smaller than schools in urban areas, and multigrade teaching is the norm in many rural schools.

Accurate data on rural-urban disparities are difficult to obtain, as this is not tracked or recorded in routine reports. However, the last four districts in table 2.6 are mountain districts, which are almost all rural schools.

The lack of facilities makes rural areas unattractive to many people, and rural schools may have more difficulty attracting qualified teachers than urban schools. According to the TSD, "It is hard to attract people to rural areas, as the conditions are difficult . . . Young people, even those from rural areas, want to come down from the highlands as soon as

Table 2.6 Size of Primary Schools, by District, 2004

District	Number of schools	Average enrollment
Berea	126	430
Botha-Bothe	80	347
Leribe	183	376
Mafeteng	150	303
Maseru	236	374
Mohale's Hoek	164	247
Mokhotlong	104	205
Qacha's Nek	100	181
Quthing	123	237
Thaba-Tseka	136	227
Total	1,402	303

Source: Lesotho, Ministry of Education and Training data.

they can. Even those who come on study leave try hard to stay in Maseru.” In some areas this may be changing, as the Highlands Water Project has opened up areas by providing paved roads and other modern infrastructure.

The annual school census records school location in four general categories, not normally used for analysis. These locational data reveal that only 24 percent of teachers in lowland areas are unqualified, compared with 51 percent in mountain areas (see table 2.7).

Even these figures may mask great teacher shortages in the most isolated schools. The report of one district resource teacher (DRT) is a case in point. In the nine rural schools for which the DRT has responsibility, fewer than one-third of the teachers are qualified (see table 2.8). The isolated schools typically have only one qualified teacher (the principal), and two of the schools have no qualified teacher at all. Although the overall PTR in rural schools is not very different from the national average, the

Table 2.7 Percentage of Unqualified Teachers, by Gender and Location, 2004

Location	Female	Male	All
Foothills	35	58	39
Lowlands	21	39	24
Mountain	47	60	51
Senqu River Valley	26	59	35

Source: Lesotho, Ministry of Education and Training data.

Table 2.8 Teacher Supply in Nine Rural Schools, 2004

School	Pupils	Teachers			Pupil-teacher ratio	Pupil-qualified teacher ratio
		Qualified	Unqualified	Volunteer		
A	70	1	0	3	70	70
B	278	1	4	0	56	278
C	292	1	3	0	73	292
D	365	4	4	0	46	91
E	123	1	4	0	25	123
F	382	1	5	0	64	382
G	100	0	4	0	25	n.a.
H	68	0	2	0	34	n.a.
I	250	2	1	0	83	125
Total	1,928	11	27	3	51	175

Source: Data from a district resource teacher interviewed by the authors.

Note: The number of qualified teachers includes the principal of the school. Volunteer teachers are unpaid. n.a. = not applicable; there were no qualified teachers.

DRT suggests that classes are often very small in the higher grades, reflecting greater dropout.

Teacher absenteeism is reportedly a problem in rural areas, where schools are very remote, and it can take a day to reach a town. Most teachers leave the school to collect their paycheck at the end of each month, which may entail an absence of up to three days, during which only one teacher is left behind to keep control of the school. The government is planning to make it possible for teachers to be paid through their bank. Although teachers will still have to travel to withdraw money and buy commodities, they may be able to schedule these trips among themselves to reduce the negative impact on the school. Other factors also cause absenteeism: a visit to a doctor can take three or four days. Most of the teachers are from rural areas, but their family home is often far from where they are working. As travel home on weekends is difficult, teacher absenteeism is higher on Friday and Monday.

Monitoring of absenteeism may be more difficult in rural areas for a number of reasons. First, in the church schools that make up the majority of primary schools, management responsibility is given to a management committee that is responsible for a number of schools. As the schools can be widely dispersed, the management committee may have little direct experience with individual schools. Second, in rural areas the school principal is often better educated and wealthier than many others in the community and may have considerable status and influence in the community. As a result, the principal may exert considerable influence on the composition and actions of the management committee, making it much less likely that the committee will report difficulties in the school. Teachers who misbehave should be reported by the principal, the management committee, and the inspectorate. In reality, the delays in taking action against teachers weaken the disciplinary system. True in all areas, this failure to discipline teachers may be especially great in rural areas where communication is more difficult. Schools difficult to access by road are less likely to be visited by government inspectors.

Teacher absenteeism is compounded by pupil absenteeism, as pupils are withdrawn by their families to undertake domestic tasks or mind livestock.

The combination of poorly qualified teachers, teacher absenteeism, and uneven pupil attendance is reflected in lower attainment in rural areas. The overall repetition rate is higher in mountain areas than in lowlands, and the test results of the Southern African Consortium for Monitoring Educational Quality (SACMEQ) 2001 survey indicate poorer learning outcomes in rural areas (see tables 2.9 and 2.10).

Table 2.9 Percentage of Repeaters, by Gender and Location, 2004

Location	Pupils		
	Female	Male	All
Foothills	16	22	19
Lowlands	14	20	17
Mountain	18	23	20
Senqu River Valley	14	18	16
Total	16	21	18

Source: Lesotho, Ministry of Education and Training data.

Table 2.10 Test Scores for Lesotho, by Location, 2001

Subject	Overall	City	Rural
Reading	451.2	482.1	441.3
Mathematics	447.2	482.2	436.8

Source: Southern African Consortium for Monitoring Educational Quality II.

Recruiting teachers to teach in rural areas does not appear to be as much of a problem as getting fully qualified teachers. The PTR in rural areas is similar to that in urban areas, and few schools have reported difficulty in filling posts. As the presence of volunteer teachers attests, individuals are anxious to take up positions in schools. Teacher attrition is believed to be lower in rural than in urban areas, although a quantitative analysis has not been undertaken to verify this. As the data show, the majority of teachers in remote schools may be untrained, causing serious concern about the quality of education.

TEACHER FINANCING

Teachers are employed on incremental salary scales, with automatic progression through a series of steps. The entry level and upper limit are determined by teacher qualifications at entry in service and the number of salary steps. Some sample salaries (based on salary scales in 2005) are shown in table 2.11.

Overall, primary education accounts for half of the national education budget (see table 2.12). Within the primary education budget, the salaries of teachers in schools covered by the free primary education policy account for 54 percent of the total budget. As there are approximately 9,500 teachers on the payroll, the average annual cost per teacher in 2004 came to M24,000 (US\$4,100).

Table 2.11 Annual Salaries for Primary School Teachers, 2005

Professional level	Starting salary		Highest salary		Number of salary steps
	Maloti	US\$ equivalent	Maloti	US\$ equivalent	
Unqualified					
Standard 7	10,056	1,734	10,680	1,841	3
COSC	11,952	2,061	15,204	2,621	9
Trained					
Certificate	15,744	2,714	22,932	3,954	6
Diploma	23,604	4,070	34,272	5,910	6
Deputy principal	35,315	6,089	41,940	7,231	6
Principal	42,768	7,374	49,344	8,507	6

Source: Lesotho, Ministry of Education and Training data.

Note: Salary scales for primary school teachers differ from those of secondary school teachers, which are higher. COSC = Cambridge Overseas School Certificate.

Table 2.12 National Expenditure on Education, 2004

(number of teachers = 9,500)

Item	Maloti	US\$ equivalent
National education budget	834,500,014	143,879,313
Primary education (50 percent of education budget)	421,435,000	72,661,207
Primary teacher pay (54 percent of primary education budget)	228,000,000	39,310,345
Average annual pay per teacher	24,000	4,138
Average monthly pay per teacher	2,000	345

Source: Lesotho, Ministry of Education and Training data.

TEACHER DEPLOYMENT

Teacher deployment is based on local hiring of teachers. The ministry “grants” teachers to schools based on school population and budget considerations. Once the school is granted a post, the school management committee can select the teacher. Once the teacher is identified, the papers are sent to the Teaching Service Commission for ratification and ultimate payment of salaries by the government.

RECRUITMENT

This local hire system has a number of implications. First, teachers are not sent to schools. Instead, they apply to schools where they would be willing to work. There is no pattern of teachers refusing postings: individuals unwilling to work in rural areas do not apply for posts in those areas. Second, the ability to select teachers locally makes it more likely that local

people will be appointed and encourages volunteer teachers, who may be more likely to get a post if they are known in the school.

However, the local hire system is open to local influence. The ministry thinks that although posts are advertised, many schools already have a person in mind before they begin the selection process. In some cases, this results in a local person being appointed instead of an outsider. There have been cases of qualified teachers being rejected by communities that prefer to hire a local unqualified teacher instead. Volunteer teachers may expect to get a paid position when one becomes available, and when these expectations are not satisfied, tensions may arise within the community. In addition, the local system makes the rational distribution of teachers difficult, as MOET does not control teacher deployment. Strong local control may also cause uneven deployment within schools. Teachers in powerful positions may be given the smallest classes, leaving the largest classes to the least experienced and least qualified teachers.

LANGUAGE

Sesotho is the first language for the majority of the population, but there are small numbers of speakers of minority languages. Finding competent teachers for these students presents a challenge.

INCENTIVE

To encourage teachers to locate in rural areas, a hardship allowance is paid as a flat fee of M275 per month. This is generally acknowledged to be too small to encourage the more highly qualified teachers to locate in remote areas. As one DRT explained, even the cost of travel to town to collect the monthly check could easily cost M70, and the cost of commodities, especially fuel, is higher in rural areas. There are two other noteworthy features of the hardship allowance: (a) a flat fee, the allowance is proportionally more significant for the lowest-paid teachers, and (b) the allowance is determined by very general classifications of schools. Teachers in remote rural areas in the lowlands do not receive the allowance, while teachers in towns in mountain districts do.

DISTRIBUTION

Teacher deployment between schools is quite uneven in some areas. While in theory the grants to schools ensure equitable distribution, a number of factors distort the distribution of teachers. First, the process of

appointing a teacher is fairly long and involves different departments of government, church authorities, and local management committees. Inefficiency, poor communication, and bureaucratic delays mean that some schools do not take up the posts granted to them or there may be long delays before a teacher is in place.

Second, the ministry finds it difficult to transfer teachers from schools where numbers are falling. The construction of new schools in rural areas is causing a fall in numbers in some of the older schools. In addition, in some cases schools were built quite close together (often schools of different religious denominations), and now that these accept students of any denomination they compete for students. Where a school is perceived to be of poor quality, parents may move their children to a nearby school or withdraw them altogether, causing enrollment to fall in some schools. School authorities are reluctant to allow a teacher to be transferred out of a school. In particular, church authorities may be sensitive about the erosion of their schools and resist efforts to transfer their teachers.

TEACHER UTILIZATION

All primary teachers have the same official working hours. Schools work from 8:00 a.m. to 2:30 p.m., with some local variations. Teachers are trained largely to teach the entire curriculum without subject specialization. Within some schools subject specialization is arranged at the discretion of management. Teachers are employed as public servants, but unqualified teachers are not entitled to a pension (but do receive a gratuity payment on retirement).

Various types of teachers are outside the public service: (a) substitute teachers, who take over the classes of teachers on sick or study leave and are employed and paid by the government on short-term contracts, renewable annually; (b) private teachers in some church schools, who are paid from school funds raised through voluntary contributions from the community; and (c) volunteer teachers, who are not paid.

Multishift teaching is not practiced, although it is mentioned in the original plan for providing free primary education. A shift system was proposed but dropped owing to budgetary limitations.

Multigrade teaching is practiced widely, especially in rural schools where the numbers in the higher grades are low, by having one teacher teach two grades at the same time. However, many perceive the teaching of more than two grades as impractical and a temporary inconvenience. While many small schools officially teach mixed grades 1–6 because of small numbers in the higher grades, the practice is unpopular with parents,

who tend to view this as an incomplete school. As a result, some schools offer an “illegal” grade 7. Despite the widespread use of multigrade teaching, it is not normally included in the program for initial teacher education. The curriculum documents also tend to assume monograde classes.

The ministry guidelines suggest assigning qualified teachers to the lowest grades. This is the practice in some schools, but in others experienced teachers arrange to teach older children. In most schools the principal also teaches a class. The ministry guidelines advise that the principal should teach unless the school has more than 800 pupils.

TEACHER MANAGEMENT

The Teaching Service Commission (TSC) has ultimate legislative powers over all matters pertaining to teacher appointment, promotion, transfer, and discipline. The teacher management structures vary by type of school. Each school has a principal. In government, community, and smaller denominational schools, each school has a management committee. This committee has responsibility for recommending teacher appointments, promotions, and transfers. This gives the committee considerable power. Technically, the TSC could overrule these committees, but this seldom happens in practice. The management committee coordinates with the TSC on matters of teacher recruitment but also may work with the supervisor of government-controlled schools, district education officers, and inspectors on matters of teacher discipline.

In church schools, the structures are more complex. Each school has an advisory school committee, which has little executive power, and a group of up to eight schools is managed by a management committee. The school management committees normally work through the church educational secretariats in dealing with the ministry (see table 2.13).

Table 2.13 Composition of Management and Advisory School Committees

Member	Management committee	Advisory school committee
Representative of the proprietor	2	2
Representative of parents	3	4
Teacher representative	1	1
School principal	1	1
Representative of the traditional leader or chief	1	1
Total	8	9

Source: Lesotho, Ministry of Education and Training data, 2005.

In the case of teacher absenteeism or other misbehavior, a complaint from a principal of a church school would be passed to the management committee, the church authorities, the ministry, and the inspectorate, before the TSC would take any action. Where the misbehaving teacher is popular or well connected locally (as may easily happen given the local hiring system), the management committee may be reluctant to take action, causing even greater delays before the difficulty comes to the attention of the ministry.

SCHOOL PRINCIPALS

Head teachers or principals of schools are selected by school management committees. The process of selection is not always transparent. Principals are required to have a qualification in school leadership and a certain minimum experience in teaching. However, in rural schools many of the principals do not meet those requirements. The position of principal is a promotion to be achieved on the basis of merit. When a person appointed to this position does not meet the formal requirements, only a responsibility allowance is paid to the appointee.

SCHOOL SUPPORT AND INSPECTION

The school inspectorate is responsible for inspecting primary schools. However, the conclusions of the 2002 *Schools Inspectorate Final Report* (Lesotho, Ministry of Education and Training 2002) point to a series of weaknesses in the inspectorate:

- School inspection is highly unlikely to be contributing to the quality of education in Lesotho's schools.
- Primary schools are inspected by education officers without expertise in primary education.
- Most school inspections do not include an evaluation of the quality of education provided in the school.
- There is no follow-up of inspection recommendations.
- The ministry has almost no reliable information about the quality of education provided in the schools.
- There is almost no valid information on which to base advice to the minister or to formulate new policy.
- The capacity of the field inspectorate is limited by a lack of adequate transportation.

In view of these weaknesses, and in particular the transportation difficulty, remote rural schools are unlikely to receive inspection visits with any regularity.

DISTRICT RESOURCE TEACHERS

District resource teachers were first appointed in the mid-1980s under the Primary In-service Education Programme (PIEP) but have since been mainstreamed into the ministry. A support person, the DRT is usually a former principal of a primary school, appointed to look after a small number of isolated rural schools. Not all schools have an assigned DRT, as the limited number of DRTs are appointed specifically to the most remote schools. The key duty of DRTs is to provide school-based support and training to rural (often unqualified) teachers in the areas of pedagogy, curriculum, and school management.

In some cases, the schools are so remote that the journey from the “base school” can take a full day. The aim is to visit each school twice every six months, but this is difficult to achieve. The records from 1997 to 2001 show that most schools are visited by the DRT between one and four times a year, with few schools receiving more than two visits. Almost three-quarters of the visits made to schools by DRTs are one-day visits. The other visits vary from two to five days in length. These visits are intended to be supportive, with particular focus on supporting teachers with multigrade classes. The evaluation reports an increase in learning achievement in the schools, at least initially, but this improvement has become less obvious as the DRTs have worked with the same schools over a prolonged period.

SUMMARY OF KEY ISSUES

As the primary education system is expanding, the number of teachers needed is growing. Lesotho is not producing enough newly qualified teachers to meet the demands of the primary education system. As a result, as the teaching force has expanded, the proportion of untrained teachers has increased.

Rural areas are at a particular disadvantage. Recruitment does not appear to be a problem in rural areas. The PTR is similar in rural areas as in urban areas, and few schools reportedly have difficulty filling posts. As the presence of volunteer teachers attests, individuals are anxious to take up positions in schools. Teacher attrition is believed to be lower in rural than in urban areas, although a quantitative analysis is not available. The

difficulty lies in getting qualified teachers in rural areas. As the data show, the majority of teachers in remote schools may be untrained, causing serious concern about the quality of education. Rural-urban comparisons are not a routine part of reporting on the education system.

Teacher deployment is done using a local hire system. This gives schools considerable autonomy in selecting teachers and may contribute to high retention in rural areas. However, the system makes redistribution of teachers difficult.

Although the Teaching Service Department is responsible for teacher recruitment, it tends to focus on the operational aspects of the task rather than on the strategic issues of supply and demand. The Lesotho College of Education is semiautonomous, and its intake is not determined directly by the ministry, creating the potential for mismatch between supply and demand.

Country Report: Malawi

Malawi has a population of 11.9 million, which is growing at a rate of 3.3 percent a year. It introduced free primary education in 1994, and primary school enrollment expanded from 1.9 million to 3.2 million. The education system has eight grades at the primary level, ending with a primary school leaving certificate examination (PSLCE). At present there are 5,103 primary schools with a total school population of 3,166,000 pupils. The population in the cohort 6–13 years of age is 2.4 million, but this is expected to reach 3.4 million by 2015. The gross enrollment rate (GER) is 132 percent. The government's strategic plan anticipates that the GER will be reduced to 120 percent by 2010. Even assuming a steady reduction in GER, the number of children in primary school will rise to 4.1 million by 2015.

THE TEACHING FORCE

There are 44,000 teachers, resulting in an average of 72 pupils per teacher. The Ministry of Education expects that this will fall to 67 by 2010 and to 60 by 2015 (see table 3.1). Achieving these targets will require a teaching force of more than 68,000 by 2015. Thus, to achieve its primary education goals, Malawi will have to expand the teaching force by 24,000 over the next 10 years.

PROFILE

Of the total teaching force, 38 percent are female. The majority have a secondary education, either a lower secondary junior certificate examination (JCE, 55 percent) or a higher secondary Malawi school certificate examination (MSCE, 44 percent). There are very small numbers with third-level diplomas or degrees. Among female teachers, more have the lowest levels of education than have the highest, although the differences are small (see table 3.2).

Table 3.1 Projected Demand for Teachers in Malawi, 2004–15

Indicator	2004	2005	2010	2015
Primary age cohort (6–13)	2,397,857	2,476,986	2,913,568	3,427,100
Number of students	3,165,171	3,220,082	3,496,282	4,112,520
Number of teachers	43,952	44,723	52,183	68,542
Pupil-teacher ratio	72	72	67	60
Gross enrollment rate	132	130	120	120

Sources: Malawi, Ministry of Education data and author's calculations.

Table 3.2 Teachers' Level of Educational Attainment, 2004

Educational attainment	Number of teachers	Percentage of total teachers	Percentage of female teachers
PSLCE (primary school)	473	1	44
JCE (lower secondary school)	23,971	55	43
MSCE (upper secondary school)	19,467	44	32
Diploma	33	0	9
Degree	8	0	38
Total	43,952	100	38

Source: Malawi, Ministry of Education data.

Note: JCE = Junior Certificate Examination; MSCE = Malawi School Certificate Examination; PSLCE = Primary School Leaving Certificate Examination.

The majority (88 percent) of teachers have received training, as a result of a crash training program that has been in place over the last 10 years. Malawi used to have a system of teacher training that involved a two-year pre-service course. In 1993 this was dropped to one year in an effort to increase the supply of teachers. In 1997 this, in turn, was dropped in favor of the Malawi Integrated In-service Teacher Education Programme (MIITEP; see table 3.3).

The MIITEP strategy was to recruit large numbers of untrained teachers and gradually provide them with training while they remained in service. Each cohort of recruits underwent six months of full-time training, then two and a half years of supported teaching, followed by a period of further full-time study. Initially, the MIITEP trained three cohorts a year, with an intake of 3,000 student teachers in each cohort. There was some dropout during the course, but an average of 2,000 from each cohort qualified. Following a review of the MIITEP in 2000, the intake was reduced to two cohorts a year to allow for more time in college and thereby improve quality.

Under the MIITEP, the ministry recruited 22,000 untrained teachers in 1997, with the expectation that 18,000 would qualify. It recruited a further 11,000 in 2000 and is in the process of training the last cohorts of

Table 3.3 Teachers Qualified under the Malawi Integrated In-service Teacher Education Programme

Cohort	Year of completion	Number of teachers
1	1999	2,073
2	1999	2,064
3	1999	2,180
4	2000	1,991
5	2000	1,898
6	2001	1,923
7	2002	1,995
8	2003	1,596
9	2004	2,207
10	2005	2,783
11	2005	2,704

Source: Malawi, Ministry of Education data.

Table 3.4 Number and Training of Qualified Teachers, 2004

Qualification	Number of teachers	Percentage of all teachers	Percentage of female teachers
Malawi Special Teacher Education Programme	2,350	5	65
Two-year pre-service training program	11,371	26	62
One-year pre-service training program	5,381	12	57
MIITEP	19,491	44	64
Unqualified (in process of completing MIITEP)	5,359	12	60
Total	43,952	100	62

Source: Malawi, Ministry of Education data.

Note: MIITEP = Malawi Integrated In-service Teacher Education Programme.

these. There has been no recruitment since 2000. As a result of this accelerated program, nearly 20,000 teachers (44 percent of the total) have been trained through the MIITEP (see table 3.4).

TEACHER TRAINING

The ministry is suspending the MIITEP and replacing it with a pre-service teacher training system using a 1+1 model. This new model will involve one year of full-time study in a teacher training college (TTC), followed by a year of supported teaching practice and study. This system was implemented beginning in 2006, and the first set of qualified teachers will complete their training in 2008.

The number of new teachers trained is determined mainly by bed capacity in the TTCs. There are five publicly funded TTCs, with a total bed capacity of 2,220. The capacity has been reduced by the recent loss of Montfort College, which is becoming a university. This college will

continue to train teachers, but for secondary schools only. This capacity is insufficient to meet the demand, and the ministry has put in motion the following:

- A project to expand each of the five TTCs, bringing the total bed capacity to 3,160, supported by the German Agency for Technical Cooperation
- The construction of one new college with a bed capacity of 540, supported by the World Bank
- A plan for a new TTC, pending the availability of resources
- Two TTCs in the private sector (Emanuel and Development Aid from People to People Chilangoma), which are licensed. One has 34 students, and the other has 29, and the first graduates were produced in 2005. Enrollments are expected to rise gradually.

A three-year distance education training course is planned, with an annual intake of around 1,000. The course is aimed at new teachers, as all of the existing teachers should have been trained by the last MIITEP cohorts.

These figures allow some predictions of the supply of newly trained teachers over the coming years (see table 3.5). The predictions are based on the assumptions that the proposed expansion of the TTCs goes ahead

Table 3.5 Estimated Supply of Trained Teachers, 2004–10

Year	Teacher training college		Distance education	
	Number of teachers trained	Comment	Number of teachers trained	Comment
2004–05	4,000	Final two cohorts from MIITEP	n.a.	
2005–06	—	No graduates, year 1 of new pre-service teacher training course		
2006–07	2,200	First cohort of 1+1 course: Blantyre, 540; Karonga, 300; Kasungu, 540; St. Josephs, 300; Lilongwe, 540	n.a.	First intake into distance education course
2007–08	3,160	Second cohort after expansion: Blantyre, 600; Karonga, 540; Kasungu, 700; St. Josephs, 600; Lilongwe, 720	n.a.	
2008–09	3,700	Third cohort with additional colleges constructed (540 initially)	1,000	Graduates from distance education course
2009–10	3,700	Fourth cohort	1,000	Second cohort

Sources: Malawi, Ministry of Education data and author's calculations.

Note: — = not available; n.a. = not applicable.

in time to provide expanded output in 2007–08, that the new TTC is constructed as planned, and that the distance learning course goes ahead as proposed.

TEACHER ATTRITION

The ministry estimates that teacher attrition is around 6 percent of the primary school teaching force (see table 3.6). In total, 6,500 teachers left their jobs in 2004, but many of these transferred to other teaching posts and cannot be counted as lost from the teaching profession. Of the 2,166 who left teaching, more than one-third died.

HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) is a serious concern. The infection rate is estimated to be about 20 percent for Malawi as a whole (World Bank 2004a). In 2004 there were 787 teacher deaths, compared with 244 in 1995 (see table 3.7).

Table 3.6 Teacher Attrition, 2004

Indicator	Number of teachers	Percentage of total teacher moves	Percentage of teachers who left teaching
Transferred to other teaching post	4,358	67	n.a.
Transferred to nonteaching post	103	2	5
Resigned	244	4	11
Retired	314	5	14
Prolonged illness	181	3	8
Dismissed	207	3	10
Died	787	12	36
Other	330	5	15
Total movements	6,524	n.a.	n.a.
Total teacher attrition	2,166	n.a.	n.a.

Source: Malawi, Ministry of Education, education statistics, 2004.

Note: The data in this table are based on a school census, which achieved a 99.9 percent response rate.

The first annual report by the Education Management Information System (EMIS) was produced in 2004, based on records of the education system compiled by the EMIS project supported by the U.S. Agency for International Development. n.a. = not applicable.

Table 3.7 Teacher Death Rate, 1995–2004

Indicator	1995	2000	2004
Number of primary teachers	33,771	34,222	43,952
Deaths among primary teachers			
Number	244	289	787
Percent	0.72	0.84	1.79

Source: Malawi, Ministry of Education data.

The rate of teacher deaths more than doubled in the period 1995–2004, with much of the increase presumed to reflect a greater number of deaths from HIV/AIDS. Anecdotal evidence supports this presumption. In one division alone, there were 20 AIDS deaths in one month. The Education Management Information System (EMIS) records that one district lost 80 teachers in one year, 70 due to death.

The impact of HIV/AIDS may be even worse than these figures suggest. The Teachers Union of Malawi (TUM) believes that the ministry's figures may be distorted by underreporting. Schools may fail to report a death in order to ensure that the family of the deceased teacher continues to receive an income, while colleagues share the workload. HIV/AIDS may cause an increase in teacher attrition up to 8 percent overall, while not reducing the number of pupils in the medium term. HIV also contributes to virtual attrition, as sick teachers may not come to work, and head teachers may be reluctant to take action to avoid financially harming the family. In addition, many teachers have to care for sick relatives or orphans. These additional domestic pressures may cause greater teacher absenteeism.

With the exception of these disturbing figures for teacher deaths, attrition for other reasons is not high. Many teachers stay in the teaching force until the retirement age of 55. In fact, many are anxious to go on working after age 55, and some are given "month-to-month" contracts that allow them to teach while receiving a pension. At present there are 1,400 of these contracts, and the figure is limited by budget resources rather than teacher supply. Many other teachers do not wish to retire at 55 and have to be compelled to do so.

Attrition to other jobs appears to be low, partly because there are few alternative sources of employment for graduates with a Malawi school certificate examination (MSCE) qualification. Dropout is a bigger issue among secondary teachers, who are better qualified and able to get other jobs. A few teachers reportedly have left to teach in private primary schools, but this is done more often by retired teachers than by teachers in mid-career.

Two channels may be encouraging attrition from primary school teaching. First, in response to a shortage of secondary teachers, many primary school teachers have been assigned to teach in secondary schools. Some are undergoing training to upgrade their qualifications to those of a secondary teacher and are unlikely to return to the primary school classroom. At present, an estimated 5,000 primary teachers are working in secondary schools. Second, primary school teachers are allowed study leave. Not all apply for this, but for those who do go on leave, almost no one returns to primary teaching. Some go on to teach in secondary schools, and others

Table 3.8 Teaching Posts and Training, 2000–04

Indicator	2000	2001	2002	2003	2004
<i>Teaching posts</i>					
Number established	55,510	55,510	55,510	55,510	55,510
Number filled	47,840	53,444	46,032	45,100	43,952
Percentage of posts filled	86	96	83	81	79
<i>Teacher profile</i>					
Number trained	24,556	31,798	23,632	32,019	38,593
Number untrained	23,284	21,646	22,400	13,081	5,359
Percentage of teachers trained	51	59	51	71	88

Source: Malawi, Ministry of Education data.

leave teaching altogether. Around 100 primary teachers a year enter a full-time course to qualify as a secondary teacher, and others take other courses.

TEACHER SUPPLY AND DEMAND

Malawi has 55,510 established teaching positions, but not all of them are filled. The pattern of recruitment of untrained teachers has meant that at times there have been large numbers of untrained teachers, but these have been gradually trained as the MIITEP has reached them. Table 3.8 shows the pattern. Recruitment in 2000 is reflected in greater numbers of teachers in 2001, followed by very rapid attrition in 2002. Since then, attrition has been slower, but there has been no new recruitment, so the total number of teachers has declined. In the same period, the MIITEP training reduced the number of untrained teachers to only 12 percent of the total number of teachers.

An estimated 4,000 untrained teachers received their qualifications in 2005 in the last two cohorts of the MIITEP. After this, there was a gap before any newly qualified teachers emerged from the new pre-service teacher training course. Based on the estimated output from teacher training, the number of newly qualified teachers will not exceed the number lost to attrition until 2008. With the expanded TTCs and distance education course in place, the number of qualified teachers will exceed attrition substantially, and the number of qualified teachers could rise to 50,800 by 2015 (see table 3.9).

Based on these figures, Malawi will not produce enough teachers to meet the expanding demand. Even taking into account the expansion of teacher training capacity, supply will not be sufficient to meet the rising demand for teachers, and by 2015 the shortfall of qualified teachers could be more than 17,000 (see table 3.10 and figure 3.1).

Table 3.9 Estimated Supply of Trained Teachers, 2005–15

Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Trained teachers	38,359	40,057	37,654	37,595	38,499	40,889	43,136	45,248	47,233	49,099	50,853
Newly qualified teachers	4,000	0	2,200	3,160	4,700	4,700	4,700	4,700	4,700	4,700	4,700
Attrition	2,302	2,403	2,259	2,256	2,310	2,453	2,588	2,715	2,834	2,946	3,051
Net change	1,698	-2,403	-59	904	2,390	2,247	2,112	1,985	1,866	1,754	1,649

Source: Author's projections.

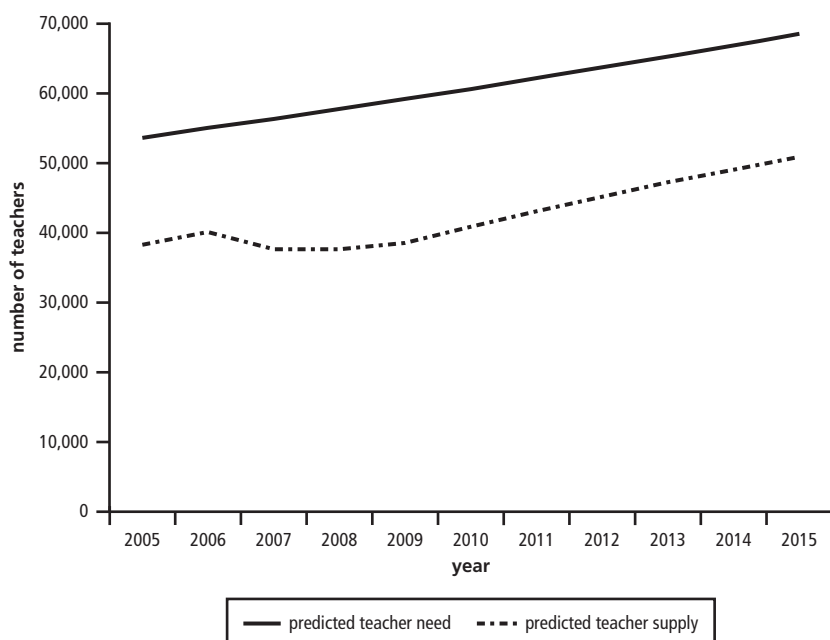
Note: Projected supply of teachers includes an assumed output from teacher training programs and a 6 percent teacher attrition rate.

Table 3.10 Estimated Supply of and Demand for Qualified Teachers, 2005–15

Indicator	2005	2006	2007	2008	2009	2010	2015
Teacher need, based on PTR of 60	53,668	55,013	56,388	57,793	59,230	60,699	68,542
Supply of qualified teachers	38,359	40,057	37,654	37,595	38,499	40,889	50,853
Shortfall of qualified teachers	15,309	14,955	18,734	20,198	20,731	19,810	17,689

Source: Author's projections.

Note: PTR = pupil-teacher ratio.

Figure 3.1 Estimated Demand for and Supply of Trained Teachers, 2005–15

Source: Author's calculations.

There are a number of possible ways to address the shortfall in teacher supply. One is to raise the retirement age, which stands at 55. Given that many teachers are willing to work beyond age 55, this might provide an easy source of experienced teachers. However, opting for this possibility might have implications for the government's broader human resource policy.

TEACHER FINANCING

Most teachers are employed as "substantive employees," which means that they have permanent jobs and are entitled to receive a pension on retirement. However, the following types of teachers are not in this category:

- *Temporary teachers* are untrained teachers who are employed even as they receive training. Once they are qualified, they become substantive employees. The 5,000 untrained teachers who are completing their in-service training as part of the MIITEP fall into this category.
- *Retired teachers* are often employed on a month-to-month basis. The retirement age is 55, but teachers over 55 may be employed on a monthly basis up to age 60. In 2005, there were 1,400 teachers in this status. They receive their pension as any other retired staff and a salary for their teaching, but they get their gratuity entitlement only after serving for five years.
- *Community teachers*, of whom there were 12,000 in 2005, do not belong on the government payroll at all. However, in some areas, usually rural, where there are too few teachers, a young person from the community may work in the school. This person may receive some payment from the community, sometimes in cash, but often in kind (maize, chickens, and such).

Teacher Pay. Teacher compensation improved significantly in 2001, when a housing allowance was introduced across the public service. For some teachers the housing allowance was more than the basic salary, and it was not taxed. Under a recent restructuring, payments for salary and housing allowance have been amalgamated into a single payment. This is the subject of some controversy: because the entire payment is now taxed, some teachers take home less money than before. The main issue is the calculation of pension, and a strike over this issue has been threatened. Teachers also receive a small professional allowance (MK 800 per month; Malawi's currency is the kwacha). There are no special financial incentives for teachers in rural areas.

Teacher salaries are on an incremental scale, but there is no relationship between performance and pay (see table 3.11). Teacher pay is tied to

Table 3.11 Teacher Salaries (Annual) by Pay Grade, 2005

Grade	Starting salary		Highest salary		Number of annual steps
	Kwacha	US\$ equivalent	Kwacha	US\$ equivalent	
Starting primary teacher	67,740	599	74,844	662	6
Senior teacher	136,224	1,206	173,688	1,537	5
Head teacher					
Lower grade	184,104	1,629	238,416	2,110	5
Higher grade	244,368	2,163	268,812	2,379	5

Source: Malawi, Ministry of Education data.

civil service pay scales. This may be reviewed in the future, with the possibility that teachers may be paid on a separate, better scale and admitted to a professional body like a teacher council.

Teacher pay rose in 2002 with introduction of the housing grant. Since then, there have been small annual increases, but the TUM argues that these have not kept pace with inflation. Nonetheless, salaries remain attractive to school graduates. When the places in teacher training colleges for September 2005 were advertised, 45,000 applied for the 2,200 places available.

Teacher promotions are based on a combination of seniority and interview. Teachers have to have a minimum of four years of experience before they can apply for promotion, but the final promotions are awarded on the basis of an interview. Opportunities for promotion are limited by quotas. In 2004 some 18,000 teachers applied for promotion to the senior teacher level, but only 2,800 places were authorized. The small number of posts is a source of frustration for teachers. The majority of primary teachers are employed at the starting level. Female teachers are slightly overrepresented in the lower grades and slightly underrepresented at the head teacher level (see table 3.12). Head teachers are selected by the Teaching Service Commission, based on performance and interview. For both teachers and head teachers, performance during the interview may have a greater influence than performance on the job, as there is no system for evaluating performance. The absence of an assessment of performance in determining promotion provides little incentive for teachers to improve the quality of their work.

Teachers in the National Budget. Malawi has a total budget of MK 89.8 billion, of which 12 percent is spent on education (see table 3.13). Of this, 41 percent, or MK 4.3 billion, is spent on primary education. Teacher salaries account for 86 percent of the primary education budget. A total of MK 3.7 billion is paid to the 43,952 teachers, averaging MK 84,983 per teacher.

Table 3.12 Breakdown of Teachers by Grade, 2004

Teacher grade	Number of teachers	Percentage of total teachers	Percentage of female teachers
Starting teachers	20,144	46	38
Senior teachers	10,036	23	40
Temporary teachers	9,550	22	41
Teachers employed on a monthly basis	1,384	3	25
Head teachers			
Lower grade	1,962	4	36
Higher grade	735	2	32
Other	141	0	84
Total	43,952	100	38

Source: Malawi, Ministry of Education data.

Table 3.13 Teacher Salaries and the National Budget, 2005

Indicator	Kwacha	US\$ equivalent	Remarks
National budget	89,888,793,930	795,476,052	
Education budget allocation	10,638,611,965	94,147,009	12 percent of national budget
Budget allocated to primary education	4,335,956,409	38,371,296	41 percent of education budget
Budget allocated to salary of primary school teachers	3,735,165,000	33,054,558	86 percent of primary education budget
Number of primary school teachers			43,952
Average cost per teacher	84,983	752	
Salary of a newly qualified teacher	67,740	599	
GDP per capita	17,311	153	
Teacher starting pay as a percentage of GDP per capita			390 percent

Source: Malawi, Ministry of Education data.

TEACHER RECRUITMENT AND DEPLOYMENT

It is acknowledged that the teacher deployment system is not functioning equitably, and teacher-pupil ratios vary widely between urban and rural areas. While rural areas average 77 pupils per teacher, urban areas average 44 (see table 3.14). The World Bank country status report (World Bank 2004a) points out a randomness value of 34 percent in teacher allocation, one of the highest in the region.

Despite this imbalance in the number of teachers, the best-educated teachers are not necessarily found in urban areas. An analysis of teacher education status by division shows little variation among divisions. There

Table 3.14 Schools, Teachers, and Pupil-Teacher Ratios, by Location, 2004

Indicator	Rural	Urban	Total
Number of schools	4,932	171	5,103
Number of pupils	2,896,356	270,430	3,166,788
Number of male teachers	26,002	1,100	27,102
Number of female teachers	11,803	5,047	16,850
Total number of teachers	37,805	6,147	43,952
Pupil-teacher ratio	77	44	72

Source: Malawi, Ministry of Education, education statistics, 2004.

Table 3.15 Location of Teachers, by Level of Education, 2004 (percent)

Location	PSLCE	JCE	MSCE	Diploma or degree
Central Eastern	1.1	56.6	42.2	0.2
Central Western	1.4	56.7	41.8	0
Northern	0.8	55.3	43.8	0.1
Shire Highlands	0.6	53.5	45.9	0
Southern Eastern	1.1	54.0	44.8	0
Southern Western	1.1	48.9	49.9	0.1
Average	1.1	54.5	44.3	0.1
Lilongwe City	0.4	59.1	40.5	0
Blantyre City	0.4	49.5	50.1	0

Source: Malawi, Ministry of Education, education statistics, 2004.

Note: JCE = Junior Certificate Examination; MSCE = Malawi School Certificate Examination; PSLCE = Primary School Leaving Certificate Examination.

Table 3.16 Gender of Teachers, by Location, 2004

Gender	Rural	Urban	Total
Male	26,002	1,100	27,102
Female	11,803	5,047	16,850
Total	37,805	6,147	43,952
Percentage female	31	82	38

Source: Malawi, Ministry of Education, education statistics, 2004.

is approximately the same proportion of teachers with a JCE and an MSCE in each area (see table 3.15).

However, there is a large gender disparity in teacher location (table 3.16). The vast majority of teachers in urban schools (82 percent) are female, compared with only 31 percent of teachers in rural areas.

In the EMIS data, schools are classified as either rural or urban. In total, 179 schools are classified as urban, and the remaining 4,924 are considered rural. This simple classification masks important differences between schools in rural areas. Table 3.17 shows data from six zones in different

Table 3.17 Differences in Characteristics among Select Rural Zones, 2004

Zone	Description	Number of schools	Number of pupils	School size	Number of teachers	Pupil-teacher ratio	Number of teachers with MSCE diploma	Percentage of MSCE holders
Ching'ombe	Lilongwe (rural)	15	15,387	1,026	355	43	144	41
Songani	Near Zomba	21	18,574	884	321	58	134	42
Chikala	Near Zomba	16	13,900	869	175	79	54	31
St. Pauls	Zomba (very rural)	6	3,955	659	28	141	9	32
Kalulu	Nsanje (very rural)	8	5,956	745	43	139	23	53
Chilipa	Mangochi (very rural)	22	11,910	541	102	117	39	38

Source: Malawi, Ministry of Education data from annual school survey, 2004.

Note: MSCE = Malawi School Certificate Examination.

areas, selected to illustrate the differences. In the Ching'ombe, close to Lilongwe, there are 43 pupils per teacher. In contrast, in the very rural zones like St. Pauls, Kalulu, and Chilipa, the pupil-teacher ratio (PTR) ranges from 117 to 141. In the most rural zones, schools tend to be smaller, although they still have more than 500 pupils. There is very little difference between these zones in the proportion of teachers with a higher level of education (MSCE or diploma).

RECRUITMENT

There is high demand for teaching jobs. As noted, when vacancies were advertised for intake in September 2005, 45,000 applied for the 2,200 available places. The qualifications for entry have risen. In the first phases of the MIITEP, student teachers with the JCE were admitted, but now they all have the MSCE.

Since the introduction of free primary education in 1994, teacher recruitment has been accomplished by hiring untrained temporary teachers, who are later trained through the MIITEP. This recruitment was done centrally, and teachers were deployed to schools on the basis of need.

This process changed with the reintroduction of a college-based teacher training program in September 2005. Under this system, teachers attend colleges; once they have completed the first year of training, they are deployed to schools.

Teacher recruitment was previously the responsibility of the Teaching Service Commission, which advertised and selected suitable candidates on the basis of their qualifications and an interview. Candidates were not recruited for specific locations, and there were no specific recruitment policies to select teachers for rural areas. Since the 2005–06 academic year, the Department of Teacher Education and Development became

responsible for advertising, interviewing, and recruiting new teachers for training. The deployment of qualified teachers is the responsibility of the Department of Human Resources, and promotion is the responsibility of the Teaching Service Commission.

DEPLOYMENT

Under the MIITEP system, where untrained temporary teachers were recruited and later trained, the deployment of teachers was done at the point of recruitment. The original plan was to send teachers to the rural schools where the need was greatest. However, many teachers, particularly female teachers, found reasons to argue that they should not be sent to rural areas. Female teachers often made the argument based on marriage. As a matter of policy, if a husband is located in an urban area, the ministry will not normally force the wife to leave the area.

Generally, teachers do not want to return to their own village, fearing the many demands placed on them by family. Some people from rural areas would prefer to be in their home district, but not actually in their home area. However, there is no formal policy of sending teachers back to their home district.

Transfers. Once teachers are deployed, they can request a transfer to another area. Female teachers often request a transfer on the basis of marriage, and there are reports of women faking a marriage in order to get a transfer. It is rare to find female teachers in rural areas, unless they are with their husband (if, for example, both are teachers). Male teachers are sometimes able to get a transfer because they are pursuing further studies and need access to electricity for study at night. Teacher illness is another major reason for transfer. In Malawi, antiretrovirals are available free to people with HIV, but only a limited number of hospitals can dispense them or even diagnose HIV. There is no formal arrangement allowing sick teachers to move to an area near a hospital. However, for compassionate reasons, district education managers often allow this, even where there is no vacancy in the urban area.

The ministry rarely initiates redeployment. If a district education manager needs to fill a vacancy, he or she will often try to transfer a teacher from a nearby school. Managers have a strong disincentive to move teachers, as they have to pay the travel costs for each move, and the budget is limited. Teachers who misbehave are sometimes sent to rural areas as punishment.

Overall, there is a good deal of teacher movement. In 2004 more than 4,000 teachers transferred to another school, 10 percent of the teaching population. Most movement is initiated by the teachers

Table 3.18 Main Languages of Malawi

Language	Percentage of the population
Chichewa (with Chinyanja)	70
Chiyao	10
Chitumbuka	9
Other	11

Source: Malawi, National Statistics Office (2000).

themselves. Teachers who want to move may face long delays but may eventually get to move where they want. Teachers who have a lot of influence or who have pressing humanitarian reasons to move (such as marriage or illness) may be able to get redeployment to an urban area. In some cases, teachers have been able to get a transfer, even where there is no vacancy in the school to which they are moving. As a result, some urban schools are significantly overstaffed, and teachers have relatively light workloads. As there is constant teacher-initiated movement and no regular supply of new teachers, there is an over-supply of teachers in desirable areas and a shortage in less desirable areas. In one extreme example, a school in Blantyre has 20 classrooms and 111 teachers, of whom 90 are female.

Incentives. At present, there are no special incentives for teachers to locate in rural areas, but they are under consideration. Possible incentives include a salary bonus or the provision of services, like housing, solar power, or clean water supply. The TUM is arguing for a 25 percent additional salary payment for teachers in rural areas. Housing may also be an issue. If teachers cannot live near the school, then it is difficult for them to devote sufficient energy to their teaching. The EMIS reports a strong association between the availability of housing in an area and the presence of female teachers in the school.

Language of Instruction. Various languages are spoken in the country (table 3.18). Officially, teachers may use the local languages in the first years, but they are supposed to use Chichewa in the middle years and English in the later years of primary school. All teachers should have sufficient proficiency in Chichewa to teach, but it is unclear how Chichewa speakers manage when they work in other language areas.

TEACHER UTILIZATION

Schools operate from 7:30 a.m. to 12:00 noon for infants (4.5 hours a day), with longer hours for the older classes. Normally each teacher teaches one class, hence teaching 22–27.5 hours a week, depending on

Table 3.19 Double- and Single-Shift School Sessions, 2004

Indicator	Double	Single	Total
Number of schools	713	4,390	5,103
Number of pupils	396,801	2,769,985	3,166,788
Number of teachers	6,365	37,587	43,952
Pupil-teacher ratio	62	74	72

Source: Malawi, Ministry of Education, education statistics, 2004.

the age of the class. Head teachers normally teach classes in small schools and even in some of the bigger schools.

In areas where there is a shortage of classrooms, typically urban areas, some schools teach two shifts. However, the two shifts are taught by different teachers, evidently a measure to address a shortage of classrooms rather than a shortage of teachers. The EMIS figures show that 713 schools had more than one shift in 2004, approximately 14 percent of the total (see table 3.19).

In rural areas, the ministry has been aiming to build a spread of schools such that children are not expected to walk more than 3–5 kilometers to school. According to a World Bank country status report (World Bank 2004a), the mean distance to school in rural areas is 1.9 kilometers; 37 percent of pupils in rural areas live within a kilometer of a school, and a further 38 percent live between 1 and 2 kilometers away. There has been a school mapping project based on geographic information systems, supported by the U.K. Department for International Development (DFID). However, to date, the project has focused mainly on the location of secondary schools.

Despite the geographic spread of schools, schools in rural areas are quite large, often with as many as 700 students. In some rural areas, there is a system of satellite feeder schools in which small schools teach the lower grades and pupils transfer to a full-cycle school to attend the higher grades. Some schools use multigrade teaching, especially in rural areas. Typically, this means merging two classes. However, there are no formal guidelines on multigrade instruction, and it is not normally included in teacher training.

The teacher strategy calls for specialization of primary teachers. The plan is that all primary teachers will have training in common and then specialize in the infant, junior, or senior primary level.

TEACHER MANAGEMENT

Strategic planning is the responsibility of the ministry and is shared among different units. The Planning Unit produces projections of requirements. The Teaching Service Commission is responsible for matters of teacher recruitment, promotion, and discipline. The Teacher Training Department

is responsible for the training of new teachers. A national strategy for teacher education is being drafted.

The teacher training colleges all use the same curriculum and are certified by the National Examination Board. There are proposals to allow for local examinations, so each college could examine its own students, but this is for reasons of efficiency rather than to permit variation in curriculum.

OPERATIONAL MANAGEMENT

The country is divided into six divisions and 33 districts. Each district could have 100–200 primary schools. Each division has an education division manager, and each district has a district education manager. Each district is subdivided into zones.

Within each zone, there is a primary education adviser (PEA) who is responsible for inspecting and providing pedagogical support to teachers. The PEAs are each assigned 10–15 schools and are provided with a motor-bike for transportation. However, in practice, limitations on their fuel allowance restrict the number of visits they make to schools. Each zone also has a local teacher development center for in-service training.

Most teachers are paid in cash, but some urban areas deposit payments directly into teachers' banks. This presents difficulties in rural areas, because bank offices may be distant, which means that teachers cannot cash their checks conveniently. Teachers do not normally leave school to collect their pay; instead, head teachers collect their pay from the centers where salaries are delivered every month. Teachers receive salary increments automatically (unless there is a disciplinary action against them).

There have been some delays in payment of arrears to teachers, which prompted a recent threat of strike by the TUM. The ministry agreed to begin immediate payment of arrears from 1999 and 2000, with payments for later years following thereafter. There continue to be delays in payment for new teachers, who may wait months for their first paycheck.

SCHOOL-LEVEL MANAGEMENT

Teachers are monitored by the school's head teacher. A recent policy requires all teachers to sign in to record their attendance. If a teacher does not attend regularly, the head teacher can report this to the district manager and eventually to the Teaching Service Commission. If a teacher is not attending, one of the possible sanctions is to withhold pay until the teacher agrees to improve. However, absenteeism is a problem in some cases and may be more frequent in remote schools, where the atmosphere is more relaxed and visits by inspectors and PEAs are less frequent.

The TUM argues that cases of teacher indiscipline increased with the recruitment of untrained teachers in the mid-1990s but decreased as these were trained. Only 10 teachers were dismissed in 2004 as a result of disciplinary action, mainly for causing student pregnancy, stealing, or perpetrating exam fraud. Where a teacher is unjustly accused, the TUM provides a defense.

Head teachers have not traditionally acted as pedagogical mentors, but a recent DFID project has provided leadership training to one head teacher and two senior teachers in each school. These senior staff members are expected to provide support for inexperienced teachers.

TEACHERS UNION

The Teachers Union of Malawi, founded in 1945, is the main national teachers union, with a membership of 44,000 primary teachers and 2,000 secondary teachers. There is a separate union for teachers in private schools.

SUMMARY OF KEY ISSUES

The key challenges for providing teachers in rural areas are the following: (a) provision of living conditions for rural teachers, including housing, electricity, and access to clean water; (b) provision of incentives to locate in rural areas; and (c) improvement in the communication infrastructure, including access to news and information, to make teachers feel connected.

The policy successes and lessons of Malawi are the following:

- The MIITEP provided very large numbers of teachers quickly in a crash program. However, there are concerns about the quality of the output. MIITEP was launched quickly, before all of the enabling structures were in place. The teacher development centers were not in place, the schools were not given adequate preparation to support new teachers, and some schools were staffed entirely with unqualified teachers. These weakened the in-service support for new teachers.
- The Malawi School Support Systems Programme provided training for primary education advisers, head teachers, and senior teachers. It involved a massive training effort of more than 15,000 teachers (three per school for 5,000 schools) and 315 PEAs.

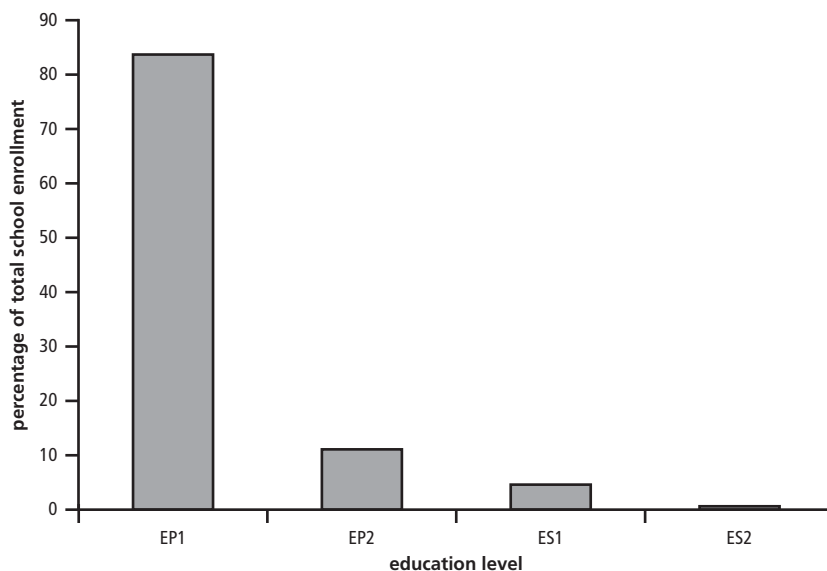
Country Report: Mozambique

Mozambique has a total area of 799,380 square kilometers, including 13,000 square kilometers covered by water, and a population of 19.4 million in 2005, according to the National Institute of Statistics. The country comprises 10 provinces—Cabo Delgado, Gaza, Inhambane, Manica, Maputo, Nampula, Niassa, Sofala, Tete, and Zambézia—and the capital, Maputo City. The population of the capital is about 6.1 percent of the total population. The national population is 48 percent male and 52 percent female; population density is 20 inhabitants per square kilometer.

Mozambique is multilingual, with 13 Bantu languages, each with many dialects, spoken predominantly in rural areas where 71 percent of the population lives. Portuguese is the official language and the language of instruction in school. At present two schools in each province are experimenting with the use of local languages as the medium of instruction, using the new curriculum launched in 2004.

Primary education is in two cycles. Lower primary education (EP1) comprises grades 1–5, and upper primary education (EP2) comprises grades 6–7. The official age for starting school was changed from seven to six in 1993. Thus, EP1 comprises the age cohort 6–10 years, and EP2 comprises the age cohort 11–12 years. Secondary education is also in two cycles. The first cycle (ES1) comprises grades 8–10, and the second cycle (ES2) comprises grades 11–12.

The education system has seen dramatic growth since independence. According to the 2004 annual school survey of the Ministry of Education, literacy rose from 39 percent in 1997 to 49.5 percent in 2003, as a result of greater access to education. However, much of the population only has access to primary education: 96 percent of the school population in 1999. In contrast, only 3 percent of the school population is in secondary education, 0.8 percent is in technical and professional education, and 0.4 percent is in higher education (see figure 4.1).

Figure 4.1 Student Distribution by Level of Education, 1992–99

Source: Mozambique, Ministry of Education data.

Note: EP1 = lower primary education, grades 1–5; EP2 = upper primary education, grades 6–7; ES1 = first cycle of secondary education, grades 8–10; ES2 = second cycle, grades 11–12.

TEACHER DEMAND AND SUPPLY

The 2004 survey also reports an EP1 enrollment of 3,071,564 pupils in 8,373 schools, an overall gross enrollment rate (GER) of 121 percent, and an average of 20.8 percent of pupils repeating in each grade (see table 4.1).

Table 4.1 Gross and Net Enrollment Rates at EP1 in Mozambique, by Province, 2004

Province rate	Gross enrollment rate	Net enrollment
Cabo Delgado	121.7	73.3
Gaza	137.7	82.7
Inhambane	133.5	81.4
Manica	129.8	75.1
Maputo Cidade	149.1	99.9
Maputo Provincia	156.8	99.3
Nampula	99.8	59.1
Niassa	122.8	81.2
Sofala	114.6	71.2
Tete	118.1	79.0
Zambézia	117.1	75.5
National average	121.2	75.6

Source: Mozambique, Ministry of Education, annual school survey, 2004.

Note: The net enrollment rate is the result of changes in the demographic patterns detected by the last census.

TEACHER DEMAND

As the population in the primary school cohort increases, the number of teachers needed is likely to grow. Both the Ministry of Education and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) project that population will grow over the next 10 years, bringing the population in the 6–10 age group to nearly 3 million by 2015.

At the 2005 GER of 121 percent, the school population in EP1 by 2015 will be 3.6 million. If the pupil-teacher ratio (PTR) remains unchanged, the number of teachers required for EP1 will rise from 46,636 to 54,872 over the 10-year period.

Measures to increase the efficiency of the system may reduce the repetition rate. In particular, a new curriculum introduced in 2004 removes the requirement to pass the end-of-year examination before progressing to the next grade. A reduction in repetition and a decrease in the number of students could result in a gradual decrease in the GER to 105 percent over the next 10 years. The requirement for teachers would be a more modest 47,616.

However, the 2005 PTR was considerably higher than the ministry target of 50 pupils per teacher. If a PTR of 50 is reached by 2015, the number of teachers required will rise to 62,853. These three scenarios are shown in table 4.2.

Table 4.2 Three Scenarios for Teacher Demand at EP1, 2005–15

Indicator	2005	2010	2015	Additional teachers	Percentage increase
Population in 6–10 age cohort	2,642,984	2,960,243	2,993,000		
<i>Scenario A: static GER and PTR</i>					
Gross enrollment rate	121	121	121		
Enrollment	3,071,564	3,581,894	3,621,530		
Pupil-teacher ratio	66	66	66		
Total number of teachers needed	46,636	54,271	54,872	8,236	18
<i>Scenario B: reduced GER, static PTR</i>					
Gross enrollment rate	121	112	105		
Enrollment	3,071,564	3,315,472	3,142,650		
Pupil-teacher ratio	66	66	66		
Total number of teachers needed	46,636	50,234	47,616	980	2
<i>Scenario C: reduced GER, target PTR</i>					
Gross enrollment rate	121	112	105		
Enrollment	3,071,564	3,315,472	3,142,650		
Pupil-teacher ratio of 50 by 2015	66	58	50		
Total number of teachers needed	46,636	57,163	62,853	16,217	35

Source: Mozambique, Ministry of Education data, and author's projections.

Note: GER = gross enrollment rate; PTR = pupil-teacher ratio.

TEACHER SUPPLY

There are not enough teachers, especially in secondary schools. In rural areas there are particular shortages and many one-teacher schools.

Teacher Training. The teaching force for EP1 in 2004 comprised 46,636 teachers, of whom 44 percent were untrained (see table 4.3). Female teachers accounted for 30 percent of the teaching force, and 26 percent of them were trained, compared with 53 percent of male teachers. The figures for 2005 indicate that 47 percent of teachers are employed as contract teachers and not as established civil servants.

There are various paths to teacher training. Mozambique has a Universidade Pedagógica (UP), which offers a five-year program for training teachers for secondary schools. Entry to this is upon completion of secondary school, although there is also a scheme that allows some primary teachers with five years of experience to enroll.

IMAPs (*institutos de magistério primário* [primary teacher training colleges]) are middle-level teacher training institutions, which offer a two-year program for preparing teachers for upper primary level (EP2). Entrants to this program are lower secondary school (grade 10) completers who successfully pass an admissions test. Unqualified teachers who have two years of experience may also be admitted. There are 10 IMAPs: three in Maputo and the rest in provinces. As three provinces have none, more IMAPs are being built (three were opened in 2005). IMAPs also offer evening courses for unqualified teachers. Teachers in IMAPs specialize in two or three subjects from the school curriculum. Like IMAPs, ADPP (*ajuda de desenvolvimento de povo para povo* [Humana People to People]) colleges provide teacher training for the EP2, mostly for lower secondary schools.

At a lower level, 11 CFPPs (*centros de formação de professores primários* [primary teacher training colleges]), one in each province, provide training for instruction at EP1. Entrants to this program must have completed upper primary schooling and are given two years of training without specialization. As the CFPPs produced only 1,775 graduates in 2004, the future of the program is under review, and its entry requirements may be adjusted. A number of other, smaller teacher training programs produced

Table 4.3 Training Status of EP1 Teachers, 2004

Indicator	Trained	Untrained	Percentage	
			Total	untrained
Total number of teachers	26,101	20,535	46,636	44
Number of female teachers	8,716	5,292	14,008	38
Percentage of female teachers	33	26	30	n.a.

Source: Mozambique, Ministry of Education data.
n.a. Not applicable.

Table 4.4 Teacher Training Intakes, 2004

Type of training	Initial	In-service	Total
IMAP	1,461	1,024	2,485
CFPP	1,775	248	2,023
ADPP and other	542	0	542
Total	3,778	1,272	5,050

Source: Mozambique, Ministry of Education data.

Note: ADPP = *ajuda de desenvolvimento de povo para povo* [Humana People to People]; CFPP = *centro de formação de professores primários* [primary teacher training college]; IMAP = *instituto de magistério primário* [primary teacher training college].

more than 5,000 graduates in 2004 (see table 4.4). However, 1,200 of these completed in-service programs and should not be counted as new teachers.

Teacher Attrition. Teachers may retire after 35 years of service. Thus, if all teachers remained in the profession for the full 35 years, the theoretical attrition rate would be close to 3 percent. However, with the large number of teachers on short-term contracts, even an attrition rate of 4 percent (without considering the impact of HIV/AIDS, the human immunodeficiency virus/acquired immunodeficiency syndrome) seems conservative. With HIV/AIDS, the attrition rate may be closer to 7 percent. Actual figures for teacher deaths are lower than these estimates suggest, although they are rising steadily (see table 4.5). The ministry estimates that HIV infection rates among teachers were 14.5 percent in 2002 and that this will rise to 17 percent by 2015.

Another cause for the loss of primary education teachers arises from a scheme that allows primary teachers to migrate to secondary education. A primary teacher with five years of experience and a positive evaluation from her/his head teacher may be awarded a scholarship to attend the pedagogical university's five-year program. Completion of this program qualifies the primary teacher for appointment as a secondary school teacher. In 2002–05, some 1,824 primary school teachers have benefited from this program and have moved to teaching positions in secondary schools.

Under the rules of this scheme, teachers must return to their own province when they finish the course. The scholarship includes a payment of 75 percent of salary while at university. Some teachers from provinces near Maputo teach part time while studying and receive 85 percent of their salary. Recently teachers on this scholarship have been able to get the remainder of their salary as a loan, which they must repay on completion of the course.

Table 4.5 Teacher Deaths in Service, 2000–04

Indicator	2000	2001	2002	2003	2004
Number of deaths (all causes)	326	401	466	484	559

Source: Mozambique, Ministry of Education data.

In summary, taking the most optimistic scenario, with an attrition rate of 4 percent, teacher deaths stabilizing at 550, and migration to secondary school static at 815, an additional 3,320 teachers will be required each year, just to maintain the number of teachers. As this far exceeds the output of the teacher training institutions, it seems likely that many of the new teachers will be untrained when they first join the teaching force.

TEACHER FINANCE

Teacher pay is based primarily on qualifications, as seen in the salary levels shown in table 4.6. Within each salary level, there is a progression of salary steps, small increases based on length of service, which are awarded every three years in urban areas and every two years in rural areas. At the upper levels (N1–N3) there are also promotional grades within the level. Experienced teachers may apply for promotion and move to a higher pay scale within the same level. These promotions are decided by an examination given orally or by interview. Head teachers are also paid on the basis of their qualifications but receive an additional payment of 25 percent of salary.

At N4 and N5 there are no opportunities for discretionary promotion (see table 4.7). Teachers at these levels receive their increments (progression) but may be promoted only by completing a further educational qualification and moving to a higher level. Contract teachers are also paid according to their level of qualification, but as temporary employees, they are not entitled to a pension.

At these levels, teachers in primary schools (from N3 to N5) earn the equivalent of US\$72–US\$243 per month. In a country with an estimated US\$200 GDP per capita, lower primary teachers (N4–N5) earn between 4 and 10 times GDP per capita, while upper primary teachers (N3) earn between 9 and 15 times GDP per capita.

Table 4.6 Salary Levels by Qualification and Assignment, 2005

Salary level	Qualification	Teaching level
N1	Universade Pedagógica (UP)	Upper secondary
N2	University degree, but not from the UP	Secondary
N3	IMAP or completion of secondary education	Upper primary (EP2)
N4	CFPP training or completion of lower secondary education	Lower primary (EP1)
N5	Completion of primary education	Lower primary (EP1); none recruited at this level

Source: Mozambique, Ministry of Education data.

Table 4.7 Teacher Salaries at Levels N3–N5, 2004

Salary level	Starting salary		Highest salary		Number of steps
	Meticais	US\$ equivalent	Meticais	US\$ equivalent	
N5	1,335,610	72	2,136,976	116	13
N4	1,937,585	105	3,100,136	168	13
N3					
Initial	2,736,911	148	0	0	0
Highest	4,502,734	243	4,552,747	246	4

Source: Mozambique, Ministry of Education data.

Figure 4.2 Teacher Salaries at the N4 Level, 1992–99

Source: Mozambique, Ministry of Education data.

Teacher salaries are adjusted each year for inflation. The increases from 2003 to 2004 were between 10 and 14 percent. Historically, teacher salaries fell in U.S. dollar terms in the early 1990s but rose steadily in the late 1990s (see figure 4.2).

Data from the Financial Department indicate that primary education (EP1) accounts for 49 percent of the national education budget and that EP1 teacher salaries account for 94 percent of this figure. There are

Table 4.8 National Expenditure on Education, 2004

Indicator	Meticals	US\$ equivalent
National education budget	4,383,755,660,000	236,959,765
Primary education budget (49 percent of national education budget)	2,161,322,620,000	116,828,250
Primary teachers' pay (94 percent of primary education budget)	2,045,271,750,000	110,555,230
Average annual pay per teacher	42,471,795	2,296
Average monthly pay per teacher	3,539,316	191

Source: Mozambique, Ministry of Education data.

48,000 teachers on the payroll—the number of teachers on the payroll is higher than the number reported in the school surveys, possibly because of teachers who are assigned nonteaching functions—with an average monthly salary of Mt 3.5 million (Mozambique's currency is the metical; see table 4.8).

TEACHER DEPLOYMENT

Deployment policy is based on contracts allowed by the regional governor at the provincial level. Contracted teachers work for one year, their contract is renewable for the following year, and they may apply after three years of contracted service to be considered eligible for state employment. Qualified teachers are automatically considered state workers, provided funds are available.

As graduates from each provincial teacher training college are required to teach in that province, the recruitment of newly qualified teachers is fairly automatic. However, a lack of funds has prevented some provinces from recruiting all of the newly qualified teachers from their provincial teacher training college.

At the IMAP level, there are more graduates than can be employed in Maputo, while there are teacher shortages in other areas. To address this imbalance, a national system has been established for the redistribution of IMAP graduates. Two months before the end of the teacher training program, each province informs the ministry of its need or surplus. In areas where there is a surplus, teachers are asked if they are interested in moving. Interested teachers are called together to a meeting at which the conditions in rural areas are explained to them. Those who still desire to do so are transferred. In 2005 some 200 teachers expressed interest, but after the meeting, only 107 proceeded with the transfer from Maputo to Inhambane (44), Zambézia (45), and Nampula (18).

The majority of issues concerning teacher deployment arise within provinces. On the basis of needs identified at the provincial level, newly qualified teachers are assigned to schools. While many new teachers are happy to work in the provincial towns, they are reluctant to work in the more isolated areas within the province. Teachers complete a form indicating their choice of posting and are then assigned to a post by the provincial authorities.

FACTORS INFLUENCING DEPLOYMENT

Various factors influence deployment, including incentives such as the location bonus and teacher housing and issues related to gender, the prevalence of HIV/AIDS, and differences between rural and urban areas.

Location Bonus. The regulation Diploma Ministerial 22/99 provides financial incentives for public servants to locate in rural areas. To define areas of work location, a region is classified into four groups: 1 for major cities, 2 for provincial towns, 3 for the more remote villages, and 4 for the most remote schools. Based on their posting in a group, teachers are paid a location bonus (see table 4.9). Teachers with an IMAP qualification receive a bonus of 30 percent of their salary if they work in a city and up to 60 percent if they work in a rural area. Teachers with a university qualification, who would normally be secondary teachers, receive a bonus of 60 percent of their salaries if they work in a city and up to 100 percent if they work in a rural area. In addition, the starting salary for a teaching position is 25–30 percent higher than that of a nonteaching position.

While the scheme seems very generous, with bonus payments up to 100 percent of salary, three factors weaken its impact. First, much of the bonus depends on the qualification rather than the location. For an N3 teacher (that is, an IMAP graduate teaching at the upper primary level), the difference between teaching in a provincial town and a remote area is relatively small. In a posting to a provincial town, the teacher receives the regular salary plus 40 percent, while in a posting to a remote area the payment is the salary plus 60 percent, a difference of only 20 percent.

Table 4.9 Incentive Payment for Teachers, by Location, 2005

(percentage of salary)

Level of qualification	Group 1	Group 2	Group 3	Group 4
UP graduates (secondary)	60	70	80	100
IMAP graduates (upper primary)	30	40	50	60

Source: Mozambique, Ministry of Education data.

Note: IMAP = *instituto de magistério primário* [primary teacher training college]; UP = Universidade Pedagógica [pedagogical university].

Table 4.10 Monthly Income of Teachers, by Qualification, Location of School, and School Schedule

Entry qualification of new teacher	Group 1: urban single shift	Group 1: urban double shift	Group 4: rural single shift ^a
No qualification	1,335,610	2,136,976	1,335,610
Salary level N5	1,335,610	1,335,610	1,335,610
Second-shift teaching	n.a.	801,366 ^b	n.a.
CPPP qualification	1,937,585	3,100,136	1,937,585
Salary level N4	1,937,585	1,937,585	1,937,585
Second-shift teaching	n.a.	1,162,551 ^b	n.a.
IMAP qualification	2,728,181	3,987,342	3,357,762
Salary level N3	2,098,601	2,098,601	2,098,601
Second-shift teaching	n.a.	1,259,161 ^b	n.a.
Bonus			
Percent	30	30	60
Amount	629,580	629,580	1,259,161

Source: Mozambique, Ministry of Education data, 2005.

Note: CPPP = *centro de formação de professores primários* [primary teacher training college]; IMAP = *instituto de magistério primário* [primary teacher training college]; n.a. = not applicable. The income is in Mozambican meticals.

a. In remote and isolated areas, double-shift school scheduling is not usually implemented.

b. Additional 60 percent of salary paid for second shift.

Second, the bonus payment extends only to teachers at the N3 salary level and higher. The N4 and N5 teachers, who make up the bulk of lower primary teachers, are not eligible for any location bonus.

Third, teachers who teach two shifts receive a bonus of 60 percent of their basic salary. Two-shift schools are found more frequently in areas of high population density; hence, teachers in towns and cities are more likely to take home additional earnings from this source. As table 4.10 shows, even an unqualified teacher is significantly better paid teaching two shifts in an urban school than teaching one shift in a rural school.

Teacher Housing. The ministry does not usually provide housing, although in some communities, a head teacher's house is built on the school grounds. Some rural communities and nongovernmental organizations have constructed teacher housing in an effort to attract teachers to their schools.

Gender. Gender has an impact on deployment. Female teachers are particularly reluctant to move to rural areas for a variety of reasons. One teacher expressed the following concern: "I can't find a man to marry me." Many women refuse to accept rural deployment outright, while others make the move but quickly seek a transfer back to their urban location.

HIV/AIDS. HIV/AIDS infection among teachers is increasing. The ministry is developing measures to address this issue. One of the measures being considered is to allow sick teachers to transfer to an urban area where they can more easily access medical treatment. If this is implemented, it may move even more teachers from rural areas to urban centers.

Table 4.11 Trained and Untrained EP1 Teachers, 2004

Province	Trained	Untrained	Total	Percentage untrained
Cabo Delgado	1,663	1,373	3,036	45
Gaza	1,751	2,188	3,939	56
Inhambane	1,932	1,773	3,705	48
Manica	1,385	1,933	3,318	58
Maputo Cidade	2,783	239	3,022	8
Maputo Província	2,180	1,294	3,474	37
Nampula	3,999	3,190	7,189	44
Niassa	1,253	2,009	3,262	62
Sofala	2,306	764	3,070	25
Tete	2,183	1,741	3,924	44
Zambézia	3,930	2,356	6,286	37
Total	26,073	20,535	44,225	44

Source: Mozambique, Ministry of Education data, annual school survey, 2004.

Note: The Trained and Untrained totals are slightly greater than the sum of the provincial totals because some teachers are not recorded as assigned to any province.

RURAL-URBAN FACTORS AFFECTING DEPLOYMENT

The system of deployment is not working effectively. The ministry does not report on school characteristics in terms of rural-urban location, but the differences between rural and urban deployment can be seen from the differences among provinces (see table 4.11). There are also striking differences in the proportion of untrained teachers. Averaging 44 percent nationwide, only 8 percent of EP1 teachers are untrained in Maputo City, compared with 62 percent in Niassa. Further, the better trained teachers are in urban areas. Of the 32 EP1 teachers with a university qualification, 24 are in Maputo City and 5 are in Maputo Province. Teachers with the IMAP qualification are also overrepresented in Maputo City.

There are also inequalities in the pupil-teacher ratio (PTR) and in the ratio of pupils to qualified teacher (PQTR). The PTR ranges from 49:1 to 100:1, and the PQTR ranges from 59:1 to 161:1 (see table 4.12).

The differences in teacher qualifications do not correlate with pupil performance on school examinations (see table 4.13). However, the examination data may not be reliable, since the exams are graded by the teachers themselves who, especially in rural schools, may be too remote to be adequately supervised and may be more subject to influence by the head teacher, parents, and others in the community.

Data from SACMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) provide an alternative view of pupil performance. SACMEQ II data for Mozambique show that pupils in rural areas lag behind their urban counterparts in both reading and mathematics. As

Table 4.12 Pupil-Teacher Ratio and Pupil-Qualified Teacher Ratio, by Province, 2004

Province	Number of pupils	Total number of teachers	Pupil-teacher ratio	Number of trained teachers	Pupil-qualified teacher ratio
Cabo Delgado	242,105	3,036	80	1,663	146
Gaza	233,633	3,939	59	1,751	133
Inhambane	241,818	3,705	65	1,931	125
Manica	223,738	3,318	67	1,382	162
Maputo Cidade	164,388	3,022	54	2,782	59
Maputo Província	192,614	3,474	55	2,174	89
Nampula	487,989	7,189	68	3,998	122
Niassa	160,228	3,262	49	1,251	128
Sofala	242,808	3,070	79	2,304	105
Tete	251,621	3,924	64	2,183	115
Zambézia	630,622	6,286	100	3,929	161
Total	3,071,564	44,225	69	25,348	121

Source: Mozambique, Ministry of Education data, annual school survey, 2004.

Table 4.13 Grades 1 and 2 Completion and Survival, by Province, 2004

Province	Grade 1				Grade 2			
	Admission	Completion	Promotion	Survival (percent)	Admission	Completion	Promotion	Survival (percent)
Cabo Delgado	79,103	71,112	55,465	70	53,291	48,765	38,347	72
Gaza	61,626	58,691	40,259	65	51,074	48,614	34,648	68
Inhambane	63,114	60,180	40,625	64	52,786	50,703	35,489	67
Manica	60,730	56,703	39,815	64	49,859	46,546	33,219	67
Maputo Cidade	34,412	33,738	24,355	71	34,540	33,708	24,230	70
Maputo Província	43,644	41,760	30,453	70	42,647	40,834	29,991	70
Nampula	140,512	132,897	98,684	70	105,005	99,594	74,642	71
Niassa	49,221	44,051	32,441	66	33,932	30,600	22,545	66
Sofala	69,693	64,887	48,527	70	53,096	50,136	39,025	73
Tete	70,504	64,321	50,195	71	50,439	46,563	37,057	73
Zambézia	218,508	194,452	129,904	59	144,688	130,903	89,133	62
Total	891,067	822,792	590,723	66	671,357	626,966	458,326	68

Source: Mozambique, Ministry of Education data.

shown in table 4.14, the differences in mean scores are greater than the sum of the standard errors.

This pattern seems consistent with the analysis in a World Bank study of the cost and financing of education (World Bank 2003). A regression analysis indicates the following: student outcomes are significantly worse in rural areas than in cities, and students who are taught by untrained teachers obtain significantly poorer results (summary data are shown in table 4.15).

Table 4.14 Student Achievement in Reading and Mathematics, by Location

Location	Reading		Mathematics	
	Mean	Standard error	Mean	Standard error
Isolated, rural area	502.3	5.93	524.0	6.32
Small town	510.5	3.73	527.5	2.70
Large city	533.3	4.22	536.7	3.26

Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality II data, 2000.

Table 4.15 Student Achievement, by Location and Teacher Characteristics

Factor	Effect	Statistically significant?
Percentage of teachers with more than 10 years of education	+0.029	Yes
Percentage of untrained teachers	-0.039	Yes
Maputo City	Reference	n.a.
Cabo Delgado	-9.20	Yes
Zambezia	-6.85	Yes
Maputo Province	-0.85	No
Urban-rural	-4.59	Yes

Source: World Bank (2003).

n.a. Not applicable.

TEACHER UTILIZATION

Rural areas present additional difficulties because the school-going population is more dispersed. Average school sizes in rural areas are 100–200 students, compared with an average of 1,600 in Maputo City. Supplying teachers for small rural schools is made more difficult by teacher specialization. Historically, teachers for upper primary schools have specialized in teaching one of the school subjects. But more recently, teachers have been trained to teach two or three (out of the 11) subjects in the school curriculum. However, even with this measure of flexibility, the efficient staffing of small schools is still difficult, as at least four teachers are required to cover grades 6 and 7, grades in which enrollment may be low. Some teachers travel between small schools to complete their load of 25 teaching hours a week, which is required of teachers on a full-time salary.

Urban schools often teach two or three shifts. Typically, the first-shift school session is from 7:30 a.m. to 12:30 p.m., and the second-shift session is from 1:00 p.m. to 5:30 p.m. Three-shift sessions, often in populous urban schools, are 6:30 a.m.–10:00 a.m., 10:30 a.m.–1:00 p.m., and

1:00 p.m.–5:30 p.m. In the rural areas, many of the schools are single shift, from 7:30 a.m. to 12:30 p.m., with some afternoon classes, mainly for the older students.

Two strategies have been used to increase the use of teachers in rural schools: mixed classes and cluster schools.

MIXED CLASSES

Classes are generally larger in grade 1 and smaller in the upper grades (see table 4.16). Ministry rules indicate that classes should be combined if each has less than 25 students and that no class should exceed 40 students. Outside of Maputo City, classes are often combined, so that teachers effectively teach two grades at the same time (see table 4.17). Overall, reports indicate that 1,708 classes, or 3 percent of all classes, are mixed.

Table 4.16 Primary Enrollment by Grade and Class, 2004

Grade	Enrollment	Single class	Mixed class	Average class size
1	967,077	18,146	0	53
2	728,639	14,214	284	50
3	591,436	12,203	377	47
4	446,664	9,634	522	44
5	337,748	7,816	525	40
Total	3,071,564	62,013	1,708	48

Source: Mozambique, Ministry of Education data, annual school survey, 2004.

Table 4.17 Primary Enrollment by Province and Class Structure, 2004

Province	Enrollment	Single class	Mixed class	Average class size
Cabo Delgado	242,105	4,531	461	48
Gaza	233,633	5,065	112	45
Inhambane	241,818	5,320	56	45
Manica	223,738	5,173	32	43
Maputo Province	192,614	4,255	50	45
Nampula	487,989	9,272	204	51
Niassa	160,228	3,210	339	45
Sofala	242,808	4,777	127	50
Tete	251,621	5,142	144	48
Zambézia	630,622	12,496	183	50
Maputo City	164,388	2,772	0	59
Total	3,071,564	62,013	1,708	48

Source: Mozambique, Ministry of Education data, annual school survey, 2004.

These combined classes are not formally multigrade classes, as multigrade methods of instruction are not yet included in the curriculum and in programs of teacher training.

CLUSTER SCHOOLS

A second strategy is to use clusters of schools, centered on a “complete school” teaching grades 1–7. The complete school is the center that provides support for the other, incomplete, schools in the cluster. The cluster schools also send their EP1 completers to the center to continue to EP2. However, the clusters are geographically quite large; satellite schools may be located up to 20 kilometers from the center. This distance is one of the factors causing high dropout rates at the end of EP1. The ministry is trying to minimize the distance by building more schools closer to communities. In some cases, students live at EP2 schools. Some schools are boarding schools, which are more costly to run. In other cases, parents build huts at or near the school that shelter the children during the school week.

There has been no use of biannual intakes as a strategy for improving teacher utilization. The ministry believes that parents would not want to wait a full alternate year for their children to start school.

TEACHER WORKLOAD

Teachers are expected to teach 25 hours per week. Most teachers teach only one shift. In multishift schools, a teacher may teach two shifts and get 60 percent on top of his or her normal salary. The head teacher normally teaches in addition to taking administrative responsibility.

Where there are not enough teachers, the available teachers normally cover the empty classes as well as their own, to avoid complaints from parents. Schools use mixed-class methods to teach two classes during the same period. If the classes are too big to share a room, a teacher can teach two classes by alternating continually between the separate classes. The teacher may also distribute students who are without a teacher among the classes of the remaining teachers.

TEACHER MANAGEMENT

The ministry is in the final stage of preparing a strategic plan that will guide subsidiary planning for teacher supply in the future. At present, the ministry has an IMAP in nine of the 11 provinces for producing teacher supply. The planning of teacher supply is carried out at the provincial

level. The province decides the level of intake into the IMAP and can call for expanding the IMAP as needed.

TEACHER APPOINTMENT AND DISCIPLINE

Teacher training is standard throughout the country, but for the most part, teachers for each province are trained in the provinces where they expect to be posted. Teaching posts are usually advertised. Qualified teachers go to the provincial office in search of vacancies.

Recruitment interviews for teachers are conducted under the guidance of the provincial director of education, who makes recommendations to the provincial governor regarding the appointment of teachers for salary levels N3 and lower. Head teachers are nominated by the provincial director of education on recommendation of the district director of education. This mechanism offers no open competition. Head teachers are provided with some leadership training.

The head teacher, the first level of teacher management, is responsible for monitoring attendance and taking action if teachers are not working regularly. However, head teachers are often reluctant to take action and quite sympathetic to teachers. Disciplinary action may also be taken at the district or provincial level either by the coordinator of the ZIP (*zona de influencia pedagógica*), the school inspector, or the pedagogical adviser. The total number of teachers disciplined for misbehavior is usually small but has been rising slowly in recent years (see table 4.18).

PEDAGOGICAL SUPPORT

In each school a teacher is given responsibility to act as pedagogical assistant. The pedagogical assistant observes the classes of teachers and provides a written comment to the teacher, which the teacher signs to acknowledge that he or she has read it. ZIP coordinators also provide some pedagogical support, but they travel by bicycle and may not get to

Table 4.18 Teachers' Disciplinary Records, 1999–2004

Punishment	1999	2000	2001	2002	2003	2004	Total
Suspended for five years	11	17	7	27	24	23	109
Dismissed permanently	8	27	6	21	7	7	76
Demoted	0	0	2	2	11	20	35
Fined	0	0	0	0	6	8	14
Total	19	44	15	50	48	58	234

Source: Mozambique, Ministry of Education data.

the most isolated schools very regularly. District officials and inspectors also provide support, but transportation to and from schools is a problem. The lack of adequate transportation means that remote schools are visited less frequently.

TEACHER PAY

Teachers are normally paid directly through their bank account and may make withdrawals using an automated teller machine. However, this service is not available to rural teachers, as there are no banks at or near the schools. The district office distributes the salaries to teachers. Sometimes the ZIP coordinators collect the money from the district office and bring it to schools.

SUMMARY OF KEY ISSUES

Mozambique faces some challenges of teacher supply. The demand for teachers is rising rapidly as enrollment increases and there are insufficient qualified teachers to fill the vacancies. At present, 44 percent of EP1 (lower primary) teachers are untrained.

Deployment is also a major challenge. In most provinces, there are unemployed teachers, often because they have refused to accept a rural posting, while at the same time there are classes being taught by untrained teachers. The government provides bonus payments for all civil servants, including teachers, to go to rural areas. However, this incentive is not working well enough to attract an adequate supply of teachers for rural primary schools.

Rural areas are at a disadvantage regarding education in several ways. They have fewer teachers, resulting in high PTRs. And because many teachers do not possess the necessary qualification, PQTRs are even higher. Teachers in rural areas are less likely to be supervised because of the difficulties of travel for the school inspector. These disadvantages result in poor student achievement.

To respond to these challenges and disadvantages, the Ministry of Education and Culture has adopted two priorities: (a) finding mechanisms to encourage teachers to move to and remain in rural areas and (b) developing multigrade teaching to optimize the use of teachers in rural areas. Acting on these priorities would be greatly facilitated if the education data were disaggregated by rural and urban schools. A more accurate picture of the differences would emerge, guiding the formulation of appropriate actions on the priorities for improving teacher posting and performance in rural primary schools in Mozambique.

Country Report: Tanzania

Tanzania is signatory to international conventions and agreements on improving educational access, equity, and quality. These include the Education for All conference in Jomtien, Thailand, in 1990, and the World Education Forum in Dakar, Senegal, in 2000. The country's reform agenda is set out in the Tanzania Development Vision 2025, which accords high priority to education, considered pivotal in bringing about social and economic transformation. Vision 2025 aims to create a well-educated nation and achieve a high quality of life for all Tanzanians.

Reforms in other sectors include the Public Service Reform Programme, focused on improving the delivery of goods and services, and the Local Government Reform Programme, which is part of wide-ranging reforms in the public sector. These programs are the primary mechanism for decentralizing and devolving powers to local levels, a main feature in the delivery of education at the primary level.

In 1995 the government of Tanzania promulgated the Education and Training Policy (ETP) to translate the country's Jomtien commitment into action. The major objectives of ETP are to increase enrollment, assure equitable access, improve quality, expand and improve the optimum use of facilities, and achieve operational efficiency throughout the system. Other broad policy aims include enhancing partnerships in the delivery of education, broadening the financial base and the cost-effectiveness of education, and streamlining education management structures through the devolution of authority to schools, local communities, and local government authorities.

The sectorwide Education Sector Development Programme (ESDP), initiated to support the Tanzanian government's long-term human development and poverty eradication targets and redress the problem of fragmented interventions, translates ETP into action. In turn, the Basic Education Master Plan, Secondary Education Master Plan, and Teacher

Education Master Plan were initiated to achieve the aims and objectives of ESDP.

The Primary Education Development Plan (PEDP) was developed in 2002 from the Basic Education Master Plan. It is a five-year plan (2002–06) aimed at expanding enrollment, improving the quality of teaching and the learning process, building capacity in the public and private sectors of the education system, and strengthening the institutional arrangements that support the planning and delivery of education services.

KEY COMPONENTS OF EDUCATION REFORM

This section briefly describes the institutional arrangements for managing the education system and determining national norms for class size, teacher qualifications and compensation, and teacher demand and supply.

SHARED MANAGEMENT RESPONSIBILITY

Managing the education system is a responsibility shared by two government ministries. The Ministry of Education formulates laws, policies, and regulations governing education in general and primary education in particular. It is also responsible for monitoring and issuing directives to ensure quality and adherence to specified standards.

Local authorities under the Presidents' Office for Regional Administration and Local Government have the specific responsibility of managing primary schools. Under the local government structure, the municipal or council executive director is supported by subsector sections, including one for education. The education section is headed by the district education officer who is supported by specialist officers at the district level. Under the district office are the ward education coordinators (WECs) who supervise schools. The school is managed by the head teacher in collaboration with school committees.

PUPIL-TEACHER RATIOS

The desired national pupil-teacher ratio (PTR) is 45:1, but at present the average ratio is 59:1. This has been caused by expanded enrollment since the inception of PEDP. Table 5.1 shows PTRs by region, with the highest PTR in Kigoma (74:1) and the lowest in Kilimanjaro (44:1). The reasons for these variations include differences in teaching and learning environment; economic, sociocultural, and environmental backgrounds; and

Table 5.1 Breakdown of School Population and Staffing in Tanzania by Gender and Region, 2004

teacher Region	Number of pupils			Number of teachers			Pupil- ratio
	Female	Male	Total	Female	Male	Total	
Arusha	124,948	139,997	264,925	2,838	1,608	4,446	60
Dar es Salaam	210,170	209,420	419,590	6,602	1,398	8,000	52
Dodoma	148,556	153,214	301,770	2,629	3,114	5,743	53
Iringa	180,354	179,064	359,418	3,178	3,710	6,889	52
Kagera	212,256	219,473	431,729	2,456	4,275	6,731	64
Kigoma	159,020	169,420	328,440	1,406	3,045	4,451	74
Kilimanjaro	170,222	175,663	345,885	5,094	2,735	7,829	44
Lindi	66,897	72,504	139,401	872	1,895	2,767	50
Manyara	108,350	116,328	224,678	1,576	1,805	3,381	67
Mara	174,735	138,098	366,397	2,353	3,477	5,830	63
Mbeya	245,289	242,842	488,131	3,415	4,605	8,020	61
Morogoro	160,287	169,241	329,528	3,381	3,174	6,555	50
Mtwara	102,475	107,147	209,622	1,289	2,772	4,061	52
Mwanza	335,386	354,349	689,735	3,919	5,684	9,603	72
Pwani	88,044	96,643	184,687	1,766	1,755	3,521	53
Rukwa	117,106	125,207	242,313	1,243	2,514	3,757	65
Ruvuma	129,267	128,683	257,950	2,100	2,966	5,066	51
Shinyanga	285,791	308,462	594,253	3,330	5,021	8,351	71
Singida	117,665	124,621	242,286	1,626	2,366	3,992	61
Tabora	129,550	145,051	274,601	1,863	2,362	4,225	65
Tanga	187,884	199,630	387,514	3,397	3,158	6,555	59
Total	3,456,822	3,626,241	7,083,063	56,334	63,439	119,773	59

Source: Tanzania, Ministry of Education and Vocational Training data.

historical backgrounds (early missionary work and good infrastructure). In areas where the people or the communities are enlightened on the importance of education, support for education policies is high, fostering a working environment conducive for teachers to stay and work.

The government is responsible for recruiting, training, and deploying the required number of primary school teachers to accommodate the big increase in pupil enrollment and the rising rate of teacher attrition resulting from retirement and death from HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome). As projected in the PEDP, the government set the following targets for training new teachers: 9,000 teachers for 2002, 10,000 teachers a year for 2003–05, and 9,000 teachers for 2006. To enhance quality, pre-service teacher training has been rationalized and improved in order to increase its capacity to produce the large number of newly trained teachers demanded by expanded enrollment.

TEACHER QUALIFICATION AND REMUNERATION

The entry qualification into Teachers' College for primary school teacher training is the ordinary level certificate. Student teachers take two years of training to attain a grade A certificate, the qualification required by the Education and Training Policy for teaching in primary school.

In 2005, teachers with lower qualifications who were already in service when the ETP was introduced in 1995 were being upgraded to the grade A certificate required by the ETP. Out of about 42,000 teachers with lower qualifications, 23,524 were registered by August 2004 in the ongoing distance training program of self-study or face-to-face instruction.

As the data in table 5.2 show, most teachers with lower qualifications are in rural schools. Many teachers in rural schools are enrolled in the higher diploma program. This is often a way for them to move to the district office; teach in the secondary schools, many of which are located in urban areas; or search for other jobs.

The monthly salary of a newly qualified (that is, grade A) primary school teacher started at T Sh 87,090 (Tanzania shillings, about US\$80) and reached T Sh 180,350 (US\$166). The monthly salary of a teacher with a diploma qualification started at T Sh 108,800 (US\$99) and reached T Sh 244,630 (US\$225).

Teachers receive their pay through their bank account. This mode of payment is convenient for teachers who live or teach close to a bank but inconvenient for those far from a bank, who may need to spend a night in town to collect their salary. As most banks are located at council headquarters in urban areas, rural teachers are the most inconvenienced. As shown in table 5.3, which presents the distribution of teachers in rural and urban schools in three regions, the majority of teachers (82 percent) are in rural schools.

Table 5.2 Teachers Being Upgraded in Qualification in Three Regions, by Gender and Location, 2005

Region	Rural						Urban					
	To grade A certificate			To diploma level			To grade A certificate			To diploma level		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Manyara	203	202	405	129	61	190	101	55	156	9	7	16
Rukwa	295	559	854	3	10	13	90	38	128	9	8	17
Tanga	1,024	1,367	2,391	18	27	45	327	100	427	14	10	33
Total	1,522	2,128	3,650	150	98	248	518	193	711	32	25	66

Source: Tanzania, Ministry of Education and Vocational Training data.

Table 5.3 Distribution of Primary School Teachers in Three Regions, by Gender and Location, 2005

Region	Rural				Urban			
	Number of schools	Number of teachers			Number of schools	Number of teachers		
		Female	Male	Total		Female	Male	Total
Manyara	440	1,625	2,015	3,640	42	540	198	738
Rukwa	372	600	1,769	2,369	32	295	149	444
Tanga	764	2,910	3,285	6,195	91	1,184	324	1,508
Total	1,576	5,135	7,069	12,204	165	2,019	671	2,690

Source: Tanzania, Ministry of Education and Vocational Training data.

Table 5.4 Calculation of Number of Teachers Required, 2005 and 2010

Indicator	2005	2010 (estimated)
Number of children in primary school—age cohort (7–13 years)	6,665,344	8,003,531
Gross enrollment rate (percent)	106.3 ^a	100
Number of children in primary schools	7,582,853	7,852,280
Number of children out of school	466,018	0
Target pupil-teacher ratio	45:1	40:1
Number of teachers required	177,077	196,320

Source: Tanzania, Ministry of Education and Vocational Training data.

Note: The number of teachers required in a single-stream primary school (standards 1–7) is eight.

a. 2004.

TEACHER DEMAND AND SUPPLY

As Tanzania moves toward the desired PTR of 45:1, the demand for teachers remains high. The demand is expected to persist when the next goal is set—a target PTR of 40:1—for the South African Development Community. Table 5.4 shows the teacher requirement and the projection for 2010, under the following assumptions: number of children in the primary school–age cohort, GER, enrollment in primary schools, number of out-of-school children, and PTR.

TEACHER DEPLOYMENT AND UTILIZATION

The deployment of teachers in most rural areas is problematic, owing to the following factors: geographic limitations, shortage of housing, poor communication, shortage of clean water, lack of electricity, poor health services, and lack of social amenities such as shopping centers and places for recreation.

The need for housing is great, and the government plans to build more houses for teachers in rural areas to foster the deployment of teachers. Table 5.5 shows the critical shortage of teacher houses, especially in rural areas, where 93 percent of all schools are located. Table 5.6 shows that, in the Manyara, Rukwa, and Tanga regions, out of the total houses required

Table 5.5 Housing for Teachers, by Region, 2005

Region	Houses needed	Houses available	Shortfall
Arusha	5,184	1,241	3,943
Dar es Salaam	8,033	401	7,632
Dodoma	7,313	3,017	4,296
Iringa	9,060	3,161	5,899
Kagera	8,808	2,434	6,374
Kigoma	6,885	944	5,941
Kilimanjaro	8,732	628	8,104
Lindi	2,977	515	2,462
Manyara	4,773	820	3,953
Mara	8,630	1,503	7,127
Mbeya	10,752	2,632	8,120
Morogoro	6,817	1,993	4,824
Mtwara	5,806	1,544	4,262
Mwanza	16,352	1,560	14,792
Pwani	4,539	1,080	3,459
Rukwa	7,001	2,821	4,180
Ruvuma	5,987	1,998	3,989
Shinyanga	12,668	1,446	11,222
Singida	5,425	1,148	4,277
Tabora	6,661	505	6,156
Tanga	8,993	703	8,290
Total	161,396	32,094	129,302

Source: Tanzania, Ministry of Education and Vocational Training data.

Table 5.6 Housing for Teachers in Rural and Urban Schools, by Region, 2005

Region	Rural			Urban		
	Houses needed	Houses available	Shortfall	Houses needed	Houses available	Shortfall
Manyara	4,107	956	3,151	675	87	588
Rukwa	3,023	660	2,363	469	57	412
Tanga	8,297	752	7,545	1,660	54	1,606
Total	15,427	2,368	13,059	2,804	198	2,606

Source: Tanzania, Ministry of Education and Vocational Training data.

for rural schoolteachers, only 15.5 percent are available. Of the total houses required for urban schoolteachers in the same three regions, only 7.1 percent are available.

Where schools operate a double-shift schedule, standard 1–2 pupils have 3.5 hours of instruction per day per shift. Pupils in standards 3–7 receive 4.5 hours of instruction per shift (whereas single-shift pupils at this level have 5–6 hours of instruction). The smallest school has 315 pupils attending single-stream classes; the largest school has 945 pupils attending three-stream classes. In an adequately staffed, single-stream primary school, the teacher has a workload of 20–30 hours per week. However, in schools with between two and five teachers, the teaching load can be more than 30 hours per week.

TEACHER MANAGEMENT

Head teachers in collaboration with the school committee manage, lead, supervise, and develop school staff. Head teachers in most primary schools have attended educational management courses conducted at the Agency for Development and Education Management. Likewise, the members of school committees have been trained on their roles and responsibilities.

At the ward (subdistrict) level, ward education coordinators supervise and manage teachers in their assigned area. Usually one WEC supervises and supports between two and eight schools. Management of teachers is also carried out by officers at the district level, notably the district education officer and his or her team, school inspectors, and staff of the Teacher's Service Department.

At the regional level, a regional education officer is a member of the Regional Secretariat, which is responsible for education, including the management of teachers. Also at the regional level, the Teacher's Service Department (which operates at the district level as well) deals with the appointment, promotion, and disciplining of teachers. The regulations of the Public Service Act No. 8 of 2002 and the prospective Teachers' Service Scheme specify the procedures for dealing with teachers' disciplinary cases.

The teacher's performance is monitored by the head teacher, school committee, WEC, school inspector, and district education officer. In every primary school, teachers are required to sign an attendance registry and a form indicating the material they taught in every class.

School inspection operates at the district, zonal, and national levels. Inspectors based in districts inspect primary schools regularly. Each school is required to be inspected at least once every two years. In districts with a small number of schools, all schools are inspected yearly. In districts with more than 80 schools, 50 percent of schools are inspected. However, schools in rural areas are inspected less frequently because of lack of transportation, geographic constraints (isolation, flooding, poor infrastructure), and financial constraints.

The recruitment of school inspectors is competitive. Vacant posts are advertised, applicants are screened, and those who pass the interview are given training before they are placed.

The selection of head teachers is also competitive. Vacant positions are advertised, applicants are screened and interviewed, and those who successfully pass the interview are placed in schools. Experience shows that head teachers posted to rural schools are motivated to become head teachers because the position enhances their professional stature and social standing in the locality.

Capacity building for teachers in service is provided by teachers' resource centers, which support teachers in their area of responsibility. In addition, in-house training is conducted using specialist teachers selected from within the school.

SUMMARY OF KEY ISSUES

The challenges to sustaining the gains achieved through the PEDP include poor working environment, lack of motivation on the part of teachers, higher PTRs as a result of expanded enrollment, inefficient mechanism for paying salaries to rural teachers, and high teacher attrition rates owing to transfers to other jobs, retirement, and death from HIV/AIDS and other natural causes.

At the programmatic level, the provision of primary education involves several stakeholders, many of whom are willing to help. The PEDP initiatives need the collaborative support of development partners. The supply of teachers in the primary schools is insufficient because of the high teacher attrition rate and increased student enrollment. Given the opportunity, teachers of lower qualification are eager to upgrade their qualification to the required grade A certificate.

Various policy interventions are needed: (a) devolving powers to communities that will own and manage their school, which includes sending to schools the capitation and development funds as well as the annual allocation of capacity building for teachers; (b) fostering the provision of primary education and the training of teachers by other stakeholders; and (c) mainstreaming the Complementary Basic Education in Tanzania Program catering to out-of-school children.

Country Report: Uganda

Uganda has a population of almost 25 million, with more than 5 million children in the primary school-age group (6–12 years). The vast majority (87.7 percent) of the population lives in rural areas. In 2004 there were 147,242 primary teachers in public and private schools, teaching a total primary school enrollment of 7.7 million children, resulting in a pupil-teacher ratio (PTR) of 66:1.

After the policy of universal primary education was declared in Uganda in 1997, the demand for education expanded beyond the capacity of the school system. Gross enrollment jumped from 69 percent in 1990 to 80 percent in 1996 and to 124 percent in 1997. This huge shift in demand for education at the primary level overwhelmed the available physical facilities and teachers (see table 6.1). The PTR in the lower primary classes jumped from 38:1 in 1990 to 60:1 in 1996 and to 110:1 in 1997.

While the PTR has been reduced since then, more teachers are still required. Projections in the Education Sector Strategic Plan (March 2005) suggest that the number of primary teachers required will rise by almost 30,000 by 2015, as the pupil-teacher ratio is gradually reduced to 40:1 (see table 6.2).

Demand for places in the primary teachers colleges has been rising in recent years, and the qualifications required for admittance have been made more stringent. Before 2002, the entry requirement was four passes (in any subject in the primary curriculum). In 2002 the requirement was raised to six passes, including mathematics and English. In 2005 the requirement was further raised to six passes, including mathematics, English, and two science subjects. Over the medium term, the quality of applicants to primary teachers colleges has steadily improved, as seen in the growing number of entrants with passing marks in the key subject areas of English, mathematics, and physics (see table 6.3).

Table 6.1 Enrollment, Pupil-Teacher Ratio, and Teacher Demand in Uganda, 2005

Indicator	Number
Estimated total enrollment for 2005	7,734,608
Estimated staff establishment ceiling for 2005	132,500
Total number of teachers on government payroll	117,884
Number of trained teachers	104,637
Number of untrained teachers	12,856
Number of vacancies to be filled	14,616
Target pupil-teacher ratio ^a	58:1
Actual pupil-teacher ratio ^b	66:1
Actual pupil-qualified teacher ratio ^c	74:1

Source: Uganda, Ministry of Public Service, Teachers Payroll Monitoring Unit, School Register, March 2005.

a. Estimated total enrollment to estimated staff establishment ceiling.

b. Estimated total enrollment to total number of teachers on the payroll.

c. Estimated total enrollment to number of trained teachers on the payroll.

Table 6.2 Projected Supply of Teachers, 2004–15

Indicator	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Primary enrollment (thousands)	7,526	7,479	7,315	6,999	6,807	6,619	6,513	6,503	6,581	6,756	7,040
Pupil-teacher ratio	51	50	49	48	48	46	44	43	41	41	40
Number of teachers needed	147,564	149,572	149,288	145,818	141,819	143,881	148,033	151,222	160,508	164,770	176,009

Source: Uganda, Ministry of Education and Sports (2005).

Table 6.3 Student Achievement in English, Mathematics, and Physics, 2001–04

Academic year	English		Mathematics		Physics	
	Passed	Failed	Passed	Failed	Passed	Failed
2000–01	2,937	23	1,368	921	250	283
2001–02	7,292	23	5,283	2,156	1,704	522
2002–03	5,692	114	4,771	1,488	1,673	436
2003–04	6,011	0	6,031	0	1,936	483

Source: Uganda, Ministry of Education and Sports data.

The annual outputs of newly qualified teachers from the primary teachers colleges have fluctuated in recent years, rising from 3,386 in 1989 to 11,162 in 1999, but falling to 6,814 by 2002 (see table 6.4). There are reports that a significant proportion of the newly qualified teachers do not take teaching positions. Instead they take other jobs, such as positions

Table 6.4 Outputs of Primary Teacher Colleges, 1989 and 1995–2002

Indicator	1989	1995	1996	1997	1998	1999	2000	2001	2002
Registered for examinations	8,061	10,223	13,565	16,990	16,177	20,028	16,794	14,157	11,571
Passed	3,386	6,422	8,599	10,137	9,890	11,162	7,300	8,199	6,814
Failed	2,060	3,542	4,678	6,287	5,589	7,975	9,059	5,383	4,411

Source: Uganda, Ministry of Education and Sports data.

in the police force, nursing, or the army. However, there are as yet no accurate data to record this “wastage.”

Uganda uses a system of “established posts,” indicating the expected number of teachers in each school. However, despite recruitment drives, the actual number of teachers in recent years has been consistently below the established figure. Part of the difficulty in maintaining teacher numbers has been attrition, which is estimated at 4 percent annually. Many teachers leave their post to find work in another school, seeking either better conditions or a school near their home area. Unqualified teachers often leave to attend training college. Attrition is exacerbated by the prevalence of HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome).

In the late 1990s the supply of qualified teachers was inadequate to meet the needs of the expanding primary school system, and the government recruited unqualified teachers, provided that they met the minimum qualification for entry to a primary teachers college, and employed them on two-year contracts. As a result, by 2005 there were 12,856 untrained teachers in government schools.

To mitigate the negative impacts of HIV/AIDS on teachers, the Ministry of Education and Sports has formulated an HIV/AIDS workplace policy. This policy includes improved conditions of service that would decrease teachers’ susceptibility to HIV/AIDS, such as (a) not deploying teachers far away from their spouse; (b) deploying teachers who are HIV positive to areas where they can access appropriate medical attention; and (c) providing teachers access to condoms from health centers or civil society organizations. Prior to the development of the HIV/AIDS workplace policy, teachers infected with HIV/AIDS who were unable to work were considered to have absconded from duty and were quickly removed from the payroll and replaced. Under the new policy, teachers taken ill with the infection are kept in service, and their teaching load is shared among the remaining teachers, as reallocated by the head teacher. (Schools must stay within their establishment ceiling and do not have the flexibility to recruit relief teachers.)

TEACHER DEPLOYMENT

The pupil-teacher ratio varies from district to district. The lowest PTRs are found in sparsely populated districts such as Nakasongola (39:1) and the island district of Kalangala (40:1). Urban areas such as Kampala (42:1) and Wasiso (45:1) find it easier to attract and retain teachers and also have relatively low PTRs. In general, the PTR is higher in rural areas, as exemplified by Mayuge (58:1), Kayunga (59:1), and Kyenjojo (63:1). In areas where insecurity is high as a result of rebel activity, it is very difficult to retain teachers. For this reason, Gulu (61:1), Kitgum (72:1), and Pader (81:1) are among the districts with the highest PTRs.

Districts find it more difficult to recruit teachers for rural schools. Teachers, particularly qualified teachers, prefer to work in urban areas. Teachers avoid remote rural locations for various reasons, including the poor quality of housing; lack of services such as electricity, water, health care, and public transport; and the high cost of some commodities. By contrast, teachers in urban schools often receive a salary top-up (from parent contributions). Further, in urban schools lessons are taught in English, while in rural schools lessons are taught in the local language, which is especially difficult for teachers who are not from the area. Rural locations are particularly unattractive to female teachers.

As a matter of policy, teachers, like all public officers, may be deployed to any part of the district and can be transferred to a new post within the district. Districts are expected to manage the deployment of their teachers, based on the school-specific staff establishment ceilings. Teachers married to each other are posted to separate schools but, when and where possible, close to each other. Teachers who are HIV/AIDS positive and disclose their condition are posted near a rural or urban health facility. Deployment is complicated by use of the mother tongue as the language of instruction in the lower primary grades, as more than 50 languages and dialects are in use. In practice, teachers transferred to undesirable locations often refuse to move and, if forced, may take up a post in another district or in a private school.

In 2001, the government put in place the following measures to foster retention of primary school teachers in hard-to-reach areas: a pay incentive and housing.

The pay incentive is equivalent to 20 percent of the teacher's monthly salary. "Hard-to-reach areas" have one or more of the following persistently adverse conditions: isolation (for example, islands), difficult terrain, poor and unreliable road network, lack of housing, inadequate supply of water, a nomadic lifestyle, poor provision or total lack of social

amenities, and insecurity, including exposure to hostile communities. Only qualified teachers are eligible to receive this pay incentive, which ceases when a teacher transfers out of the area or attends a full-time training course for one year or more. The Ministry of Education and Sports has found these criteria difficult to implement.

Teacher housing is seen as an important incentive to attract and retain teachers in rural areas. Insufficient housing is available, and the government has allowed up to 15 percent of the school facilities grant (Uganda's fund for classroom construction) to be used to finance the construction of teacher housing. Some local communities have provided temporary teacher housing, and in some districts, the Local Government Development Programme supports the construction of staff houses. The government has requested nongovernmental organizations to include teacher housing in their school assistance programs. Finally, in some rural schools, teachers are allowed to cultivate gardens on the school grounds free of charge. Despite these efforts, the supply of teacher housing remains inadequate to serve the need.

TEACHER UTILIZATION

A primary school teacher teaches the entire class in all subjects. There is no teacher specialization. A primary school teacher is expected to teach 27 hours a week. Outside of class, the teacher is expected to prepare lesson plans and conduct some research needed for instruction. The teacher is also expected to supervise and conduct activities such as games, sports, music festivals, and science fairs. However, rural schools may provide fewer contact hours because of the long walking distances from home to school and back for teachers and pupils alike. Some teachers in small rural schools spend fewer hours in classroom teaching in favor of private work, such as gardening, to supplement their income.

The workload is often greater in small schools, because the PTR is the main determinant of teacher allocation, but teachers are still needed when classes are small. As a result, in small schools teachers work longer hours, there is less flexibility to cover the absence of a teacher, and head teachers often combine teaching with their administrative duties. Many schools have fewer teachers than classes, resulting in classes being left with work to do while the teacher attends to the other group. A more formal system of multigrade teaching is being piloted but is not yet in widespread use.

In Karamoja District, where the population is widely dispersed and engaged in pastoral farming, the government has launched the Alternative

Basic Education for Karamoja project, where teachers are trained in nonformal education, and children can study in small groups under trees as they watch over their grazing farm animals.

TEACHER MANAGEMENT

The district service commissions have the authority to appoint, confirm, and discipline primary school teachers. Teachers are recruited to a district pool and then deployed to schools according to the existing vacancies. Newly appointed teachers undergo a probation period of two years. Passing probation, they are confirmed, that is, they are conferred permanent status and may participate in the government's pension plan. However, owing to the shortage of qualified primary school teachers in some parts of the country, the government has authorized local governments through their respective district service commission to appoint secondary school graduates (senior 4 minimum) on a two-year contract basis. These are called trial teachers.

The national policy on teacher development emphasizes the continuous professional development of primary school teachers. Primary school teachers have access to in-service education and training; formal training, as well as continuous informal pedagogical teamwork and mentoring by their more experienced colleagues and peer educators; support from tutors from the coordinating center; and self-assessment analysis and evaluation through the Program for In-service Teacher Development and Management Systems.

TEACHER OVERSIGHT

Teachers experiencing difficulties can seek professional support from their more senior colleagues, the deputy head teacher, and the head teacher. Visiting school inspectors also provide support. The main role of inspectors is to give pedagogical support to teachers, monitor implementation of the curriculum, and give advice to head teachers. The inspectors are responsible for overseeing a number of schools, and their activities are coordinated by a senior inspector at the district office. Each school is to be visited once per term. Additional support may be provided by the following training programs for teachers: (a) school-based in-service training; (b) continuous professional programs in instructional areas, organized by tutors from the district's coordinating centers for training; and (c) refresher courses organized by the district inspectorate.

The teacher's attendance is recorded on the attendance registry indicating arrival and departure for morning and afternoon sessions. The

teacher's performance is monitored through an appraisal system. Teachers on probation are monitored at six-month intervals, while permanent teachers are monitored annually. On a day-to-day basis, the head teacher monitors the performance of teachers.

Like all other civil servants, primary school teachers are paid on the 28th of every month through a bank in an area reasonably near the school. But in areas where banks are far from the school or where there are no banks at all, teachers are paid in cash. As most banks are located far from rural schools, teachers in rural areas usually travel long distances to collect their pay. Salary increments and other adjustments payable to the teacher are not automatically included in the regular salary and must be requested for processing separately. Head teachers, not the school teachers themselves, are expected to travel to the district office to handle such matters for their teachers.

Primary teachers can be promoted to head teacher, and these posts are filled using a competitive system, as follows: (a) the district service commission advertises the vacancy; (b) the commission short-lists responding candidates and conducts interviews; and (c) successful candidates are sent to the district's chief administrative officer for deployment, in consultation with the Education Department.

As most promotions require a diploma- or degree-level qualification, there is strong demand among primary school teachers for further studies. (In response, many tertiary institutions offer training programs for teachers during holidays.) The government has issued guidelines to regulate the teachers' use of study leave. However, some teachers do not follow the guidelines and consequently have been declared as having abandoned their post.

DISCIPLINARY MEASURES

The process of dealing with teachers who misbehave involves the following steps: (a) informal warning by the head teacher; (b) written formal warning by the school's inspector; and (c) when the teacher who has been warned shows no notable change in behavior, referral to the district service commission for action, with a recommendation for disciplinary action.

DECENTRALIZATION

The government of Uganda is implementing a policy of decentralization to local governance, operationalized in the Local Governments Act of 1997. The functions and services devolved from the central government ministries and departments to local governments (district governments

or municipal governments) include education services and operations covering nursery, primary, secondary, trade, special, and technical education. The central government retains the responsibility for formulating policy, setting standards and regulation, providing training and capacity building, providing technical back-up support, and conducting monitoring and evaluation.

Three government ministries as well as local governments are responsible for the management of primary school teachers:

- The *Ministry of Education and Sports* has overall responsibility for policy formulation and planning for primary school teachers. It determines the basic demand for teachers by setting staff establishment ceilings according to enrollment, and it projects demand over the short, medium, and long terms. The ministry ensures the supply of qualified teachers by managing the 45 primary school teacher colleges. It sets and regulates the standards of teacher performance and at the same time provides quality assurance and training and technical support to teachers.
- The *Education Service Commission* is a constitutional body, independent of the Ministry of Education and Sports and of any other office that oversees government policy relating to education. The commission gives advice and guidance to the district service commissions on standards and procedures for recruiting and disciplining primary school teachers. It also recruits post-primary school teachers and sees to their confirmation and to the disposition of disciplinary cases submitted to it by the Ministry of Education and Sports.
- The *district service commissions* are mandated by the Local Governments Act of 1997 to appoint primary school teachers and, in the service of district or urban councils, appoint, confirm, and discipline all other personnel in local government.
- The *Ministry of Public Service* determines the terms and conditions of employment for all public servants, including teachers. It also determines the pay structure and manages the teachers' payroll.
- The *Ministry of Finance, Planning, and Economic Development* is responsible for mobilizing financial resources for the financing of education programs as well as for remunerating teachers. It also ensures the proper use of those resources.

TEACHER FINANCING

In Uganda, teachers constitute 57 percent of public employees, and education accounts for 44 percent of the total public service wage bill. The

primary school teachers' wage bill accounts for nearly 68 percent of the total education wage bill. In recent years the government has raised teacher pay. In 2004–05, the government raised the minimum salary of a primary school teacher from U Sh 113,000 per month (Uganda shillings, about US\$62) to U Sh 200,000 per month (US\$110) and gave head teachers a pay raise as part of the Public Service Reform Programme. At the same time, the effort to reduce the PTR has increased the number of primary school teachers.

Financing these teachers presents major challenges. Uganda allocates 30 percent of its national budget to education and 65 percent of the education budget to primary education. Given the relatively high proportions allocated to primary education, further expansion is likely to involve difficult choices regarding teacher pay, teacher numbers, workload, and PTR.

SUMMARY OF KEY ISSUES

There remain significant challenges in the deployment of teachers to rural areas. It remains difficult to attract and retain teachers in rural areas, especially female teachers. There is a need for mechanisms that encourage teachers to take posts in rural schools without compromising their marriage or family life. Effective use of teachers in rural schools is also a problem, particularly where the number of students is small.

References

- Akyeampong, Kwame, and Keith Lewin. 2002. "From Student Teachers to Newly Qualified Teachers in Ghana: Insights into Becoming a Teacher." *International Journal of Educational Development* 22 (3-4): 339–52.
- Akyeampong, Kwame, and David Stephens. 2002. "Exploring the Backgrounds and Shaping of Beginning Student Teachers in Ghana: Toward Greater Contextualisation of Teacher Education." *International Journal of Educational Development* 22 (3-4): 262–74.
- Azam, J. P. 2001. "The Redistributive State and Conflicts in Africa." *Journal of Peace Research* 38 (4): 429–44.
- Bennell, Paul, Karin Hyde, and Nicola Swainson. 2002. "The Impact of the HIV/AIDS Epidemic on the Education Sector in Sub-Saharan Africa: A Synthesis of the Findings and Recommendations of Three Country Studies." Centre for International Education, University of Sussex, Institute of Education, Brighton, Sussex.
- Benveniste, Luis, and Patrick McEwan. 2000. "Constraints to Implementing Educational Innovations: The Case of Multi-grade Schools." *International Review of Education* 46 (1-2, May): 31–48.
- Bernard, Anne. 2002. "Lessons and Implications for Girls' Education Activities: A Synthesis from Evaluations." UNICEF (United Nations Children's Fund) Evaluation Office, New York.
- Black, Thomas R., Charles Esanu, Joseph Mugambe, Rose Namwadda, and Edward Walugembe. 1993. "School Improvement in the Developing World: An Evaluation of the Aga Khan Foundation Programme." Document ED 363 930, ERIC (Education Resources Information Center) database.
- Brodie, Karin, Anthony Lelliott, and H. Davis. 2002. "Forms and Substance in Learner-centred Teaching: Teachers' Take-up from an In-service Programme in South Africa." *Teaching and Teacher Education* 18 (5): 541–59.
- Coultas, Julie, and Keith Lewin. 2002. "Who Becomes a Teacher? The Characteristics of Student Teachers in Four Countries." *International Journal of Educational Development* 22 (3-4): 234–60.
- Craig, Helen J., Richard J. Kraft, and Joy du Plessis. 1998. *Teacher Development: Making an Impact*. Washington, DC: U.S. Agency for International Development and World Bank.
- CSA (Centre for the Study of AIDS). 2005. "Young, Rural Teachers Most at Risk." Report of the Centre for the Study of AIDS (South Africa). (<http://www.csa.za.org/article/view/346/1/1>.)
- Daun, Holger. 1997. "Teachers Needs, Culturally Significant Teacher Education and Educational Achievement in an African Context: The Case of Guinea Bissau." *International Journal of Educational Development* 17 (1): 59–71.

- FAO (Food and Agriculture Organization). 2005. "AIDS: A Threat to Rural Africa." Fact sheet. (<http://www.fao.org/Focus/E/aids/aids6-e.htm>.)
- Garson, P. 1998. "Teacher Deployment: What Went Wrong?" In *Helping to Establish a Culture of Learning and Teaching in South Africa*, ed. Karen Fieldgate. Gauteng, South Africa: Education Africa.
- Gaynor, Cathy. 1998. "Decentralization of Education: Teacher Management." World Bank, Washington, DC.
- Göttelmann-Duret, Gabriele, and Joe Hogan. 1998. *The Utilization, Deployment, and Management of Teachers in Botswana, Malawi, South Africa, and Uganda*. Paris: UNESCO.
- Hallak, Jacques. 1990. *Investing in the Future: Setting Educational Priorities in the Developing World*. Paris: UNESCO, International Institute for Educational Planning.
- Hedges, John. 2000. *The Importance of Posting in Becoming a Teacher in Ghana*. MUSTER Discussion Paper 13. Brighton: University of Sussex, Centre for International Education.
- . 2002. "The Importance of Posting and Interaction with the Education Bureaucracy in Becoming a Teacher in Ghana." *International Journal of Educational Development* 22 (3-4): 353–66.
- Jacob, Brian, and Lars Lefgren. 2005. "Principals as Agents: Subjective Performance Measurement in Education." NBER Working Paper 11463, National Bureau of Economic Research, Cambridge, MA.
- Kelly, Michael J. 2000. *Planning for Education in the Context of HIV/AIDS*. Paris: UNESCO, International Institute for Educational Planning.
- Kuruppu, Lionel. 2001. "The 'Books in Schools' Project in Sri Lanka." *International Journal of Educational Research* 35 (2): 181–91.
- Lesotho, Ministry of Education and Training. 2002. *Schools Inspectorate Final Report*. Maseru: Ministry of Education and Training.
- Lewin, Keith. 2000. "Mapping Science Education in Developing Countries." Paper prepared for the Human Development Network, World Bank, Washington, DC.
- . 2002. "The Costs of Supply and Demand for Teacher Education: Dilemmas for Development." *International Journal of Educational Development* 22 (3): 221–42.
- Lockheed, Marlaine, and Adriaan Verspoor. 1991. *Improving Primary Education in Developing Countries*. New York: Oxford University Press for the World Bank.
- Malawi, National Statistical Office. 2000. *1998 Malawi Population Housing and Census Report*. Zomba.
- Nhundu, Tichatonga, and Almon Shumba. 2001. "The Nature and Frequency of Reported Cases of Teacher-Perpetrated Child Sexual Abuse in Rural Primary Schools in Zimbabwe." *Child Abuse and Neglect* 25 (11): 1517–34.
- Nleya, P. T. 1999. "Perceptions of Botswana Primary Teacher Educators on Selected Teaching Skills." *International Journal of Educational Development* 19 (2): 147–56.
- PANA (Pan-African News Agency). 2003. "African Governments Neglect Plight of Pregnant School Girls." PANA, Dakar, November 6.
- Penrose, Perran. 1998. *Planning and Financing Sustainable Education Systems in Sub-Saharan Africa*. London: Department for International Development.
- Pridmore, Pat. 2004. "Multi-grade Teaching Strategies." Presentation made at the World Bank subregional workshop, "Multi-grade Teaching and Learning," Washington, DC.
- Rojas, C. A., and Z. Castillo. 1988. "Evaluación del Programa Escuela Nueva en Colombia." Instituto SER de Investigación, Bogotá.

- Rust, Val, and Per Dalin, eds. 1990. *Teachers and Teaching in the Developing World*. New York: Garland.
- Samuel, Michael. 2002. "Working in the Rain: Pressures and Priorities for Teacher Education Curriculum Design in South Africa (Case Study of the University of Durban-Westville)." *International Journal of Educational Development* 22 (3-4): 397-410.
- Schollar, Eric. 2001. "A Review of Two Evaluations of the Application of the READ Primary Schools Program in the Eastern Cape Province of South Africa." *International Journal of Educational Research* 35 (2): 205-16.
- Sigsworth, Alan, and Karl Jan Solstad. 2001. *Making Small Schools Work*. Addis Ababa: UNESCO, International Institute for Capacity Building in Africa.
- Smith, Ann, and Enda McDonagh. 2003. *The Reality of HIV/AIDS: Christian Perspectives on Development Issues*. Dublin and London: Trócaire/Veritas/CAFOD.
- Taylor, Peter, and Abigail Mulhall. 2001. "Linking Learning Environments through Agricultural Experience: Enhancing the Learning Process in Rural Primary Schools." *International Journal of Educational Development* 21 (1): 135-48.
- Towse, Peter, David Kent, Funja Osaki, and Noah Kirua. 2002. "Non-graduate Teacher Recruitment and Retention: Some Factors Affecting Teacher Effectiveness in Tanzania." *Teaching and Teacher Education* 18 (6): 637-52.
- Uganda, Ministry of Education and Sports. 2005. *Education Sector Strategic Plan*. Kampala: Ministry of Education and Sports.
- UNESCO (United Nations Educational, Scientific, and Cultural Organization). 2005. *Education for All Global Monitoring Report 2005: The Quality Imperative*. EFA Global Monitoring Report. Paris: UNESCO.
- UNICEF (United Nations Children's Fund). 2003. *Report of the Gender Audit on the Education Sector*. Maseru, Lesotho: UNICEF.
- Verwimp, Philip. 1999. "Measuring the Quality of Education at Two Levels: A Case Study of Primary Schools in Rural Ethiopia." *International Review of Education* 45 (2): 167-96.
- VSO (Voluntary Service Overseas). 2002. *What Makes Teachers Tick: A Policy Research Report on Teachers' Motivation in Developing Countries*. London: VSO.
- World Bank. 2003. "Cost and Financing of Education: Mozambique Country Status Report." Africa Region Human Development Working Paper Series, World Bank, Washington, DC.
- . 2004a. "Cost, Financing, and School Effectiveness of Education in Malawi: Country Status Report." Africa Region Human Development Working Paper Series, World Bank, Washington, DC.
- . 2004b. *The Rural Access Initiative: A Review of Activities and Achievements, 2001-2004; Shortening the Distance to EFA in the African Sahel*. Washington, DC: World Bank.
- . 2005. *Lesotho: Education Country Status Report*. Washington, DC: World Bank.
- Yarrow, Allan, Roy Ballantyne, Brian Hansford, Paul Herschell, and Jan Millwater. 1999. "Teaching in Rural and Remote Schools: A Literature Review." *Teaching and Teacher Education* 15 (1): 1-13.

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Much is going well with the effort to provide universal primary education in Sub-Saharan Africa. Gross enrollment rates have increased from 78 percent in 1998/99 to 91 percent in 2002/03; sizable investments have greatly improved school infrastructure and access; and large numbers of new teachers have been recruited. But educating the children in remote rural areas continues to be a challenge.

Schools in hard-to-reach locations find it difficult to attract and retain teachers. Therefore, the deployment, effectiveness, management, and support of teachers in these areas require special attention and action. Such issues are thoroughly examined in this book, which also includes case studies from Lesotho, Malawi, Mozambique, Tanzania, and Uganda. The country studies give rich insights into the potential and drawbacks of specific policy options.

Teachers for Rural Schools provides information that will be invaluable in its practicality to policy makers and practitioners responsible for educating rural populations. It will also appeal to anyone interested in Africa, development, education, public policy, and social welfare.



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