

In Service Teacher Education in Sub-Saharan Africa

A Synthesis Report



Muhammad Ibn Junaid
& Francois Maka
2015



The Commonwealth

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List of acronyms and abbreviations

ACE	Advanced Certificate of Education
ADEA	Association for the Development of Education in Africa
AIDS	acquired immune deficiency syndrome
BA Ed.	Bachelor of Arts in Education
BSc. Ed.	Bachelor of Science in Education
CAPED	<i>Cellule d'Animation Pédagogique</i> ('Cell of Teaching Animation')
CAR	Central African Republic
CBI	cluster-based INSET
CNFC	National Centre for In-service Training (Central African Republic)
CPD	continuing professional development
CPR	regional teaching centre (Central African Republic)
DFID	Department for International Development (UK)
DLS	distance learning system
EFA	Education for All
ESP	Education Sector Plan (Ghana)
FME	Federal Ministry of Education (Nigeria)
FTI	Fast Track Initiative
GDP	gross domestic product
GES	Ghana Education Service
HIV/AIDS	human immunodeficiency virus/ acquired immune deficiency syndrome
ICT	information and communication technology
IDP	international development partner
IICBA	International Institute for Capacity Building in Africa

JICA	Japanese International Cooperation Agency
MDGs	Millennium Development Goals
MOE	Ministry of Education
NTEP	National Teacher Education Policy (Nigeria)
NTC	National Teaching Council (Ghana)
NTI	National Teachers' Institute (Nigeria)
INSET	in-service education and training
NCCE	National Commission for Colleges of Education (Nigeria)
NCE	Nigeria Certificate in Education
NGO	non-governmental organisation
NUC	National Universities Commission
PSTE/PRESET	Pre-service teacher education
PTA	Parent–Teacher Association
PTPDM	Pre-tertiary Teacher Professional Development and Management
RESAFAD	<i>Reseau Africain de Formation a Distance</i> (African Network for Distance In-service Training) (Senegal)
SBI	school-based in-service training
SMASE	Strengthening Mathematics and Science Education (project)
SSA	Sub-Saharan Africa
STUP	Special Teacher Upgrading Programme (Nigeria)
TED	Teacher Education Division (Ghana)
TRCN	Teachers' Registration Council of Nigeria
TSS	teachers' salary scale
UCC	University of the Cape Coast (Ghana)
UNESCO	UN Educational, Scientific and Cultural Organization
USAID/EDB	US Agency for International Development

Executive Summary

The attainment of the Education for All (EFA) goals is hinged on the availability of adequate and qualified teachers to service the ever-expanding basic education sector, especially in Sub-Saharan Africa. However, because the provision of pre-service teacher education institutions in any one country, particularly in the developing countries, is not commensurate with the explosion in the number of basic education schools that are being established, a wide gap is created between the supply and demand for teachers in these countries.

While progress is being made in terms of the quantity and quality of pre-service education programmes in many of these countries, a much greater effort is required to address the perennial shortages of teachers with the necessary qualifications and competencies for the attainment of the laudable goals of universal basic education. In many developing countries, uncertified teachers are recruited to fill teaching vacancies that would otherwise remain unfilled, underscoring the need to prepare these untrained teachers with the necessary skills to be successful on the job.

Ministries of education have historically, as part of their main functions, provided opportunities for in-service training for teachers, irrespective of their certification – both to complement pre-service teacher education provisions and to improve on the quality of teachers and teaching. However, baseline data is lacking on the nature and efficacy of these in-service programmes across countries.

As a contribution to the ongoing development of professional practice of in-service training of teachers in Sub-Saharan Africa, the UN Educational, Scientific and Cultural Organization (UNESCO)—the International Institute for Capacity Building in Africa (IICBA), UNESCO Office in Dakar, the Association for the Development of Education in Africa (ADEA) Working Group on the Teaching Profession, the International Task Force on Teachers for EFA and the Commonwealth Secretariat engaged consultants to conduct surveys of in-service education and training (INSET) programmes and approaches in eight countries, namely the Central African Republic, Ghana, Madagascar, Mozambique, Niger, Nigeria, Senegal and Zambia. Through this study of INSET, the collaborating agencies sought to fill gaps in our current knowledge and understanding about in-service teacher education practices and innovations in these countries, as a basis for drawing up lessons that would both improve current practices and inform future initiatives. The country surveys were guided by the following specific objectives:

- review policies and programmes by both government and non-governmental agencies on INSET within existing education systems and legal frameworks;
- examine the nature/type, adequacy, regularity and efficacy of INSET programmes to ensure quality teachers;
- identify best practices for emulation by other countries; and
- identify major challenges encountered and lessons learned from the experiences of each of the sampled countries in the implementation of the INSET programmes.

To achieve these goals, the project implementing partners contracted two sets of consultants: a set of eight country

consultants to conduct the INSET surveys in the sampled countries and prepare the country case-study reports, based on an agreed reporting framework. The country consultants were supported by two lead consultants who co-ordinated the country studies; they also reviewed and synthesised the country reports into a harmonised report that summarised the key issues and recommendations of the study.

Methodology

The INSET study was carried out in the following stages:

1. **Induction workshop:** The first stage involved an induction workshop in Addis Ababa in October 2011, which brought together the three key players in the study (the funding agencies, the lead consultants and the country consultants) to a roundtable to delineate the nature, scope and purpose of the study. The conceptual framework of the study was discussed and refined, and the survey template and timelines were developed and agreed upon at this workshop, to guarantee uniform application across the countries and timely completion of the study.
2. **In-country fieldwork:** The second stage comprised two main activities: data gathering in the selected countries by the various country consultants and report writing. This involved desk reviews of national development plans, education policy documents, interviews with relevant stakeholders including Ministry of Education officials, teachers, head teachers and trainers, as well as an analysis of existing structures and policy networks that may influence sustainability of the INSET programmes.

3. **Review of the reports:** This stage involved three main activities: a review of the country reports by the lead consultants to ensure compliance with the agreed research and reporting template, harmonisation of the country reports into a single summary report and circulation of the draft summary report to the institutional partners for their inputs and comments.
4. **Validation workshop:** A consolidated report was presented for review and comments by the institutional partners, lead and country consultants at a validation workshop held 18–22 March 2013 in Addis Ababa, Ethiopia. Feedback and comments from the validation workshop were incorporated in the country reports and this synthesis report, which is the final version of the consolidated report.
5. **Structure of the report:** The study examined both the contexts and the forms of the INSET programmes in the sampled countries, with a view to identifying best practices that had proved effective in working with practicing teachers. The structure chosen to address the above outlined objectives consists of four main chapters:
 - i. **Chapter 1** presents a broad contextual background that first examines how demographic and socioeconomic indicators, as well as international commitment to EFA and the Millennium Development Goals (MDGs) by the countries studied, have influenced growth in education in the countries, giving rise to issues of equity and quality in their education systems. The reports principally

discuss some common trends: on the ensuing social issues in general, but on education and teacher education and training in particular.

- ii. **Chapter 2** discusses the context of teacher education in the eight countries, focussing on its **policies, structures and management**. The analysis in this chapter tries to identify some common features and to highlight determining factors of successes and/or failures, as well as the challenges involved.
- iii. **Chapter 3** examines the status of and promising practices for INSET in the eight countries. The chapter focuses on national strategies for the provision and management of INSET, and what lessons for improvement or replication in other countries can be learned from the experiences of each country.
- iv. Finally, **Chapter 4** summarises the discussions in terms of the main findings of the study, lessons learned and recommendations for improvements in relation to policies, management and governance of INSET in the eight countries.

It is hoped that ministries of education in these countries, UNESCO field offices, and other relevant agencies, including IICBA and ADEA, will find this report useful in providing policy support for future interventions, particularly in relation to the effectiveness of INSET programmes.

Summary of the main findings

The study revealed that the provision of in-service teacher education in the eight countries is often variable and anecdotal, resulting in a growing concern about the efficacy of existing professional development schemes in meeting the training needs of teachers. The in-service training of teachers in the sampled countries took many different forms, ranging from the more popular ‘one-shot’ training of a short duration (usually a week) at designated centres using the cascade model (as in the annual MDGs retraining of teachers in Nigeria and the INSET activities in Ghana, Madagascar, Mozambique and Senegal) to a more extensive school-based professional development involving educator mentors and inspectors visiting classrooms to observe and mentor teachers over a long period of time, as exemplified by the experiences of Zambia, Niger and CAR. The ‘la CAPED’ (*Cellule d’Animation Pédagogique* or ‘Cell of Teaching Animation’) strategy employed by Niger, in particular, is an elaborate INSET programme that is organised around schools known as ‘*ecole sieges*’ (‘pole schools’), which become the designated centres for co-ordinating INSET training activities.

Alternatively, training may take the form of full- or part-time study at a college or university for upgrading teachers’ qualifications – for example, from a diploma to a bachelor’s degree or from a bachelor’s degree to a master’s and/or doctorate degrees. This form of in-service programme is common to all the sampled countries, and is by far the most prevalent approach to in-service education available to teachers in these countries, more particularly in the Anglophone countries.

The one-off in-service teacher training at designated centres covers greater numbers and allows for teachers from different

types of schools to meet and share experiences, but is also fraught with many challenges (Adama, 2012). The school-based approach involving mentoring teachers in their schools, on the other hand, provides greater opportunities to provide one-on-one support to individual teachers in their classrooms (Adeyanju 2004 & 2012). While the latter approach might appear to be more beneficial to the trainees, its implementation has greater financial implications in contexts with huge numbers of teachers – such as Nigeria, with more than half a million primary teachers across the nation. It is also affected by shortages of senior teachers and inspectors to mentor the multitudes of trainee teachers, as exemplified by the experience of Niger in implementing CAPED.

Both approaches require sufficient funding for effective implementation. However, most disturbing is the apparent lack of, or inadequate budgetary provision and absence of elaborate policies and structures for, effective management of in-service training for teachers. The reports indicate that in some of the sampled countries (for example, Ghana and Madagascar) most available INSET programmes are often donor driven, initiated and funded by donor agencies, usually on a small scale and involving few regions or sections of the country. Niger also reported inadequate funding as affecting CAPED. In 2001, for example, out of approximately 14,000 teachers, only 1,179 (representing 8.42 per cent of teaching personnel) were visited by mentor teachers and advisers. This was attributed to insufficient funding and the lack of a regulatory framework to make the tutoring/ mentoring accountable through the provision of indicators of the teachers' expected behaviours, which can be used as a basis for their evaluation (Adama, 2012).

Nevertheless, the involvement of the international community in the provision of in-service training for teachers is helping a great deal in promoting and strengthening the development of policies and programmes for the continuing professional development of teachers across the Sub-Saharan African (SSA) countries, with varying degrees of success. In Nigeria and Ghana, for example, the Japanese International Cooperation Agency (JICA) has provided both technical and financial support for the in-service training of mathematics and science teachers of basic education in schools with an emphasis on child-centred approaches with a great deal of success.

Similarly, the World Bank and the UK Department for International Development (DFID) under its Education Sector Support Programmes in Nigeria (ESSPIN) have supported school-based teacher professional development programmes in selected states in Nigeria (Adeyanju, 2005). However, as noted earlier, these are disparate attempts and usually on small-scale pilot stages that do not cover the entire teaching force of a given country.

There are isolated examples of comprehensive education policies, which seek to integrate the components of both pre-service and in-service education, aimed at ensuring coherence and continuity of training opportunities throughout the career of teachers. However, even where these exist, such as in Niger, Nigeria and Ghana, most of the provisions in the national teacher education policies of these countries are yet to be fully implemented. Constraints such as lack of awareness of the policies, inadequate funding and lack of the necessary infrastructural support facilities have stalled their effective implementation (Asare et al. 2012; Isyaku 2012 and Adama, 2012).

Recommendations

For a more robust and well-coordinated approach to in-service training of teachers, therefore, policy recommendations emanating from the country reports include the need for countries to:

- (i) design more comprehensive and integrated teacher policies that include in-service training for teachers;
- (ii) diversify the approaches to in-service training to include more school-based approaches to teacher professional development, which studies have shown to be more effective and relevant to teachers' classroom needs;
- (iii) embed INSET projects within countries' annual budgets to ensure availability of adequate resources for their implementation;
- (iv) establish elaborate structures for effective management and governance of the decentralised INSET system; and
- (v) align the INSET teacher education system to an elaborate reward system that includes links to career path.

Replication and sustainability issues

Many of the successful INSET initiatives described in this report also illustrate problems associated with replication and sustainability of the programmes, due largely to financial constraints, but also including lack of capacity and support structures. Inadequate funding is not limited to donor-driven

initiatives; it is also true of government-supported initiatives. All the countries studied reported an increase in the number of teachers participating in INSET activities, which raises the issue of cost of the training, particularly in relation to provision of allowances to participants. The Strengthening Mathematics and Science Education (SMASE) project in Nigeria, which is run on a cost-effective approach that makes use of secondary school classrooms and dormitories instead of rented accommodation and does not provide for daily allowances for trainees, though meals are provided; and the CAPED strategy in Niger, which takes care of only the catering, transport and photocopying expenses of the participants, are notable exceptions. These two approaches make organising training financially feasible, with low costs for the two governments that are in charge of the running costs component of the projects.

Another major problem associated with the school-based INSET initiatives is the apparent lack of capacity and infrastructural support structures in most schools to sustain the programmes. This, as is evident in the case of CAPED, necessitates close mentoring of trainee teachers by senior and more experienced teachers and inspectors, which becomes difficult to accomplish, certainly in situations where schools are under-resourced and bereft of experienced teachers and advisers. Nonetheless, these two problems underscore the need for major investments in the INSET systems of all the countries studied and the building of capacity of teachers at all levels of their education systems.

Chapter 1

Socioeconomic and Demographic Background

Before going into the review of the status of in-service teacher education in the SSA countries, it is important to understand the broader context within which it is taking place. The ongoing social, economic and demographic changes taking place in SSA countries have converged with an international commitment to basic education to drive an ever-expanding educational sector throughout the region, raising issues of equity and quality in the education systems of SSA countries (Adedeji and Olaniyan 2011). The demographic and socioeconomic indicators and international trends discussed in this chapter are the forces behind much of the need for reform in teacher education throughout the SSA countries. The common factors contributing to and affecting the rapid growth in education in general, and teacher education in particular, in these countries over the last two decades are outlined below:

- i. Improved health services and facilities have impacted positively on the growth and life expectancy of populations in SSA countries, with a majority of populations in the young age bracket contributing to the great pressure on education services.
- ii. The economic situation in the sampled SSA countries – characterised by steady growth in the countries' gross

domestic products (GDPs) over the last decade (6.9 per cent per annum in Nigeria, 5.8 per cent in Ghana, 3.8 per cent in Niger, 1.7 per cent in the Central African Republic [CAR], 4 per cent in Senegal, 5.4 per cent in Madagascar and 7.8 per cent in Mozambique) – has supported a gradual increase in government spending on education in these countries. This is despite high inflation rates (for example, 10 per cent in Mozambique, 8.5 per cent in Zambia) leading to significant limitations on the development of national policies and programmes, further aggravating existing social inequalities between regions (rural–urban), social groups (sedentary–nomadic) and between the sexes (male–female), all of which affect the quality of education. Gender inequality, in particular, brings with it serious demographic and health consequences, especially in areas affected by pandemic diseases such as HIV and AIDS. The death and or incapacitation of teachers affected by such diseases have a significant impact on both the provision and the quality of education. Similarly, the issue of insecurity in conflict-stricken areas – exacerbated by ethnic and sectarian crises (CAR, Mozambique, Madagascar and, more recently, Nigeria) – has affected the education of children in these areas. This has resulted in wide disparities, as several communities are displaced from their villages and towns by war and forced into refugee camps, where educational facilities are largely absent.

- iii. The international commitment to high-profile policies such as basic Education for All children (EFA) and the Millennium Development Goals (MDGs) has led to

significant increases in school enrolments and the number of schools across the SSA countries. The increase in the number of students completing primary education has created tremendous demand for secondary education in the region (see Figure 1.2). It has also created tremendous demand for teachers, more particularly at the basic education level where this expansion is greater, thereby pushing to the fore the pressing need for these countries to find effective ways of addressing the teacher challenge.

The traditional approach of addressing this problem through pre-service education faces many challenges, including the length of time it takes to produce teachers, lack of adequate institutional structures for training teachers and the unattractiveness of the teaching profession, among other factors. This has led many SSA countries to resort to employing uncertified teachers to fill vacancies that would otherwise remain unfilled.

Given the preponderance of uncertified teachers in the education systems of these countries, and insufficient and poorly equipped teachers, many SSA governments are experimenting with different approaches to in-service training of teachers, with greater or lesser involvement from international development partners. This chapter examines how demographic and socioeconomic indicators and international commitment to the EFA and MDG goals have influenced the growth of education in the sampled countries, giving rise to issues of access, equity and quality in the education systems of the eight countries. The analysis in the chapter draws on both common trends and divergences.

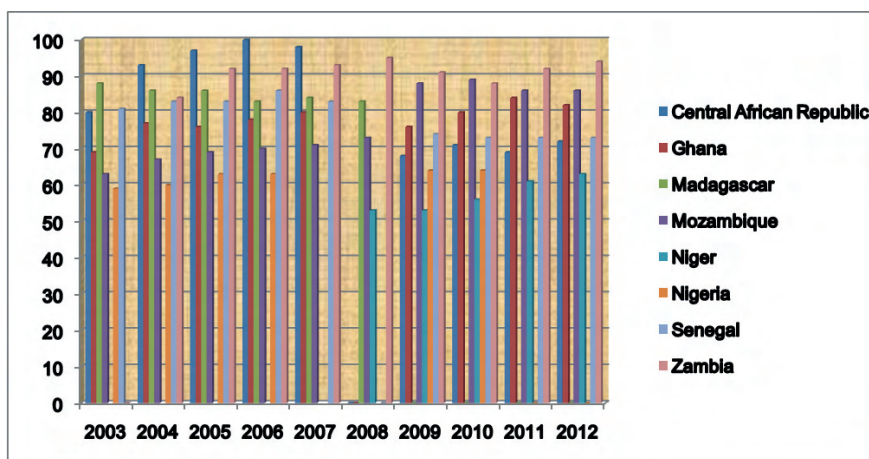
The demographic characteristics of the sampled countries

There are huge differences in population among the eight countries in the study, ranging from 4.2 million in CAR to 154 million in Nigeria. A relevant indicator for this report is the annual population growth rate in these countries. An analysis of the country reports revealed that all the sampled countries experienced an accelerated demographic growth – characterised by increased rates of births and increased life expectancy due to improved health, with significant proportions of the countries' populations in the young age bracket of under 20 years (e.g. more than 40 per cent in Ghana, 52 per cent in Mozambique, 49 per cent in CAR and 58 per cent in Senegal) – creating great pressure on education in terms of demand and funding. The average population growth rate in the sampled countries is around 2.5 per cent per annum. The general demographic indicators of the sampled countries have created an explosive growth in basic education, characterised by high primary net enrolment rates.

As Figure 1.1 shows, by 2007 Ghana had a primary net enrolment rate of 80 per cent, CAR 98 per cent, Madagascar 84 per cent, Mozambique 71 per cent and Senegal 83 per cent, while Zambia recorded 93 per cent, (EFA Fast Track Initiative [FTI] 2009; the World Bank and UNESCO Institute for Statistics, available at: www.indexmundi.com/facts/indicators; **visited on 15th July, 2014**. suggesting that many of these SSA countries were approaching the FTI benchmark of 100 per cent for the primary gross intake ratio. Nigeria and Niger had no data for

2007. However, by 2012 Niger reported 62 per cent primary net enrolment, Mozambique 65%, while Ghana, Senegal and Zambia maintained their 2007 figures. Only CAR's figure dropped to 72 per cent from its 2007 figure of 98 per cent. The most current available primary net enrolment rate for Nigeria was that of 2010, which stood at 62 per cent.

Figure 1.1: Primary net enrolment rate, by country and year

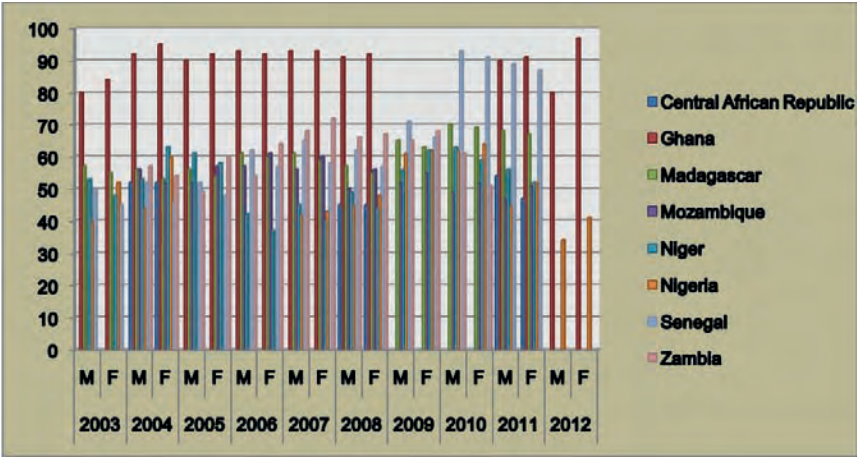


Sources: UNESCO Institute for Statistics; World Bank 2014, available at: www.indexmundi.com/facts/indicators; visited on 15th July, 2014. INSET country reports

This increased access to primary school was accompanied by a commensurate high demand for secondary education in the sampled countries. As recorded in the country reports, education indicators continued to show strength, both in terms of initial access to basic education and in transition rates from primary to general secondary education. The improvement in transition rates has been particularly notable in Ghana,

Madagascar, Mozambique, Senegal and Zambia where, by 2007, it exceeded well over 50 per cent of the primary school leavers in these countries. By contrast, in CAR, Niger and Nigeria, despite significant improvements in primary school enrolments, transition from primary to secondary was at a very slow rate, well below the 50 per cent mark (Figure 1.2).

Figure 1.2: Transition rate from primary to secondary school, by country, year and sex



Sources: UNESCO Institute for Statistics; World Bank 2014, available at: www.indexmundi.com/facts/indicators; visited on 15th July, 2014. INSET country reports

Figure 1.2 also shows that gender parity is more and more within reach, as evidenced by high rates of females transitioning from primary to lower secondary. This is a reflection of the reduction of gender disparity that accompanied the explosive expansion of access to primary education in the sampled countries. The high transition rates also show that more children are completing primary education in these countries.

Economy

Agriculture has traditionally been the main stay of the economies of the sampled countries, with majority of the countries' populations dependent on this sector for their livelihood. Similarly, a majority of the sampled countries' labour forces are engaged in agriculture (75 per cent in Nigeria, 55.8 per cent in Ghana and 65 per cent in Zambia). However, with the discovery of oil in Nigeria, Ghana and Niger, and copper in Zambia, the dominant role of agriculture in the economies of these countries, especially in terms of foreign exchange earnings, has gradually given way to petroleum and solid minerals exploration. In Nigeria, for example, by 2006 agriculture contributed 32.5 per cent to the country's gross domestic product (GDP) compared to 38.8 per cent contributed by oil and gas. Currently, oil and gas dominate the country's economy, contributing 99 per cent of export revenues and 78 per cent of government revenues (National Population Commission 2010).

In terms of real economic growth, with the exception of CAR whose GDP per capita was in clear regression from 4.3 per cent in 2006 down to 1.7 per cent in 2009, the other seven countries in the study have reported appreciable improvements in the performance of their domestic economies over the ten years up to 2012. Nigeria's GDP growth rate increased from 2.7 per cent in 1999 to 6.6 per cent in 2004 and averaged around 6.5 per cent per annum between 2005 and 2008, then rose to 6.9 per cent in 2012 (Isyaku 2012). Ghana's GDP growth rate averaged 5.7 per cent per annum over the period 2000–2009 and rose to 5.8 per cent in 2010, while the growth rate in

Senegal averaged 4 per cent per annum in 2011. Mozambique reported the highest average GDP growth rate of 7.8 per cent per annum since 1992.

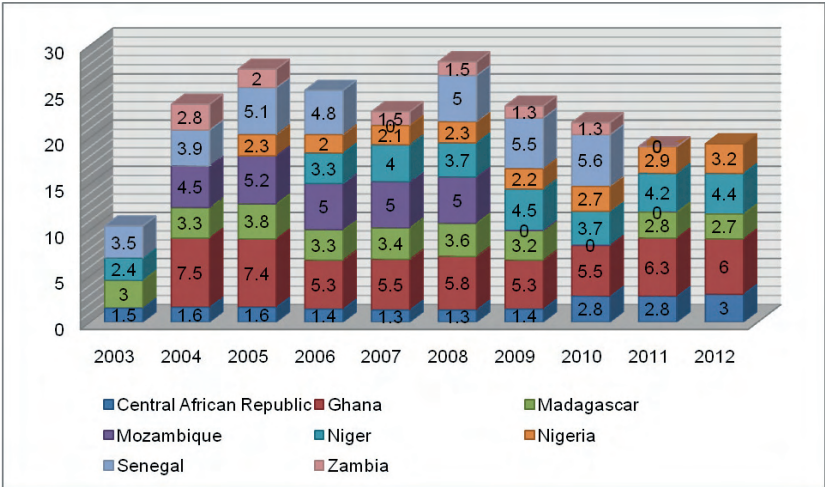
However, while these recorded rates of growth have resulted in some improvements in the living conditions of people in the sampled countries, poverty and income inequalities remain high, particularly among the rural populations. In Ghana, for example, 54 per cent of the population still live on less than US\$2 per day, despite a reduction in its poverty level from 52 per cent at the beginning of the 1990s to 28.6 per cent in 2006 (Asare et al. 2012), while in Nigeria an enormous 92 per cent live on less than US\$2 per day (UNESCO, Global Monitoring Report, [GMR] 2012). This has been compounded by high inflation rates, which averaged around 10 per cent across the sampled countries (excluding Senegal, where inflation stabilised at 5.8 per cent), and rapid population growth rate, which averaged 2.5 per cent per annum across the sampled countries. These factors have far-reaching implications for the education of the high numbers of children and young people in these countries, as well as for the education and training of teachers. The rapidly growing populations in the sampled countries call for heavy investments in the education of children and training of adequate numbers of good-quality teachers.

Expenditure on education

All the sampled countries reported steady increases in enrolments into basic education, which is feeding the increase in numbers in secondary education. This has raised the issue of adequate funding for education, particularly at the basic

education level, which has witnessed a much greater expansion than other levels of education. As evidenced in the country reports, government spending on education in the countries had shown gradual increase over the years. For example, in Niger the education sector’s share of the country’s GDP increased to 3.7 per cent in 2008 and 4.4 per cent in 2012, compared to a mere 2.4 per cent in 2003. This was despite funding levels still being much lower in Niger compared to average government expenditure on education in other sampled countries such as Ghana, Mozambique and Senegal, where education expenditure as a share of GDP rose to 5.8 per cent (Ghana) and 5 per cent respectively in 2008. By contrast, government expenditure on education as a percentage of GDP in the period 2003–2012 averaged about 1.8 per cent for CAR, 2.9 per cent for Madagascar, 2.5 per cent for Nigeria and 1.7 per cent for Zambia.

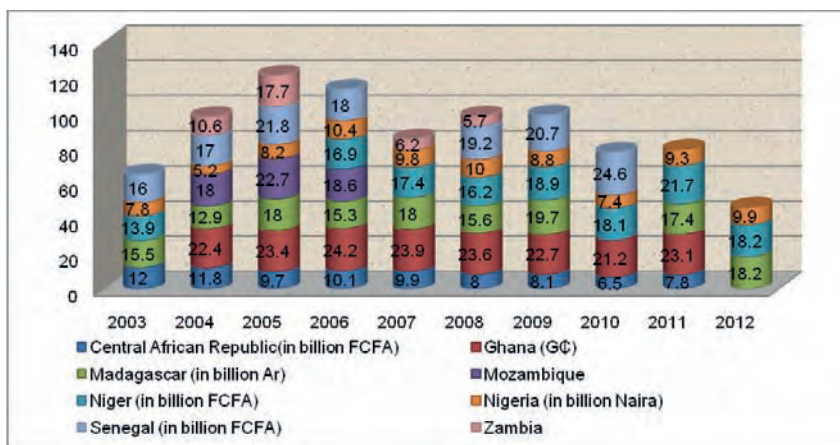
Figure 1.3: Education expenditure as % of GDP



Sources: UNESCO Institute for Statistics; World Bank 2014, available at: www.indexmundi.com/facts/indicators; visited on 15th July, 2014. INSET country reports

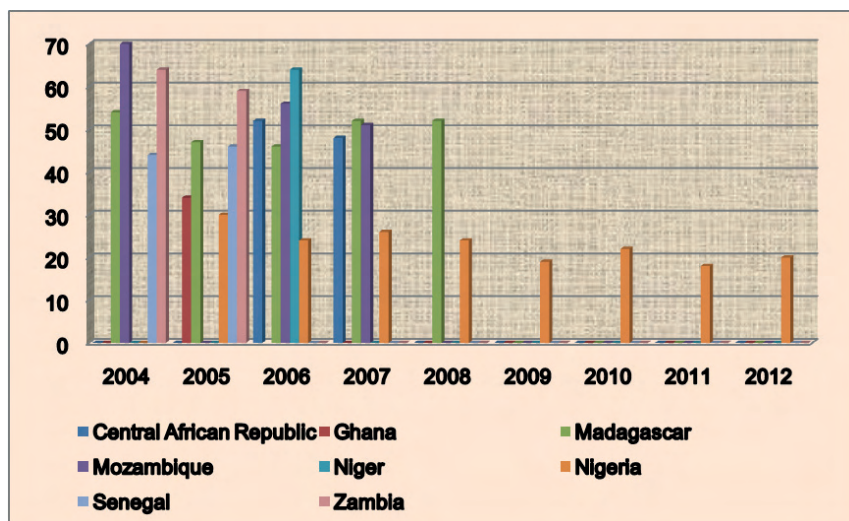
Similarly, expenditure on education as a percentage of total government spending had been on the increase in all the selected countries, with basic education continuing to attract greater attention in all the countries as a result of the commitment to provide basic education for all and the Millennium Development Goals. As Figure 1.4 shows, Ghana and Senegal exceeded the UNESCO suggested benchmark of spending 20 per cent of their national budgets on education, while Madagascar Mozambique and Niger were well on track to achieve that figure. By contrast, Nigeria and Zambia were hovering around spending of less than 10 per cent of their national budgets, despite significant improvement in the funding of basic education in recent years (Figure 1.5).

Figure 1.4: Education expenditure as % of government budget, by country and year



Sources: UNESCO Institute for Statistics; World Bank 2014, available at: www.indexmundi.com/facts/indicators; visited on 15th July, 2014. INSET country reports

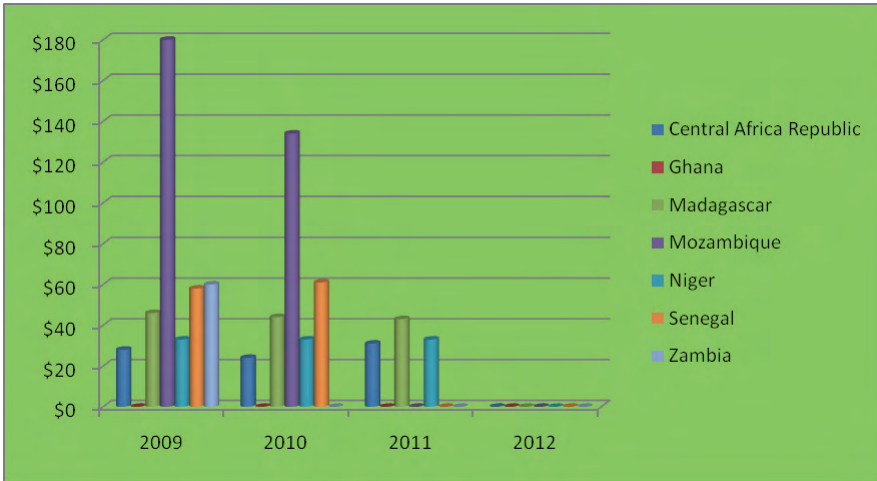
Figure 1.5: Share of primary education in recurrent education budget (%)



Sources: UNESCO Institute for Statistics; World Bank 2014, available at: www.indexmundi.com/facts/indicators; visited on 15th July, 2014. INSET country reports

Despite the increases in the expenditure profiles of these countries, gross underfunding of education was observed, resulting in a heavy reliance on external sources for financing government development expenditure. Ghana, for example, was one of the top ten countries in Africa receiving official development assistance (ODA) of US\$1.2m in 2008. In Mozambique, external sources of funding contributed about 30 per cent of the country's budget for education in 2010 alone. Figure 1.6 shows a projection of donor funding required to fill the financing gap existing in some of the sampled countries over a period of three years (2009–2011). Data on external funding for education for Ghana and Nigeria for the three years were not available in the country profiles.

Figure 1.6: Projected donor funding required for primary/basic education (US\$ million), by country and year



Source: Education for All Fast Track Initiative 2009; INSET country reports 2012

In addition, the escalating salary bills that accompany the expanded state provision of Education for All have increasingly precluded significant support for the provision of quality education in the sampled countries. In Zambia, Niger and Senegal, for example, about 90 per cent, 86.6 per cent and 85 per cent (respectively) of government expenditures on primary education were devoted to personnel emoluments, leaving little for educational development.

Another indicator that is relevant for this report is the proportion of the countries' populations that live in rural areas. The country reports reveal that a large share of the population in most of the countries lives in rural areas (for example, 70

per cent in Mozambique, 60 per cent in Nigeria and 50 per cent in Senegal). Evidence from reports (National Population Commission 2010) shows that rural dwellers are about twice as likely to have no schooling as urban dwellers (in Nigeria, for example, the figures are 46 per cent versus 20 per cent). The country reports also all reported glaring disparities between rural and urban areas in terms of provision of educational resources, both material and human, with urban areas being the most favoured.

Literacy rate

Adult literacy rates varied across the eight countries, ranging from 28.7 per cent in Niger to 67 per cent in Ghana. Although not all countries disaggregated their literacy rates according to gender and the urban–rural divide, from the few that did (Nigeria, Senegal, Niger and Ghana) it was clear that there were more literate adult males than females: 73.8 per cent versus 64.8 per cent in Nigeria; 73 per cent versus 60 per cent in Ghana; 67.1 per cent versus 47.5 per cent in Senegal and 27.8 per cent versus 11.6 per cent in Niger. Furthermore, the literacy rates for urban areas were much higher than those for the rural areas (for example, 93 per cent versus 81 per cent in Nigeria, while there were also significant variations between zones and states in this country). Apart from UNESCO and UNICEF, which have continued to give technical support in the areas of policy and strategies, development partners and non-governmental organisations (NGOs) have not provided any significant financial support for adult literacy in the study countries. Much

of the external funding in these countries goes to formal basic education. This means a number of these countries, if not all, may not achieve EFA Goal 4 of increasing the adult literacy rate by 50 per cent by 2015.

Chapter 2

Context of Teacher Education

Quality teachers are at the heart of the Education for All goals. All children need teachers that are well trained and motivated, who are all-inclusive in their teaching and can ensure that all children are learning. Yet, as this chapter shows, the sampled countries were far from ensuring that their schools, particularly at the basic education level, were staffed by qualified teachers, let alone providing them with incentives structures that would both motivate and retain them in their jobs. Given the prevalence of uncertified and poorly equipped teachers in the education systems of these countries, it is not surprising that improvements in quality have not always kept pace with the impressive gains made in access to education over the past decade. This chapter looks at the policies, structures and management of teacher education in the eight countries, focussing on general trends in its provision, the determining factors of successes and failures, as well as the challenges involved.

General education policy

The general education policies of the eight countries stressed the importance of education in national development. The educational goals of these countries were all hinged on the broader goals of the United Nations Millennium Declaration

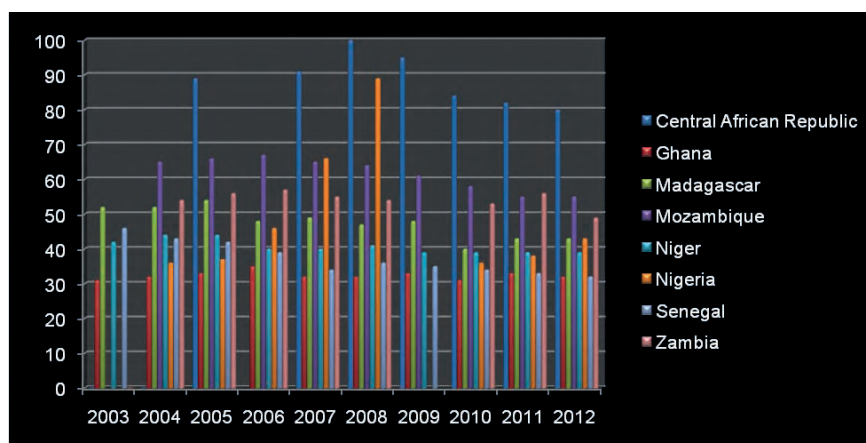
of 2000 and the 1990 Jomtein Declaration on Education for All (EFA), which aim to eliminate poverty and promote sustainable human development through education. Critical to the attainment of these goals are universalising access to primary education and reducing gender and other disparities existing in the society. Consequently, governments in these countries have increased their commitment to the expansion of education at all levels, particularly at the basic education level.

The concomitant results of this expansion include, among other things, soaring enrolment figures, particularly at the basic education level of all the eight countries, increased numbers of basic education schools and classrooms, as well as a pressing need for more qualified teachers in schools. In Nigeria, for example, according to a Federal Republic of Nigeria Millennium Development Goals 2010 Report, 'nearly 9 out of every 10 children (representing 88.8 per cent) were enrolled in basic education schools by 2010' (Isyaku, 2012). In Ghana, in the period 2002–2012, basic education enrolment increased by 75 per cent. In Niger, between 2000 and 2011, the number of Primary 1 pupils increased from 657,000 to 1,900,000, representing an increase rate of 2.9 per cent in just a year. The enrolled pupils had practically trebled over that period. Over the same period, the estimated rate of access to schooling increased from 34.1 per cent to 76.1 per cent, representing a gain of 42 per cent. The gross rate of schooling in CAR rose from 74 per cent in 2007 to 84 per cent in 2009.

Unfortunately, the supply of teachers has not kept pace with increases in enrolments in these countries, forcing many to resort to employing untrained teachers to teach at their basic education schools. The manifestation of this mismatch between rising enrolment figures and supply of teachers is seen in the

high pupil–teacher ratios at the primary school level across the countries. In Ghana, class sizes in more than half of the schools are above the national norm of 35:1 in terms of pupil–teacher ratio, while about a fifth of classes have 41 to 50 pupils and a little less than a third have more than 50 pupils per class (Asare et al. 2012). In Nigeria, the ratio can be as high as 100:1 in some parts of the country. In Senegal, despite an acceptable national pupil–teacher ratio of 35:1, there are disparities and ratios as high as 100:1 – particularly in the suburbs of Dakar, where some teachers have double stream classes (Ndiaye, 2012). In CAR, the ratio is as high as 90:1. Indeed, as Figure 2.1 shows, Madagascar, Mozambique, Niger and Zambia have also all exceeded the recommended standard pupil–teacher ratio of 35:1. In addition, these ratios include teachers that are untrained, and so are not reflective of the actual pupil-to-qualified teacher ratios in these countries. Nevertheless, they do give useful indications about existing teacher gaps in the selected countries.

Figure 2.1: Primary pupil–teacher ratio, by country and year



Sources: UNESCO Institute for Statistics; World Bank 2014, available at: www.indexmundi.com/facts/indicators; visited on 15th July, 2014. INSET country reports 2012

Specific teacher education policies

The way teachers are trained, the efficacy of teacher education programmes, the opportunities teachers have for continuing professional development and the extent to which their well-being and motivation are addressed, are key to improving the quality of teaching and retaining good teachers in schools. These factors also provide a good measure to ensure that children and young people are given access to a good-quality education. This means that the policy frameworks and governance structures that are put in place may either enhance or hinder teachers and their work in reaching the main objectives of a country's educational system. This section examines how teacher preparation was conceived in the countries' teacher or sector-wide policies and plans, types of existing teacher training programmes, governance structures and teacher profiles in the sampled countries.

All the countries recognise the important role teachers play in the attainment of Education for All and the Millennium Development Goals. It is widely believed that the quality of training teachers receive and the systematic support they get for their professional growth will guarantee their contribution to quality education. For this reason, over the years all the studied countries have attempted to reform and restructure their teacher education systems in response to the demands of new visions and agendas for education.

For example, in **Nigeria**, concern about the growing public disquiet over teacher quality led to the development and introduction of an evidence-based comprehensive National Teacher Education Policy (NTEP) by the Federal Ministry

of Education (FME) in 2010. The new policy aims to supply highly knowledgeable, skilled and creative teachers capable of producing students who can compete globally. It incorporates the components of both pre-service teacher education (PSTE) and in-service teacher education (ISTE), aimed at ensuring coherence and continuity of training opportunities throughout teachers' careers. It also focuses on standards to be implemented in both programmes, with emphasis on the evaluation of teacher performance.

A further dimension of the policy is its focus on lifelong learning through continuing professional development of teachers throughout their careers, and recognition of their achievements via a well-defined career path and reward system. It also aims to create adequate incentives to attract competent people into the teaching profession.

As a response to the need for a new kind of teacher for the country's recently introduced elongated basic education programme, the policy aims to produce level-specific trained teachers that will be able to teach at the four distinct levels of basic education, namely: early childhood care and education (ECCE), primary education, junior secondary education and adult and non-formal education (ANE). It is hoped this new focus on level-specific training of teachers will, once fully institutionalised, replace the prevailing subject-specific training of teachers, which has been found to be inadequate in the preparation of teachers for effective teaching at the basic education level which, with the promulgation of the Universal Basic Education Law in 2004, now incorporates both pre-primary and primary education levels in addition to the junior secondary education level.

Similarly, both **Ghana's** new education act (Act 778) of 2008 and its Education Sector Plan (ESP 2010–2020) emphasise the need for INSET. The act established the National Teaching Council (NTC) with responsibility for setting and ensuring professional standards and a code of practice for professional development, registration and licensing of teachers. In addition, the ESP (2010–2020) captures the importance of continuous professional development for teachers and makes management of INSET obligatory for stakeholders at the community, school, district and national levels (Asare et al. 2012).

In response to the challenges of the externally driven INSET and the low impact of INSET on students' numeracy and literacy in Ghana, the Ministry of Education/ Ghana Education Service (MOE/GES) developed a comprehensive INSET policy framework to guide the National Teaching Council (NTC) in carrying out its roles. Like the NTEP, Ghana's Pre-tertiary Teacher Professional Development and Management (PTPDM), introduced in 2011, aims at fostering the development of a world-class teacher, capable of contributing significantly to students' learning and achievement. It stipulates the principles for effective teacher management in order to motivate excellence in teacher performance and a commitment to lifelong learning, and also identifies areas for setting regulatory standards to govern teachers' work and living conditions in order to make teaching an attractive and rewarding career.

As part of its education sector reforms following successive crises of a political and military nature between 1960 and 2003, the **Central African Republic** introduced a National Strategy for the Sector of Education (SNSE) to cover the period 2008–2020. The aims of this national strategy include, among other things,

improvement of the methods and contents of teacher training through the review and development of teacher training curricula, with emphasis on competency-based instruction, the introduction of 'Bachelor–Master–Doctorate' (BMD) programmes within the higher education system and the institutionalisation of online teacher training.

Niger's Decennial Program for the Development of Education (PDDE) emphasises the use of a mechanism of self-directed training for teachers called '**la CAPED**' (*la Cellule d'Animation Pédagogique*), to address the perennial problem of a shortage of training tutors in the country. **CAPED** promotes the integration of pre-service teacher education (**PRESET**) and **INSET** in the initial preparation of teachers. The implementation of this integrative approach organises the initial training of teachers around two main blocs:

- i. units of formation (UF), which comprise the central pillar or the core contents of the formation around which revolve the fields of training and the teaching practice courses for each major field of study; and
- ii. practical training courses, articulated around the UF for each section.

Initial training integrates continuing education, and is jointly ensured by the tutors of the teacher training institutions and the field tutors (inspectors of basic education, education advisers, sector chiefs, principals and host-school masters).

Some of the countries' education plans aim to improve teaching quality by setting higher qualification standards for teachers. In **Nigeria**, for example, the minimum teaching qualification in the country was raised in 2003 from the Grade II Teachers

Certificate (TCII) to the Nigeria Certificate in Education (NCE). The TCII was a five-year post-primary school qualification while the NCE is a three-year post-secondary qualification. Similarly, in **Ghana** a Diploma in Education replaced a three-year Certificate in Education with a new structure that requires pre-service students to spend their last year of training on practical teaching attachment in schools; this provides trainees with hands-on experience in professional teaching.

In **Mozambique**, on the other hand, during the years of teacher training consolidation (1977–1991), the duration of training was extended from one to two years after Grade 6 for teachers who teach at the second cycle of primary education or after Grade 9 for those who teach at the intermediate level (secondary education). By 2007, the entry level for training was raised to Grade 10 + one year of training.

In **Senegal**, following the reform of its teacher education in 2010, the government extended the duration of pre-service training from six to nine months, stopped the recruitment of volunteer teachers and insisted on the baccalaureate diploma as minimum qualification for candidates.

Few of the reviewed plans include strategies to deploy and retain good teachers through incentives. In one of the few, **Zambia**, the government gives a housing allowance for teachers to rent houses, pays a rural hardship allowance to teachers in difficult and remote areas, pays a retention allowance to teachers with degree qualifications in order to motivate them in their work, and decentralises the procurement of teaching and learning materials to allow schools procure the materials that they need most.

Nigeria and **Ghana**, meanwhile, celebrate the best teacher with an annual National Best Teacher Award Scheme. In addition, both countries have introduced other monetary and non-monetary incentives. For example: there is a trade-off in the working conditions of teachers being proposed by the Federal Ministry of Education in Nigeria in the form of the 'Housing for all Teachers' (HAT) Scheme; and the provision of accommodation near school for teachers in Ghana to entice them to work, particularly in second cycle institutions and some deprived areas. The major objective of the schemes is to motivate teachers to perform better and also to restore some respect to the profession. They further aim at retaining qualified teachers and improving their work performance and overall effectiveness in the classroom.

However, strategies were not limited to the initial preparation of teachers. All the plans reviewed address in-service teacher education to some extent, although only Nigeria and Ghana have developed comprehensive national frameworks for INSET. Nevertheless, major efforts have been made by the countries to improve teacher quality and management through a number of in-service training (INSET) initiatives. These are examined in greater details in the next chapter.

Existing teacher training programmes

The two main models of teacher training (pre-service and in-service teacher education) were prevalent in all the countries studied. However, while the Anglophone countries (**Ghana, Nigeria and Zambia**) seemed to lay greater emphasis on the pre-service model, the Francophone countries (**Niger, CAR,**

Madagascar and Senegal) relied more on in-service training. This difference in emphasis can be explained by the mode of recruitment of teachers in the two blocs of countries. While the Anglophone countries require teaching certification as a yardstick for recruitment, the Francophone countries offer pedagogical training to untrained teachers while in the job through INSET. The difference in emphasis is further reflected in the way teacher education programmes are organised. In the Anglophone countries, academic courses are studied concurrently with pedagogical courses, while in Francophone countries pedagogical courses are offered to trainees who already have degrees or diplomas.

The length and institutional arrangements of the two modes of training also varied across the sampled countries, as well as within the countries – depending on both the level at which teachers would be teaching and the resources available for the training programmes. In the Anglophone countries (**Ghana, Nigeria and Zambia**), the duration of teacher training is much longer than it is in the Francophone countries (**CAR, Madagascar, Niger and Senegal**). This is because academic courses are studied concurrently with pedagogical courses in the Anglophone countries, while in the Francophone countries pedagogical courses are offered to trainees with degrees or diplomas. Nonetheless, in both cases the training programmes aim to ensure that teachers meet proficiency requirements before being certified as qualified or trained.

However, just as the programmes offered and the length and institutional arrangements differed, so did the quality of the teachers graduating from these widely varied programmes. In **Ghana**, for example, although many teachers now hold diplomas

and degrees in basic education as a result of the ‘qualification-driven’ university-based INSET upgrading programmes, little improvement is seen in the general quality of basic education in terms of the proportion of pupils reaching proficiency in literacy and numeracy. In **Zambia**, teacher training curricula do not mirror the curriculum in use at primary school, thereby rendering the graduating teachers ineffective in their teaching, as well as underscoring the need to reform the teacher training programme to improve its relevance to the sector its graduates are expected to serve.

Similarly, the results of a study carried out in **Niger** in 2000 by the Service of Studies and Program Development (SEDEP) revealed that whatever the levels and subject matter considered, the results of the primary school pupils’ performance in Niger were very low – with the average percentage in all the subjects and all the courses well below 50 per cent (Adama, 2012). This low performance was attributed to the low level of teacher capacity, whose classroom practice is largely ‘chalk-and-talk’ and heavily teacher-centred. This weakness characterises both the pre-service and in-service training of teachers. Only three of the eight countries (**Nigeria, Mozambique and Madagascar**) are experimenting with flexible distance teacher education programmes to address the problem of teacher shortage.

Institutional landscape

a. *Structures and organisation of teacher education*

The structures for teacher education across the countries studied comprise a diverse group of institutions, which include colleges of education (COEs), institutes and faculties of education in universities, national and regional training centres, and other

designated institutes for the training of teachers. The growth of these structures across the countries has been influenced by both the explosive expansion of universal education and concern for quality in its provision.

The eight countries in the study structure teacher education programmes differently, though some patterns were very clear. Almost every country in the study organised teacher education into two main categories: teacher training programmes for the supply of teachers to the basic education level; and programmes of study for the preparation of teachers for the senior secondary level. The former could last between nine months and three years, while the latter could last between one and four years. In the Francophone countries (Madagascar, Niger, CAR and Senegal) the breakdown is more variable ranging from nine months to two years, because of the preponderance of contractual and volunteer teachers in their education systems and the use of short in-service training programmes to upgrade these unqualified teachers to the status of qualified teachers. For much the same reason, in Madagascar and Mozambique, during the transitional period of teacher training (1975–1976), courses for the basic and senior secondary levels last between one and two years. Most Anglophone countries (Nigeria, Ghana and Zambia) run a three-year programme of study for basic education teachers and three to four years training for senior secondary teachers.

Generally, the colleges of education in the Anglophone countries ran a three-year post-secondary teacher training, leading to a certificate or diploma in education. In the Francophone countries, the teacher training institutions ran a two-year programme, with the exception of Mozambique where, under the transitional period, the course length was reduced to one year for those who

entered after Grade 10. The teachers supplied by these colleges taught at the basic education level. In Ghana, such colleges numbered up to 41 at the time of the study and are structured on a model described as 'In-In-Out', which requires the trainees to spend the first two years of training on academic and pedagogical aspects on campus and the last year on practical teaching attachment to schools. In Nigeria, there were 112 colleges at the time of this study, including federal, state and privately owned institutions. The trainees spend only a semester on teaching practice, but microteaching is carried out at the college level and visits to neighbouring schools for observation are mandatory throughout the three-year period of training. Mozambique had 35 colleges comprising 24 public teacher education colleges and 11 private colleges. In Senegal, primary school teachers are trained in regional training centres called *Centres Regionaux de Formation des Personnels de l'Education* (CRFPE). These centres numbered up to 12, and the training lasted for nine months and was based on a dual system approach, including theory and practical teaching attachment to schools.

Table 2.1: Number of trainee teachers, by country and gender

Country	Number of trainees	
	Male/Female	Female
Central African Republic	DNA	DNA
Ghana	26,863	11,461
Madagascar	23,070	-
Mozambique	DNA	DNA
Niger	DNA	DNA
Nigeria	318,887	157,228
Senegal	DNA	DNA
Zambia	7,298	4,253

Source: INSET study country reports 2012. DNA = data not available

Table 2.1 shows the number of students undergoing training at institutions during the period under review. Incidentally, apart from Madagascar which provided only the total number of teacher trainees, the other Francophone countries did not provide data on their trainees. It was only the Anglophone countries (Ghana, Nigeria and Zambia) that provided disaggregated data on their trainee teachers. Interestingly, Zambia had more females pursuing both pre-service and in- service training programmes than the other two Anglophone countries, with **4,253** of the **7,298** students being female. Thus, although the gender gap seems to be narrowing, as noted in the transition rates from primary to secondary (Figure 1.2), wide variations still exist at the tertiary level, as reflected by the available data from the three countries (Ghana, Nigeria and Zambia).

The institutes and faculties of education in the Anglophone countries (Nigeria and Ghana) offer two streams of programmes: the three-year direct entry programme leading to BA Ed. or BSc. Ed. degrees for the graduates of the colleges of education; and a four-year education degree for graduates of senior secondary schools. The graduates of these two programmes teach at the senior secondary school level.

In some of the Francophone countries, for example, Senegal in particular, the Faculté des Sciences et Technologies de l'Éducation et de la Formation (FASTEF), runs a two-year training programme leading to Certificate of Aptitude for teaching at lower secondary for baccalaureate holders; a one-year training programme for university BA /BSc. holders leading to Certificate of Aptitude for teaching at lower secondary; and a one-year training programme for university MA/MSc. holders, leading to Certificate of Aptitude for teaching at senior secondary. The

National School of Arts offers a four-year direct entry programme to graduates of senior secondary schools who want to become teachers of arts in lower secondary schools. Regarding physical education teachers, the Higher Institute of Sports offers a six-year training for baccalaureate holders, leading to Certificate of Aptitude for teaching in senior secondary schools, whereas the National Centre of Sports runs a two-year training programme for baccalaureate holders, leading to Certificate of Aptitude for teaching at lower secondary.

Curriculum of teacher education

a) *Expected competencies*

The teacher training institutions prevalent in the eight countries (see Table 3.1 in Chapter 3) offer a wide range of courses to cater for students with diverse academic backgrounds, but all courses are linked to teaching certification. The teachers' profiles/ characteristics, and the training programmes that lead to them, are defined according to the skills desired for trainees in terms of content knowledge, skills and pedagogy. The common elements in the programmes offered by the teacher training institutions – be it at a university faculty, institute, college of education or a national or regional training centre – fall under three categories: content knowledge, pedagogy and professional ethics.

Content-related skills

These skills relate to knowledge of the trainee's subject(s) of specialisation. While it is acknowledged that a teacher cannot, at the end of his or her initial training, master everything

specific to his or her discipline, he or she must attain a certain minimum level of proficiency with the basics of the discipline and should be able to implement them satisfactorily. Emphasis on this set of skills is more prominent in the Anglophone countries, where academic courses are studied concurrently with pedagogical courses during the period of training. In the Francophone countries, pedagogical courses are offered to would-be teachers who have already attained some reasonable proficiency with the basics of their discipline(s) during their previous degree or diploma programmes.

Pedagogical skills

The trainee teacher must have the instructional and didactic skills needed to deliver his or her teaching effectively. These include, among other things, excellent communication skills; group and conflict management skills to enable him or her to create an all-inclusive classroom that will foster every child's success; and, more recently, information, communication and technology (ICT) skills. These latter skills take on even greater importance where there is significant use of distance learning programmes, as in Nigeria, Senegal, Madagascar and Zambia.

Professional ethics

These pertain to the code of conduct governing teachers' behaviours shared by all teachers in a given country. They include the standard rules and regulations and professional standards defined by the teaching regulatory council relating to registration, licensing and general professional practice. The trainee teacher must be made familiar with these professional

standards and ethics during his or her training. This was emphasised more by Ghana and Nigeria, where there exist statutory agencies regulating teaching.

b) *Curriculum content*

Content wise, the organisation of the curriculum of the training institutions also varied across the countries studied. In the Anglophone countries (**Ghana, Nigeria and Zambia**), the curriculum of a typical teacher training institution is structured along the following three things:

- **Educational foundation courses**, comprising philosophy, sociology, history of education, and educational and developmental psychology.
- **Teaching subjects**: Religious studies, history, music, economics, geography and social studies, creative arts, language, sciences and vocational and technical subjects. Students are to specialise in one or two subjects.
- **Teaching practice**: The length of teaching practice varies from country to country, and also depends on the duration of the training programme.

In the Francophone countries (**CAR, Madagascar, Niger and Senegal**), the curriculum structure includes only the pedagogical courses and teaching practice, since trainee teachers have already undergone training in their specialised areas.

c) *Mode of delivery*

The teacher training programmes across the eight countries are delivered in two main ways:

- i. **Face-to-face training:** A majority of the training programmes were delivered through full-time face-to-face training on college and university campuses, or at other designated national institutes and national, as well as, regional centres. The duration of such training varied from nine months (Senegal) to one or two years (CAR, Madagascar, Mozambique, Niger, Senegal and Zambia) or to three years (Ghana and Nigeria).
- ii. **Distance learning mode:** A few countries (Nigeria, Madagascar, Zambia and Senegal) had experimented with distance learning to train teachers dispersed in remote areas.

b. *Factors affecting the structures and functions of teacher education*

Apart from the unattractiveness of teacher education, resulting in low enrolments in institutions, there were other challenges faced by all the countries in the study in their efforts to determine appropriate structures and functions for their teacher training institutions. The first was that both the academic and pedagogical skills required to prepare teachers for effective teaching are rarely consolidated by the end of training. At both colleges and universities, content and pedagogical knowledge are dealt with inadequately (Adeyanju 2005; Ottevanger 2007). With the exception of Ghana, which attempts to bridge the theory–practice gap by devoting a whole year to teaching practice, the practice period in all the other countries is short and poorly supervised. These problems were even more pronounced in countries that used upgrading routes as a means of tackling the shortage of qualified teachers – such as Senegal, Niger, CAR, Madagascar and Mozambique.

Secondly, effective teacher training requires well-equipped facilities, including ICTs with adequate carrying capacity to offer low student–teacher ratios. Providing such facilities involves huge sums of money, which may not be readily available to the countries given the funding gaps for education in these countries, noted earlier. It is not surprising, therefore, that the systematic use of ICT for teaching and learning still took place on a small scale across the countries. Only Senegal and Madagascar mentioned the use of e-learning to train teachers, though not much detail was provided in the country reports about how this was being used.

Thirdly, there is scant evidence on which to determine the appropriate mix of regular long-term training in colleges and universities and short-term upgrading routes at designated centres and institutes. The common practice of upgrading routes for teacher qualifications needs to be closely examined in terms of its actual impact and cost-effectiveness. Similarly, an appropriate mix of diploma and degree programmes in teacher education needs to be determined in view of the fact that all graduates of the diploma and certificate courses in education use the qualifications for university admission. The questions to ask in this regard are: At what level should teacher education begin? Will a special strategy aimed at increasing the number of teacher education students at the degree level be more cost effective? As a governance issue, determining the appropriate functions and structures of teacher education is among the most important decisions that the SSA countries will have to make as they approach 2015. A close examination of these structures and functions vis-à-vis the national goals of education may well have implications for the duration and organisation of teacher training, as well as the appropriate pathways to teaching certification.

C. Accreditation and award-granting bodies

The ability to guarantee quality is the most relevant success factor for any programme or system and also the surest way of sustaining the programme. The country profiles provide some information about the regulatory agencies for teacher education, but little or nothing is said about the nature and quality of quality assurance systems. In Ghana, the Institute of Education of the University of the Cape Coast (UCC) serves as the main examination body for the 41 colleges of education in Ghana, and conducts accreditation for all programmes offered by the Teacher Education Division. In addition, the UCC, jointly with the University of Education, Winneba (UEW), develops and periodically reviews the curricula of all colleges of education in Ghana.

In Nigeria, the National Commission for Colleges of Education (NCCE), in collaboration with the Teachers Registration Council of Nigeria (TRCN) and other professional bodies, conducts accreditation for all programmes in the colleges of education, while the National Universities Commission (NUC) does the same for universities.

Accreditation of the colleges of education is carried out once in every five years and, until recently, usually by the external accreditors/ regulators only. However, since 2012 the NCCE has embarked on the process of institutionalising internal self-assessment by all the colleges of education in the country, using its newly developed quality assurance tool kit. This reform of the quality assurance system of teacher education requires colleges of education to embark on accreditation of their academic programmes as often as they desire before the external accreditors arrive in their colleges.

In the other countries (Madagascar, Niger and Senegal), responsibility for the quality of the teacher education programmes is entrusted to a university board or a ministerial central department known as the Inspectorate Department, which is vested with the power to devise curricula and allocate financial resources, as well as hire and discipline of teachers.

Institutional management

The division of roles and responsibilities for teacher education varied among the countries in the study, though some characteristics appeared to be constant: (i) all the teacher education institutions were operated under either federal/national or state/provincial legislation; (ii) the institutions enjoyed some degree of autonomy, but were regulated through accreditation and other quality assurance measures by designated authorities; and (iii) responsibility for managing and regulating teachers was often assigned to organisations that enjoy semi-autonomy from the central ministry. Thus, the governance of the teacher training institutions involved a balance of autonomy and responsibility between institutions and the national or provincial governments, as the case may be.

In Ghana, for example, the Teacher Education Division (TED) of the Ghana Education Service (GES) shares the responsibilities of management and training of teachers with two of the nation's nine public universities and 41 colleges of education, three of which are private. In addition to the provision of comprehensive pre-service and in-service teacher education, the TED is also responsible for registration of newly qualified teachers in the

GES, management and implementation of distance education, and sandwich programmes for basic school teachers, as well as management and implementation of donor-funded projects on teacher education and training.

The governance structure is more complicated in Senegal, where education is run by four different ministries, with each ministry taking charge of one sub-sector of education. The Ministry of Education (MOE), which is in charge of basic education (pre-primary, lower secondary and senior secondary education, as well as adult and non-formal education), is divided into 26 central ministerial directorates and services, 14 regional education inspectorates (called *Inspections d'Académies*) and 54 sub-regional education inspectorates (called *Inspections de l'Education et de la Formation*).

The teachers' pre-service training is well structured and efficiently managed. The pre-service training for primary school teachers is solely the responsibility of the MOE, and is managed by its directorates of training, human resources, teachers' examinations, educational planning and reforms, administration and finance, the regional inspectorate and the regional training centres. As for lower secondary and senior secondary teachers, pre-service training is managed by the university faculties, which are autonomous entities. However, since all the trainees (including the lower and senior secondary level teachers) are generally recruited by the MOE, the directorates of human resources, administration and finance, and that of the lower and senior secondary level, are involved in the planning and financing of this level of training.

On the contrary, the in-service training scheme is rather confusing in Senegal in the sense that almost all the central directorates, regional inspectorates and sub-regional inspectorates sometimes develop separate training activities based on their action plans or based on NGOs' and international development partners' (IDPs') funding at the national or local levels. In this context, lack of clearly defined roles and responsibilities makes the management of such a system ineffective and difficult.

In Zambia, the governance of teacher education is highly centralised, with most decision-making starting from the headquarters in Lusaka and then cascading down to the ten provincial education offices, 103 district education boards, 837 zonal offices and then down to schools spread across the country. The main Ministry of Education, Science, Vocational Training and Early Education (MOESVTEE) has a highly centralised structure, though attempts were made with the introduction of the country's national education policy in 1996 – titled *Educating the Future: National Policy on Education* – to devolve some of its decision-making responsibilities to the lower provincial and district levels, in recognition of the need to involve people in the decision-making process.

In Nigeria, education is a statutory responsibility of federal, state and local governments. This means that the setting up of teacher training institutions can be done by anybody, provided the norms and standards established by the teaching regulatory agencies are strictly adhered to. At the non-degree level, the Minimum Standards for the Nigeria Certificate in Education (NCE) are set by the NCCE, which is an agency of the FME charged with responsibility for regulating all non-

degree teacher education in the country. The education degree programmes run by universities and some colleges of education are regulated by the NUC.

All teacher training institutions have governing boards, with members appointed by either the federal government (for federal institutions) or state governments (for state institutions) and others elected by college academic boards and those representing relevant education stakeholder groups. These governing boards are charged with the responsibility of managing the affairs of the institutions. The chairs of the governing boards of the federal institutions report to the Federal Minister of Education through the NCCE, while those of the state institutions report to the state governors through their respective commissioners of education.

The Teachers' Registration Council of Nigeria (TRCN) sets professional standards for teaching in Nigeria, as well as the code of conduct and ethics for teachers. It is responsible for registration, licensing and continuing professional development of all teachers in the country. Together with the NCCE, the TRCN monitors the implementation of the NCE Minimum Standards and other teacher policies in the training institutions.

Mozambique has a fairly decentralised system of governance for education, including its teacher education programmes. Responsibility for the administration of education services (general education) and the management of human, material and financial resources is increasingly devolved to schools and financial institutions. This process of devolution gives the institutions more authority for decision-making. While the

Ministry of Education is responsible for developing national policies and ensuring their effective implementation, at the level of provinces and districts, the provincial Departments of Education and Culture (DPECs) and district Services of Education, Youth and Technology (SDEJTs) are responsible for local management of the education system, from the construction of elementary schools up to the placement and movement of teachers. There is an ongoing process of decentralisation of management of primary schools to municipalities. Higher education institutions are autonomous in terms of their administrative and financial governance.

In terms of decentralisation of the management of teacher education, the governance structure of Madagascar is similar to that of Mozambique. The country's central, regional and district directorates take charge of the administration and management of education, including teacher education, at their respective levels.

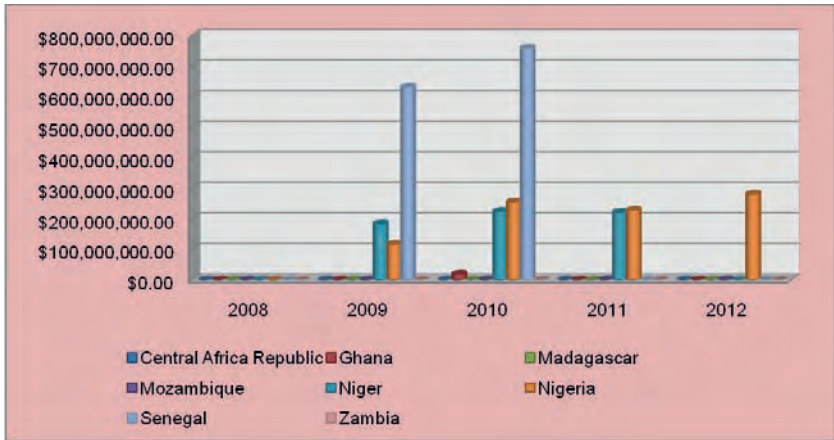
It is noteworthy that all the countries in the study have, to a greater or lesser extent, decentralised responsibilities for teacher education. In the majority of cases, however, decision-making responsibilities remain highly centralised in national governments, which are the main funders of education in these countries. As has been pointed out elsewhere by Bregman (2008), a governance structure with such complex lines of authority can obscure responsibility and create managerial and accountability obstacles for schools. As exemplified by the experience of Senegal in the management of the complex governance structure of its INSET, without well-defined and clear lines of authority and communication between the

numerous divisions responsible for teacher education, the structures put in place may hinder rather than facilitate the effective delivery of teacher education in these countries.

Funding of teacher education

Governments are the main funders of teacher education in all the countries in the study, but there are examples of support from a number of international development partners (for example, the World Bank, UNESCO, UNICEF, DFID, JICA, the Canadian International Development Agency [CIDA], the US Agency for International Development [USAID] and the Commonwealth of Learning) in all the countries. However, all countries reported gross underfunding of teacher education, though only a few gave any indication of government expenditure on teacher education. Figure 2.2 provides a graphic representation of the funding trend for teacher education in the eight countries. Madagascar, Mozambique and Senegal did not separate funds for teacher education from the entire funds available for education. Even then, as the graph shows, funding for education generally was low across the countries. Furthermore, the figures from Nigeria include federal funding for teacher education at federal colleges of education only; funding for teacher education at the university level is not included.

Figure 2.2: Teacher education budget, by country and year



Source: INSET country reports 2012

Statistics of teacher profiles

From the data in the country profiles, an impression might emerge that most teachers are qualified. Even countries that admitted to employing huge numbers of unqualified contractual and volunteer teachers – such as CAR, Niger, Madagascar and Senegal – still claimed that efforts made through ‘crash programme teacher upgrading routes’ had raised these teachers to qualified status. While this may be true in the formal sense, it does not guarantee that the so-called qualified teachers have adequate mastery of the subjects they are teaching. There is also the issue of the difference between being qualified as a teacher and being qualified in the subject that is being taught. In Nigeria, for example, due to shortages of teachers in science, mathematics and English language, there is significant ‘out-of-subject’ teaching by qualified teachers. The figures in Table 2.2 below, which show the number of teachers available and the number required across the eight countries should be seen in light of the issues raised above.

Table 2.2: Actual number of teachers and teachers still needed, by country as at 2012

<i>Country</i>	<i>Total number of teachers</i>	<i>Number of teachers required</i>
Central Africa Republic	8,000	10,560
Ghana	190,198	36,519
Madagascar	84,895	–
Mozambique	93,597	92,762
Niger	42,619	36,000
Senegal	48,771	1,143
Zambia	16,497	32,592
Nigeria	2,892,692	500,000

Source: UNESCO Institute for Statistics; EFA Review Report. DNA = data not available

Teacher demand, supply and retention

None of the eight countries studied reported any formal attempt to match demand and supply in teacher education. The figures in Table 2.2 give some indication of the numbers of teachers that might be needed at the basic education level in each of the eight countries. When compared with the numbers of trainees in Table 2.1, it is clear that the rate of supply of teachers in these countries falls far short of the demand for qualified teachers. The 2009 EFA Global Monitoring Report indicates that Nigeria, for example, would need 500,000 additional qualified teachers to achieve EFA by 2015. In Ghana, only 44.8 per cent of the

required target of qualified teachers for kindergarten, 66.3 per cent of primary school target and 82.9 per cent of the target for junior high school had been met as at 2011/12. In Senegal, less than half of its primary school teachers (33.4 per cent) are qualified, even though there has been a deliberate attempt to upgrade all the unqualified teachers to qualified teacher status through selection criteria for new teachers and a short in-service training programme.

Another point to bear in mind is that the figures above are general and not indicative of the actual numbers of teachers that might be needed across subjects in these countries. On the supply side, the annual graduate outputs of the teacher training institutions across the countries in the study were low compared to the demand for qualified teachers in these countries: about 64,000 teachers per annum in Nigeria, 6,800 teachers in Ghana and 4,500 in Zambia, reflecting a mismatch between demand and supply of teachers in these countries.

This problem of low output is a reflection of the unattractiveness of the teaching profession generally across the SSA countries. Even at the most prestigious level (the university), teacher education is the least popular programme, attracting the weakest and the least number of students who cannot be admitted to medicine, engineering, law and other more prestigious courses (Ottevanger et al. 2007). Colleges of education suffer an even greater dearth of students, because of the preferential option for university education among young people who make teaching a last resort following university and polytechnic education. Enrolment in teacher education is higher in the Francophone countries, because training comes after employment.

Furthermore, the problem of qualified teacher shortages is compounded by teacher attrition. Various countries (for example, Nigeria, Senegal, Ghana and Zambia) reported that most trained teachers leave teaching as soon as they have an opportunity, in spite of improved teachers' salaries and other non-monetary incentives accorded to teachers across the countries. In Senegal, for example, the attrition rate is estimated at 3 per cent per year. This is mostly due to deployment of teachers to non-teaching positions (headmasters, principals, prefects, study leaves etc.) or to other departments within the administration and/or transfers sought after by teachers themselves to other parts of the public sector, which they see to be more lucrative. In Ghana, it is estimated that more than 10,000 teachers leave the classroom yearly for different reasons, including moves by basic and secondary teachers to tertiary institutions to acquire higher qualifications to obtain better salaries and conditions of service. In other conflict-stricken countries such as CAR, Madagascar and more recently some parts of Northern Nigeria, teacher attrition is high due to insecurity. This results in wide teacher gaps in the affected areas.

Apart from a single case in Nigeria of a tracer study of NCE graduates, which led to the establishment of a federal teachers scheme that deployed qualified teachers to areas of need, the country reports do not give much information regarding efforts to match supply and demand in teacher education. This seems to lend credence to Lewin and Stuart's (2002) assertion that, for primary teachers, planning supply and demand is largely absent or policies are deficient.

Chapter 3

In-Service Teacher Education in the Sampled Countries

One of the key elements of teacher quality is the provision of adequate opportunities for personal growth and professional development through regular training. The effectiveness of teachers depends largely on the extent to which their knowledge and skills are upgraded regularly. Many countries have recognised this simple truth and invest a lot of resources in diverse teacher improvement programmes that are intended to enrich the knowledge and skills of teachers, disseminate new teaching skills and adequately prepare teachers for the challenges of the changing realities of the classroom and the current knowledge explosion. In Singapore, for example, every teacher is expected to submit him/herself to 100 hours of training every year.

The vast majority of developing countries are also engaged in the provision of in-service education to their teachers. All the sampled countries have, as part of their main teacher educational programmes, provided opportunities for in-service training for teachers irrespective of their certification, both to complement pre-service teacher education provision and to improve on the quality of teachers and teaching. However, the nature, scope and success of the provision vary as a function of

who the initiators of the programmes are and how much official support and finances are available for them. While INSET is recognised as important and integrated in the broader teacher education policy frameworks of some countries (Nigeria, Senegal and Ghana), donor assistance has been central in the support of INSET programmes in a number of these countries, pointing to the need for more comprehensive and integrated teacher education policies.

The country reports reveal a wide variation in the types of in-service approaches established to address teachers' needs in relation to the teaching of curricular subjects generally, or to particular needs such as the teaching of science, mathematics or English language. These approaches range from the more popular 'one-shot' training of a short duration, usually a week, at designated centres using the cascade model to the more extensive school-based professional development involving educator mentors visiting classrooms to observe and mentor teachers over a long period of time.

Alternatively, INSET may take the form of full- or part-time study at a college or university for upgrading teachers' qualifications – such as from a diploma to a bachelor's degree or from a master's to a doctorate degree. This type of in-service programme is common to all the sampled countries, and is by far the most prevalent approach to in-service education available to teachers in these countries.

This chapter examines prevailing in-service approaches in the sampled countries, with a particular look at how they are structured, funded and managed. The chapter first discusses the policies, structures and functions of in-service education

systems in the sampled countries. It then addresses the main challenges the countries face in implementing INSET strategies. A great part of the challenge is that of establishing policy frameworks that guarantee the institutionalisation of INSET, so that all teachers have equitable opportunities for continuous professional development, and its alignment with established career paths with elaborate teaching-related responsibilities that teachers can take on as they progress in their professional career. Some developing countries are already moving in this direction. Egypt, for example, has a well-defined career path for teachers to which its in-service programmes are aligned. Similarly, in Latin America, Mexico, Columbia and Peru have established career paths for their teachers.

An overview of the INSET policies

INSET policies are a subset of teacher policies, which themselves are a further subset of general education policies. This third place position of INSET makes it less visible on the policy agenda of many developing countries. Governments often act as though the continuing professional development of teachers is less important. A lot more emphasis is given to how teachers are initially prepared for their work. This is not surprising, since many of these countries are still grappling with the problem of acute shortages of qualified teachers for their rapidly expanding basic education sectors, following their endorsement of the Education for All agenda and the Millennium Development Goals.

Nonetheless, evidence from the country reports reveals that there is a growing recognition of the value of continuing professional development for teachers in all the countries

studied. All the sampled countries included policies that address continuing professional development of teachers as part of their broader education policies. However, most policy statements on INSET in the Anglophone countries (Ghana, Nigeria and Zambia) are hinged on the need to improve the quality of education, as measured by students' performances in both national and international public examinations. For example, the policy documents in Ghana, the *Preliminary Education Sector Performance Report 2008* and the *Education Strategic Plan (2010–2020)*, both emphasise the role of INSET in finding a solution to the low proficiency levels of primary school pupils in basic education. The 2008 report states that 'less than 25 per cent of Ghana's youth reach proficiency level for P6 English and 10 per cent attain proficiency in Primary 6 Mathematics'. INSET is perceived as a panacea for low academic performance of pupils in basic schools. Managing INSET for teacher professional development thus becomes an obligation for all the stakeholders at the community, school, district and national levels.

In the same vein, Nigeria's *Education Sector Road Map, 2009*, and the *Four Year Strategy Plan (2011–2015)* of the Federal Ministry of Education both emphasise the need for quality teachers as the bedrock for quality education for all, culminating in the development and adoption of a National Teacher Education Policy (NTEP) in 2010. The new policy offers an interesting example of what might be considered a comprehensive teacher education policy, with specific focus on teachers' professional development and lifelong learning. It incorporates the components of both pre-service teacher education (PSTE) and in-service teacher education (INSET)

and aims at ensuring coherence and continuity of training opportunities throughout the teachers' careers. It also focuses on standards to be implemented in both programmes, with emphasis on the evaluation of teacher performance. A further dimension of the policy is its focus on lifelong learning through continuing professional development of teachers throughout their career, and recognition of their achievements in a well-defined career path and reward system. It also aims to create adequate incentives to attract competent people into the teaching profession, such as bursaries and scholarships for teacher trainees.

In addition, the establishment of a National Teachers' Institute at the federal level to co-ordinate teacher in-service education across the country has assisted greatly in the design, quality control and implementation of INSET programmes. The institute has a network of zonal and state offices, as well as study centres to assist in the discharge of its mandate of in-service training of teachers.

Zambia's policy documents, *Educating our Future, 1996* and the *Education Sector Investment Plan, 1997* recognise the growing demand for in-service capacity building for the country's serving teachers in order to improve the quality of education. The policy seeks to increase the number of teachers, especially female teachers in rural areas, by increasing incentives in terms of promotion, upgrading opportunities and hardship allowances. INSET in Zambia is thus linked to a broader education policy that seeks to support teachers' work and effectiveness. The Zambian Ministry of Education insists that INSET training should be demand driven, and should be well organised rather

than haphazard. Therefore, in-service training undertaken by any teacher must be relevant to his or her present career and in line with the Ministry of Education's needs and priorities.

In the Francophone countries (CAR, Niger, Madagascar and Senegal), on the other hand, the aim of INSET policy has been largely focussed on preparing the many unqualified teachers in basic education schools for professional examinations and certification. The prevailing practice of employing volunteer and contract teachers, many of whom are unqualified, to address the pressing need for teachers to achieve EFA has underscored the need to fill the gaps created by the deficits of initial training of successive generations of volunteer and other contract teachers in the education system.

The Francophone countries thus exemplify a policy of relaxed certification requirements, which allows the selection of teachers for tenure based on content knowledge examinations, but without assurances they have had the opportunity to learn or master what is expected of them. In Senegal, for example, every year from 1994 to 2004 uncertified teachers with minimal or no pre-service training at all were hired and placed in teaching positions. The role of INSET in this context then became that of preparing such individuals for professional examinations. This practice tended to place greater emphasis on content knowledge than on pedagogical knowledge. The high rate of teacher failure in such examinations questioned the credibility of this policy, forcing the Senegalese government to raise the entry profile of teachers and to insist on formal attestation of initial training. This followed repeated recommendations from annual reviews of the education sector, which reported

the growing disquiet of the education community (including teachers themselves) regarding the teaching force and the poor performance of students.

Lessons learnt from this long experience led the government to take three major decisions in 2010–2012: (i) to stop the recruitment of volunteer teachers and upgrade the entry profile to senior secondary graduates; (ii) to create a Ministerial Training Directorate; and (iii) turn the *Ecole de Formation des Instituteurs* into regional training centres (*centre regionaux de formation des personnels de l'education*), with the aim of enhancing both pre-service and in-service teacher training.

The Central African Republic (CAR) presents another case of relaxed certification requirements, where contract teachers and community teachers with no teaching certificates are recruited into teaching, particularly at the Fundamental I level. As in Senegal, the INSET policy of the CAR focuses on improving the quality of such teachers. Unfortunately, because of the lack of funds and commitments to the Jomtien 1990 Declaration on EFA and the Dakar Framework for Action of 2000, most of the attention and resources are directed to the initial training of teachers.

In Niger, like in CAR, INSET initiatives are concentrated on improving the quality of teaching through a vast campaign of continuing education for the contractual teachers. In particular, the training priority for principals, education advisers and inspectors has been aimed at building the capacity of these senior education officers and equipping them with the mentoring skills necessary for the successful implementation of the adopted school-based initiative embodied in CAPED.

The examples of Niger, CAR and Senegal contrast sharply from the main practice in Ghana, Nigeria and Zambia, where certification is insisted on before practice, even though a mix of both models can be found in all the countries in the study. This raises a major structural issue in the preparation of basic and secondary education teachers: should subject content studies take place before the study of education and pedagogy and before initial teacher preparation is embarked upon; or should both take place simultaneously in the training programmes?

The **Strategic Plan of Education** in Mozambique, [The Strategic Plan for Education and Culture Sector (SPECS)], places a high premium on in-service training and teacher performance evaluation in schools and classrooms. The plan focuses on improving teacher skills and forming a greater connection between the performance of teachers in the classrooms and the evolution of their career. Accordingly, the Ministry of Education has opted for school-based in-service training of teachers. Schools are expected to provide teachers with opportunities to improve on their knowledge and skills for both teaching and school management on a continuous basis.

However, mixed results have been noted. The Mozambique report indicates the difficulty involved in ensuring both the quality and sustainability of the training programmes, which were often ad hoc in nature and characterised by ‘uneven levels of merit and with a very specific and localised impact’. In general, lack of a well-defined teacher policy, appropriate strategies and an institutional framework to make teaching attractive and competitive, coupled with an absence of criteria to value INSET training seminars and workshops being run by the schools, has hampered the attainment of the Strategic

Plan's main objective of producing well-motivated, trained and supported teachers. These issues will require going beyond the mere location of INSET in schools to ensuring greater accountability for the quality and sustainability of the school-based INSET programmes.

In Madagascar, there is no official policy for INSET, although with the ongoing reform of pre-service training and the preponderance of unqualified community and contract teachers in the country's basic education sector, the government is now directing attention towards reducing the number of unqualified teachers in schools through certification. Although the endorsed EFA Action Plan aimed at ensuring that all basic education school teachers become certified by 2011, this ambitious target proved unrealistic and was reduced to 50 per cent of teachers certified by 2012. It is still doubtful if this target was achieved by the end of December 2012.

While only two out of the eight countries studied (Ghana and Nigeria) have developed separate and well-defined INSET policies, there have been several in-service training initiatives for teachers in all the countries. However, the prevailing initiatives – as the country reports indicate – are expensive both in terms of state subsidy costs borne by governments and financial accessibility to a majority of teachers, whose low earnings may not support their participation in the available INSET programmes.

Even in a small country such as Madagascar, the cost to government of INSET programmes could be very high. For example, for the period 2011–2012, the total cost of pre-service and in-service training was estimated at \$18.6m US\$,

46 per cent of which was devoted to contract teachers. Again, since half the contract teachers were to be certified by 2012, an additional \$2.5m US\$ was to be allotted to their training from the country's Fast Track Initiative (FTI). In Nigeria, on the other hand, the government has been spending \$25m US\$ annually on retraining primary school teachers at the rate of 145,000 teachers per annum since 2006.

The detailed country reports indicate that governments in all the sampled SSA countries acknowledge that teachers, whether certified or not, need opportunities for continuing professional development. They also show that while no country has ignored the training and retraining of its teachers, there do not appear to be any centrally co-ordinated policies and governance structures in which teacher career paths, teacher performance evaluation and incentives are aligned with both initial teacher education and INSET policies, apart from mere expressions of intentions by some of the countries (Ghana and Nigeria).

INSET structures

In-service teacher education programmes for basic and secondary school teachers exist in all the countries studied. These structures are diverse and include national and district/regional government agencies, teachers' institutes, universities, colleges of education and schools. From the summary of the institutions and organisations in Table 3.1, one can see that INSET programmes take place within formal institutional structures that are used for pre-service education.

Table 3.1: In-service training institutions/ organisations, by country

S/NO	Country	Institution/ organization
1	Central Africa Republic	a) Teacher training schools b) National Institute of Research in Pedagogy and Teaching Animation c) National Centre for In-service Training (CNFC) d) Regional teaching centres (CPR)
2	Ghana	a) Colleges of education b) University of Cape Coast c) University of Education, Winneba d) National INSET Unit e) Staff Development Centre for Ghana Education Services f) Development partners (UNICEF, JICA, USAID etc.) g) Ghana National Association of Teachers (GNAT)
2	Madagascar	DNA
3	Mozambique	a) Teacher training colleges b) Institute of Primary Teacher Training c) National Institute for Literacy and Adult Education Training d) Pedagogical University Education e) Faculties of education f) Institute of Open and Distance Education g) Catholic University of Mozambique
4	Niger	a) Teacher training schools b) Direction of Pre-service Training (DFIC) c) Regional Management of State Education d) Basic Teaching Inspection (IEB) e) Teaching Cell of Animation (CAPED) f) <i>Initiative Francophone pour la Formation a Distance des Maîtres (IFADEM)</i> g) <i>Agence Universitaire de la Francophonie (AUP)</i>
5	Nigeria	a) Colleges of education b) Universities' faculties of education c) National Teachers Institute d) National Open University e) Teachers Registration Council f) Universal Basic Education Commission g) Science Teachers Association of Nigeria
6	Senegal	a) Regional Training Centre for Educational Personnel b) Faculty of Science and Technology for Education and Training c) National School of Arts d) Faculty of Sports e) Faculty of Technical Education and Training f) National Centre of Sports g) National Training School for Family and Social Economic Development
7	Zambia	a) Universities b) Colleges of education c) National In-service Teachers College d) Open and Distance Learning College e) Zambia Open Community School

Source: INSET country reports 2012. DNA = data not available

INSET governance

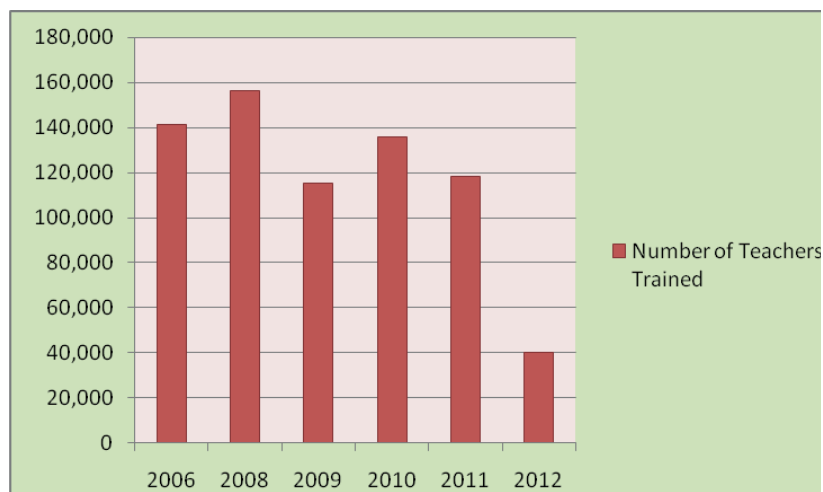
The governance structures for INSET in the study countries extended from national ministries of education, through decentralised regional and district offices to schools. Management processes include the definition and discharge of roles and responsibilities, and the transmission and channelling of information through the different parts of the governance structure and decision-making.

In Ghana, for example, INSET has both national and district jurisdiction and there are national and district INSET units for its governance and administration. National structures (the National INSET Unit and National INSET Committee) take charge of overall administrative and policy issues, while district structures (the District INSET Committee and District Teacher Support Team) ensure effective implementation of INSET at the school and cluster levels, including monitoring and evaluation of the status of school- and cluster-based INSET. School-based INSET (SBI) and cluster-based INSET (CBI) are found in all districts, and it is their responsibility to ensure the availability of in-service training opportunities to all teachers in the districts. District education officers are charged with the responsibility of preparing action plans, mobilising funds, budgeting for INSET activities and implementing training programmes.

In much the same vein, INSET in Nigeria has both federal and state jurisdiction, with clearly defined structures at the federal and state levels offering opportunities for in-service training for teachers. The National Teachers' Institute, with its network of zonal and state offices, as well as more than 300 study centres spread across the length and breadth of the country, co-

ordinates the provision of INSET training programmes for basic education teachers in the country. Figure 3.1 reflects both the frequency of the training and the numbers of primary school teachers trained by NTI in the seven years to 2012.

Figure 3.1: Teachers trained by NTI by year



Source: National Teachers' Institute, Kaduna, 2006–2012 MDGs Workshop reports

In addition, the Universal Basic Education Commission (UBEC) devotes 15 per cent of its intervention funds to in-service training of teachers of basic education in all states and the Federal Capital Territory. Under this arrangement, a total of 1,493,352 teachers had been trained by 2010 (UBEC, *Daily Trust*, 30 September 2010).

CAR, Madagascar, Mozambique, Niger, Senegal and Zambia also present similar governance structures for INSET, comprising national, regional, district and school structures charged with the responsibility of both PRESET and INSET provision. The

governance of school-based INSET initiatives, though centrally driven by national ministries of education, is intended to involve a balance of autonomy and responsibility between the schools and the co-ordinating ministries. Training funds, though limited, are made available to schools for INSET activities and the head teacher and curriculum leader are responsible for administration and co-ordination of both school-based and cluster-based INSET.

Part of the public funding of basic education in these countries is tied to the provision of school-based INSET. The role of the schools in this regard is to put forward continuing professional development plans for the training of teaching staff, and appropriate budgets for funding by the district or regional education authorities.

The co-ordination, operation and funding agreements between the national and regional/district structures define the principles for the organisation of the decentralised INSET systems. The District INSET Units (DIUs) in Ghana, the zonal and state offices of the National Teachers' Institute (NTI) in Nigeria, the Pedagogic Influence Zones (PIZs) in Mozambique, as well as the regional training centres in Senegal and the *ecole seiges* in Niger are decentralised units with clearly defined roles and responsibilities for developing INSET plans, programmes and budgets, as well as ensuring the effective implementation the programmes.

Functions of INSET

In general, the country reports point to few if any differences in the functions and structures of the INSET systems in the sampled countries. Two main patterns prevailed in the provision of in-

service training for teachers. In the Francophone countries, with deliberate policies of recruiting unqualified teachers in their basic education systems (CAR, Madagascar, Niger and Senegal in particular), attention and efforts have tended to concentrate on using INSET for certification. The exception is Niger which, although it has a huge number of contractual teachers with no prior pre-service training, does not offer certification through its INSET programme. Instead, the main objective of Niger's in-service teacher training is to set up a school-based system of training and supervised practice for the improvement of teacher quality.

In this context, the school becomes the basic unit of the INSET and the head teachers are in charge of the daily supervision of the teachers under their responsibility. Training courses are organised for these heads of schools through CAPED, in order to reinforce teacher capacities in administration, management and in teaching animation. The Cells of Teaching Animation constitute the principal goals around which the continuing training process is structured.

In much the same vein, in the Anglophone countries (Ghana, Nigeria and Zambia) INSET is largely used for pedagogical renewal, designed to provide qualified serving teachers with opportunities to sharpen their knowledge and skills on a continuous basis (even though evidence of the use of INSET for teacher upgrading exists in the experience of Nigeria). The only Lusophone country in the sample, Mozambique, also uses INSET for both certification and for the improvement of educational services in schools.

Issues affecting structures and functions of INSET in the sampled countries

The first issue facing the countries is the large number of their basic education teachers, both certified and uncertified, who need INSET training on a continuous basis. As noted in Chapter 2, the significant expansion of basic education influenced by high-profile international policies such as EFA and MDGs has escalated the demand for teachers, leading to mass recruitment of unqualified teachers in the study countries. This, coupled with the fact that effective in-service training requires well-equipped facilities, high-quality training materials and well-paid tutors, makes the provision of INSET on anything but a limited basis well beyond the means of many of the sampled countries.

Secondly, the lack of alignment of INSET programmes with clearly defined career paths in all the countries, apart from a brief expression of intent in the policy documents of some countries (e.g., Nigeria, Ghana and Mozambique), has rendered most existing INSET programmes, particularly those focussed on pedagogical renewal, both ineffective and unattractive to teachers, who do not perceive any relevance or link between the training programmes and their career progression.

Even with regard to the INSET for certification, because the academic and pedagogical skills required for effective teaching have not been mastered before employment, the remedial training being offered to such teachers has proved both ineffective and expensive, as the experiences of Senegal, Madagascar and the Central African Republic illustrate.

Thirdly, the patronising nature of the provision of INSET, exemplified by the popular 'one-shot' training workshops, raises questions about the relevance of the INSET programmes to teachers, who are reduced to being mere receptacles of knowledge. The prevailing mixture of certified and uncertified teachers in the education systems of these countries calls for differentiated training programmes based on the established training needs of different cohorts of teachers.

Available research (Truell 1999; Washburn et al. 2001) tells us that the in-service needs of teachers vary according to teaching experience, qualification and location, and also change over time. This means teachers' professional experiences, mode of certification and location need to be utilised in the preparation of differentiated training programmes. Where these differences are ignored in the development of training programmes, national reforms have enjoyed little support and ownership from teachers, resulting into poor outcomes or outright failure.

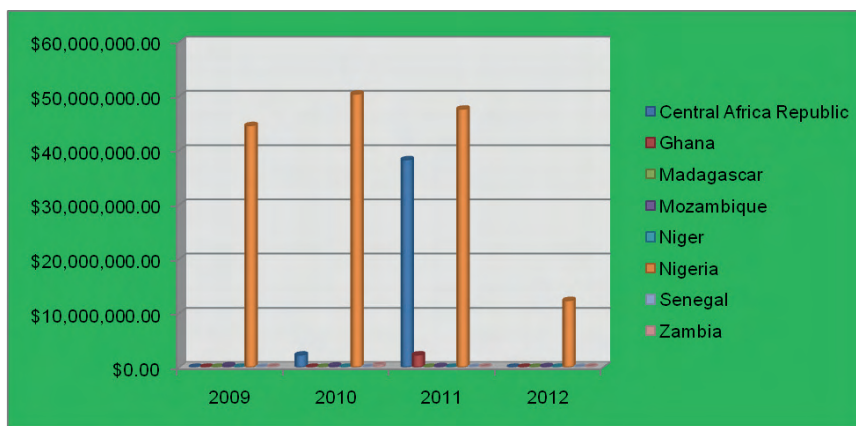
The purpose and objectives of the INSET systems in these countries therefore need to be re-examined and refocused on the actual training needs of teachers and their career aspirations. INSET will not be effective without a stress on the critical issue of engaging teachers and their organisations in the processes of planning, self-evaluation and external evaluation of training programmes, with the aim of ensuring that the relevance and quality of the services provided are guaranteed.

INSET funding

The level of public funding for INSET varied among the eight countries and was affected by the annual budgets allocated to the general education systems by the national governments

and their priorities. As discussed in Chapter 1, the Sub-Saharan African countries have been challenged with the provision of universal basic education for all since Jomtein in 1990. At the heart of this challenge is the expansion of access to basic education. Accordingly, large chunks of available resources/funds for education are devoted to establishing schools and increasing enrolments – to the detriment of teacher education. There is a recurrent problem of underfunding of education in general, and of INSET in particular, across the countries studied, with many reporting inadequate or no budgets for INSET programmes (Figure 3.2). It is understandable, therefore, that only few of the sampled countries have addressed INSET in any depth.

Figure 3.2: INSET funding, by country and year



Source: INSET country reports 2012

If there are no resources, it becomes difficult to set up and manage an INSET system. The Nigeria and Madagascar examples illustrate how costly it is to provide INSET opportunities to teachers. For instance, the annual one-week retraining of

more than half a million primary school teachers in Nigeria launched in 2006 required a budget in the order of \$25m [US\$] per annum over a four-year period. Likewise, the launch of the Special Teacher Upgrading Programme (STUP) required an initial funding of \$2.5m US\$.

In Madagascar, 46 per cent of the \$18.6m allocated to teacher education was devoted to in-service training of contract teachers. Again, since half of the contract teachers were to be certified by 2012, an additional \$2.5m was to be allotted to their training from the country's FTI.

Another source of funding for INSET, which is reported but not adequately quantified in the country reports, is external funding from international development partners (IDPs). IDPs represent one of the most significant sources of funding for INSET in many if not all of the eight countries. However, the country reports fell short of providing detailed analyses of the costs involved in this regard.

Nevertheless, there are scattered examples of donor-driven INSET programmes across the countries such as the SMASE projects in Ghana and Nigeria, supported by JICA; the Continuing Professional Development Programme (CPDP) project in Mozambique, funded by the Netherlands; and the school-based continuing professional development (CPD) in Zambia, supported by JICA. The basic problem facing these donor-driven INSET initiatives is sustainability once the donors withdraw their support at the end of project cycles, given these countries' limited government resources. There is no shortage of examples of donor-driven projects that have ultimately failed as a result of the withdrawal of donor support.

A further point compounding the problem is the apparent lack of involvement of the private sector in the provision of INSET in all eight countries. While the public sector can and must remain the focal point in the provision of INSET for teachers, the potential of the private sector must also be fully exploited. This sector has enough reference points in the provision of education and other social services demonstrating its strength as a viable source of funding.

Modes of delivery of INSET

The INSET programmes in the sampled countries are organised through the following three modes of delivery: face-to-face, distance learning and school-based modes.

- ***Face-to-face mode of delivery***

Many of the in-service education programmes found in the eight countries employ the face-to-face cascade model for their training activities. This involves the conduct of short training workshops that are brief, concentrated and sometimes imposed on teachers without particular regard to their training needs. In this mode of delivery, a group of national trainers are trained first, whom in turn train large numbers of teachers at designated centres or schools. In some cases, there might even be another cascade to the district or school levels. The contact period could range from a few hours in a day, or two days to a week, or in much longer cases, to two weeks or one month over a vacation period. This is the case for most in-service education for specific skills or knowledge. The organisers of these in-service activities include the teacher training institutions and government agencies listed in Table 3.1.

- ***Distance learning system (DLS) mode***

Other forms of teacher in-service programmes are delivered through the distance learning system (DLS) mode. This is carried out in two main ways: the first is the use of conventional print materials supplemented with CDs and DVDs to support student teachers; the second involves the use of ICTs (radio, mobile phones, e-learning) in the delivery of training activities. Examples of the former include the diploma/certificate, bachelor's and master's degrees offered on a part-time basis by the colleges, universities and the National Teachers' Institute in Ghana and Nigeria, through which teachers upgrade their qualifications to teach at higher levels or assume leadership positions. The latter is exemplified by the Senegalese *Reseau Africain de Formation a Distance* (RESAFAD; African Network for Distance In-service Training) and USAID/Education De Base (for teachers' professional development), the Faculty of Education (for certification training), and Nigeria's recent use of mobile technology to provide support to teachers of English language in the Federal Capital Territory.

- ***School-based mode***

The school-based mode uses self-help models based on teachers working together at the school or cluster levels to provide training to teachers. Teachers are usually put in clusters, where they can share experiences with one another and discuss common problems, as well as proffer solutions to issues without being far away from their bases. The most senior and more experienced among them serve as mentors to their younger and inexperienced colleagues. Niger's CAPED; Ghana's

'In-In-Out' system at the colleges of education; Nigeria's Special Teacher Upgrading Programme (STUP), where student teachers spend a long time in schools during training; and other isolated examples of school-based INSET initiatives reported in Zambia and Mozambique are all good examples of the school-based mode of delivery.

Profile of INSET programmes in the eight countries

It is clear from the foregoing that the issue of INSET is on the educational agenda of all the eight countries. The country reports have documented a number of educational reforms that are at various stages of implementation or at the level of planning, which include the provision of in-service training to teachers in these countries. From the summary of the INSET programmes in Table 3.2, one can see that there are basically two types of in-service education programmes: the formal type, which leads to certification (i.e. certificate, diploma or degree) and the less formal continuing professional development type, aimed at improving the knowledge and skills of serving teachers through workshops, school-based INSET and teacher support groups.

Table 3.2: Types of in-service programmes, by country

<i>S/ NO</i>	<i>Country</i>	<i>Programme</i>
1	Central Africa Republic	a) INSET provision at the level of Fundamental 1 b) INSET provision on the levels of Fundamental 11, General Secondary and Technical Fundamental 2 c) Regional teaching centres (CPR) d) National Centre for In-service Training (CNFC)
2	Ghana	a) Induction and initial INSET programme b) Continuing INSET to upgrade professional knowledge and skills c) In-service teacher education programme (distance education mode)
3	Madagascar	a) In-service education for qualification
4	Mozambique	b) Continuing professional development programme c) Pedagogical support to in-service teacher improvement of school management d) Distance teacher training
5	Niger	a) Decennial Programme of Development of Education (PDDE) b) Training of Priority for principals, education advisers and inspectors c) Teaching Cell of Animation (CAPED) d) Face-to-face training
6	Nigeria	a) In-service education for qualification b) In-service education for specific skills or knowledge
7	Senegal	a) Institutional provision for INSET/requalification INSET b) Continuing INSET to upgrade knowledge and skills c) INSET for specific skills and knowledge d) Special programmes for short-term qualification e) INSET for all contractual teachers (primary, lower secondary and senior secondary)
8	Zambia	a) School-based continuing professional development b) Zambia teacher education course by distance learning

Source: INSET country reports 2012

INSET for qualification

In all the countries in the study, teachers – both qualified and unqualified – were provided with opportunities to upgrade their qualifications or obtain a qualification through college and university diplomas/certificates and degrees. Some countries (Ghana, Nigeria and Zambia) even offer in-service versions of their diploma/certificate and degree programmes. Examples of this include the NCE by distance learning at the National Teachers' Institute of Nigeria, in which Grade II trained primary school teachers upgrade their qualifications to obtain the minimum teaching qualification of NCE. Similarly, in Senegal, Madagascar, Mozambique, CAR and Zambia, unqualified teachers can upgrade in formal programmes to diplomas and degrees.

As variously documented in the country reports, two main reasons were behind the widespread phenomenon of upgrading routes for teacher qualification. The first was that an insufficient number of teachers was often produced by the teacher training institutions compared to the growing teacher needs at the basic and secondary school levels brought about by the explosive expansion of these two sectors in the last two decades. In practice, therefore, many countries resorted to filling teacher gaps at these levels (particularly at the basic education level) with uncertified and/or under-qualified teachers. Providing these teachers with an opportunity for formal teacher education was viewed by many countries as a quick and cost-effective way to produce teachers.

A second reason was that INSET for qualification was provided as part of the incentives structure of these countries. In this regard, the opportunity for further education during one's career, with consequent higher qualifications and rewards

in terms of promotion and increased salaries, was viewed as an important means of attracting and retaining good-quality teachers, especially if the programme (as was often the case) is subsidised by the employer.

However, as pointed out by Ottevanger et al. (2007), both the policy and practice of teacher upgrading requires very close scrutiny, most especially if systems have been in place over a long period. The experience of many countries (for example, Niger, Senegal, CAR, Madagascar and Mozambique) shows that providing uncertified teachers with a teacher education programme may lower the standards of teaching in the long run. Secondly, if no reduction of study time is possible during the degree, because the difference in level between the diploma/certificate and the degree is too big academically, then it may well be more cost-effective to expand enrolments at the degree level than at the diploma/certificate level.

Thirdly, while higher qualifications remain an important incentive for teachers, their effectiveness will be better enhanced if the focus is on improving the competencies of teachers in the subjects they teach and at the level where they are already qualified – such as the case of the Advanced Certificate of Education (ACE) offered by several universities in South Africa. The ACE upgrades a teacher from a diploma to degree level and attracts an increased salary, but does not necessarily qualify its holder to teach at a higher education level. Teachers of primary and secondary levels can do the ACE relevant to their respective levels, but the additional qualification does not take them out of their teaching domains. However, this is contrary to what happens in many of the countries in the study. The Nigerian case study (Isyaku 2012),

for example, reported that in all cases when teachers graduate from such upgrading programmes, they leave their previous post or level for a higher level or different class within the school system. This means that if the NCE teacher obtains a bachelor's degree, he or she moves to senior secondary to teach or is posted to head a school, thereby making it impossible for him or her to use the newly acquired knowledge at the appropriate level. This makes the South African model more efficient and cost effective in ensuring the retention of quality teachers at all levels of the education system.

Programmes for further career progression also exist in all the eight countries. These include master's and Ph.D degrees that are pursued by teachers towards leadership and administrative functions. Many of the universities in the countries studied offer a master's degree in Educational Management and Administration, for secondary school teachers who aspire to assume leadership positions in their schools as principals or directors in ministerial departments. These programmes are run on both a full-time and part-time basis.

INSET for special skills

There are many examples from the countries in this study of continuing professional development programmes for teachers of subjects such as science and mathematics (Nigeria and Ghana) or English language (Nigeria and Zambia). These programmes aim at either implementing specific curriculum reform or improving classroom practice. Most of these programmes are donor driven and, by implication, usually have a limited lifespan. This means once the project ends, the programme also draws to a close. Even where efforts to continue with the programmes exist, financial constraints may hinder their sustainability.

A further characteristic of such programmes is that they are often offered on a short-term basis and are usually not linked to an overall national strategy to develop a sustainable support infrastructure. The MDG annual INSET programme in Nigeria, which has been running as a federal government intervention consistently since 2006, is a notable exception in this regard. In addition, as noted in several of the country reports, although INSET programmes may be initiated and offered by one or several agencies of government, institutions or NGOs, they are rarely streamlined and co-ordinated in a collaborative manner; many exist as disparate attempts by different operators. An exception is the SMASE INSET programmes in Ghana, Nigeria, Senegal and Zambia, where the donor agency, the Japanese International Cooperation Agency (JICA), works in close collaboration with the ministries of education of these countries to implement the programmes.

There are a number of problems associated with the INSET programmes in the countries studied. First, most INSET initiatives are based on workshops at designated centres and are usually one-off events, even though – as mentioned earlier – some of them may be offered on a regular basis. Notwithstanding, their short-term nature raises doubts about their efficacy in bringing about desired changes in classroom practices; this would normally require a much longer learning process (Ottevanger 2001). Secondly, successful implementation of the skills learned requires active support and coaching in school environments, which are varied both in terms of teachers and resources available. If practical problems are encountered within the school context, the impetus for change is often quickly lost. Thirdly, as reiterated by Ottevanger et al. (2007), without the

complete support of the school community (both material and social support), individual teachers can easily meet resistance if they start to do things differently on their own.

Promising INSET initiatives

In this section of the report, without seeking to be exhaustive, an attempt is made to give some examples innovative approaches to in-service education in the countries that have proved effective and relevant in terms of producing shifts in knowledge, skills and attitudes of teachers.

In **Nigeria** since 2006, the Federal Ministry of Education has embarked upon extensive reforms of all levels of the education system, including teacher education and in particular INSET, with a number of laudable initiatives:

- i) annual MDG-supported retraining of primary school teachers nationwide; this covers the more than half a million primary school teachers in the country;
- ii) JICA-assisted SMASE–Nigeria in-service project for mathematics and science teachers operating in three states (Kaduna, Niger and Plateau); and
- iii) the Special Teacher Upgrading Programme (STUP), aimed at raising the status of 59,694 Grade II teachers in the basic education sector across the country to the minimum teaching qualification of the Nigeria Certificate in Education (NCE).

In all three cases, the success of the approaches was guaranteed by the support and commitment the initiatives enjoyed from governments at both federal and state levels, as well as the

technical assistance provided by JICA in the SMASE project. In the case of the annual MDG workshops, billions of naira (on average US\$25 million per year) has been invested into every aspect of the planning and execution of the training workshops from 2006 to the time of writing.

A recent impact study of the MDG teacher-retraining project, 2006–2010, revealed many of the academic content knowledge, skills and methods learnt by the participants at these workshops. These were demonstrated by the participants and/or observed in their performance in post-workshop tests on the four core subjects, as well as their classroom teaching (Adeyanju 2012). The study also revealed that teachers' attitudes towards teaching had improved greatly as a result of the training received.

Both the MDG workshops and the SMASE INSET employed the more traditional face-to-face delivery method. However, while the MDG retraining approach is usually a one-off training of one week's duration a year, the SMASE approach adopts a much longer period of training, ranging from two to three weeks per training, often more than twice a year over a three-year period.

Both approaches also adopt the cascade model, involving the training of 'master' trainers drawn from colleges of education and universities who are then used to train the teachers. In this way, the sustainability of the two approaches is ensured through the development of both institutional and individual capacities for continuing teacher professional development.

The involvement of indigenous staff in both the development of the training manuals and the training itself has helped to widen participants' pedagogical horizons. The frequent conduct

of the training workshops over the years has led to greater institutional expertise in the planning and administration of large-scale training workshops and greater skills in producing high-quality instructional manuals that can be used by teachers as support materials long after the training.

The STUP, on the other hand, was a one-off two-year fast-track training for serving Grade II teachers to qualify them the Nigeria Certificate in Education (NCE) within a period of two years.

The modus operandi of the programme was based on a flexible approach, in which teachers were allowed to remain on their jobs while they were on the course. It combined face-to-face lectures, tutorials and integrated school experiences. The entire block of study and teaching was to be completed within two years. In terms of content, the STUP programme used the same NCE curriculum that was followed by full-time pre-service students in the colleges of education. However, it differed slightly in so far as it incorporated an additional component of school-based professional development through mentoring and internship. In its two years of operation, a total of 44,367 (83.25 per cent) teachers were upgraded to qualified teacher status (Adeyanju 2011).

The **Zambian, Nigerian, Senegalese** and **Mozambican** reports highlighted the school-based approach as the best practice that other countries could learn from. In Zambia, the Ministry of Education introduced the school-based CPD as a cost-effective measure in the training of teachers using a network of teacher resource centres (TRCs) established across the country. The training has been offered by the National In-Service Teachers College (NISTCOL) in basic schools since 1970, and more recently has been extended to high school teachers. NISTCOL offers in-service training in the following areas:

- Primary teachers diploma by distance learning
- Education leadership and management for head teachers
- School guidance and counselling

In addition to these, there are other short-term education management in-service programmes aimed at providing systematic improvement to quality education and effective schools in the long term, but these are often donor dependent.

In **Niger**, CAPED forms the main approach to in-service training of teachers and is organised around the schools (*ecole sieges*). The schools become the basic units of INSET and the head teachers are in charge of daily supervision of teachers under their responsibility. Training courses are organised for these heads of schools through CAPED in order to reinforce their capacities in administration and management and in teaching animation.

Unlike the one-off training model that lasts for only a week at a designated centre, the school-based approach lasts for much longer and allows for closer interaction with, and mentoring by, older and more senior colleagues during the training.

Between 2000 and 2010, the exponential rise in the number of schools in **Senegal**, but limited numbers of qualified teachers, was one of the major challenges for Senegalese education decision-makers. Through the strategies of INSET, a number of reforms and innovations were undertaken with a view to improving the situation. The priorities of the Senegalese education authorities are to have professionally trained teachers, cease the recruitment of unqualified contractual

teachers, and to raise the profile of entry into the teaching profession. To this end, strategies adopted by government included the creation of teachers' training centres called *Ecole de Formation des Instituteurs* (EFI) in each region, reinvigoration of the district INSET clusters, the creation of an Association of Schools Headmasters, known as *Collectif des Directeurs d'Ecoles* (CODEC), and the creation of a group of education inspectors for lower and senior secondary education.

It should be noted, however, that in Senegal, the district INSET clusters stand out and remain the only formal institutional elements of INSET implementation for teachers' continuing professional development. Each of the INSET district clusters brings together teachers of several schools in the same locality and exposes them to a programme of capacity building, the content of which is guided by common challenges and concerns of teachers in a particular district. Their activities also include recommendations coming from the national level, which derive from analyses of students' performance indicators or are based on curriculum reforms.

The co-ordination of the training activities of these INSET district units revolves around the head teachers of schools in such localities who, with the support of experienced teachers in their schools, undertake mentorship and share teaching experiences with younger teachers who lack the requisite pedagogical skills and teaching experience.

The supervision of these activities is under the responsibility of head teachers and inspectors, but the shortfall of senior teachers and inspectors is a major setback for effective

monitoring of the activities. To make up for the shortfall, headmasters of schools at various localities have formed a union known as *Collectif Des Directeurs d'Ecoles* (Union of Principals of Schools). Responsibility for supervision of the district INSET clusters falls on these principals operating under their respective jurisdictions, where for reason of distance and coverage many teachers cannot have access to training opportunities.

Though the strategy has its weaknesses, because of the peculiarity of its arrangement – which brings together teachers of the same cultural environment, who face similar teaching challenges – the strategy has been found to meet the principles of effectiveness, efficiency and relevance. This system is one strategy that tackles the real difficulties faced by teachers in their daily classroom practices in a given locality.

Ghana presented the Whole School Development (WSD) programme, which is supported by DFID, and the science, technology and mathematics (STM) project, assisted by JICA, as the best practices for the country. The major outcomes of the second phase of the JICA project included the establishment of an implementation structure for INSET, the development of high-quality training modules, and the building of capacity of officers in the national, regional and district INSET units.

In addition, the JICA-supported projects provided the Ministry of Education (MOE) and the Ghana Education Service (GES) with a blueprint for the development of a policy framework, entitled 'The Pre-tertiary Teacher Professional Development and Management (PTPDM) Policy'. It also led to the establishment

of structures by the GES towards the institutionalisation of INSET across the whole the country. These structures have the potential to sustain INSET programmes in the country. For effective quality control, an instrument has been developed to monitor the implementation and impact of the projects annually.

The INSET approach in the **Central Africa Republic** is holistic in its coverage. The approach covers inspectors of education, in-service and newly recruited teachers, school administrators and principals, the Parent–Teacher Association (PTA) and members of the community. The mode of training for INSET at the CNFC involves bringing together teachers during the Easter vacation, mid-term holidays or during the long vacations for a period of one, two or three weeks, depending on the availability of funds.

This grouping method is based on a direct contact or face-to-face approach. It is conducted in the form of class visits, teaching animation in schools and the production of teaching materials. Training activities are undertaken by teachers, who act as facilitators, or their delegates under the supervision of the director of each CPR. The activities are conducted in line with a programme conceived at the beginning of a school year. In spite of the limited resources available to them, they manage to achieve the set objectives.

The good thing about this arrangement is that, since the contact sessions are slated for holiday periods, it has allowed participation by many teachers who otherwise would not have had time to partake in the INSET training. Besides, it has also been found to be cost effective.

INSET system of reward and sanctions

The link between INSET training programmes and a reward system is an essential success factor. This is usually achieved through aligning INSET activities with clearly defined career paths. However, none of the countries in the study have an elaborate reward and sanction system. Only Ghana and Nigeria provided some indication of the use of INSET points for registration, licensing or promotion. In Ghana, for example, it is proposed that points earned from INSET training should be recognised for re-licensing and promotion, while in Nigeria an attempt has been made to link qualified teachers' registration requirements with the new teachers' salary scale (TSS), introduced by states for primary school teachers. This collaboration between the Teachers Registration Council of Nigeria (TRCN) and the states is helping them recruit more qualified teachers for basic education schools. For the INSET programmes to become successful, it is important that they become fully integrated in the career progression of teachers.

Quality assurance and monitoring mechanisms of INSET

Quality assurance is an essential factor in the implementation of the INSET teacher education programmes. INSET programmes are monitored by the same agencies that regulate pre-service teacher education in the various countries. Quality control is achieved through the training of 'master' trainers and administrators at both the provincial/state and district/local

government levels. Established structures, comprising national coordinating units and states implementation committees, in collaboration with national and state trainers and the administrators at the local level, guarantee the quality of INSET training activities. In particular, the administrators are trained in INSET system management and quality control strategies. This group of administrators is then used to train relevant officials at the local level on how to manage the quality of local INSET programmes and activities.

Chapter 4

Summary of Main Findings, Conclusions and Policy Recommendations

a. *Summary of main findings*

One of the major findings of the study is that INSET is recognised as important in all the teacher policy documents of the eight countries, even though progress on its implementation varies. The review of the country reports highlights many different initiatives scattered around the countries aimed at: addressing teachers' training needs in relation to certification for the numerous unqualified teachers in the education systems (Senegal, CAR, Zambia, Madagascar and Nigeria); particular needs, such as the use of ICT (Nigeria); or improvements in the teaching of curricular subjects such as science and mathematics (Ghana, Niger, Nigeria and Mozambique).

This notwithstanding, the status of INSET in these countries is still far from being established. Compared to the more traditional pre-service teacher education programmes, INSET's structures, coverage and funding are still very low. There is a recurring problem of under-funding of teacher education generally and INSET activities in particular. The studies reported inadequate or lack of funding of INSET due to the non-inclusion

of INSET in national policies and budgetary allocations. This has hampered both the provision and implementation of INSET activities in many of the study countries.

Due to limited government resources, a number of the study countries rely on donor assistance to support the establishment of INSET programmes for their teachers. This raises a number of basic questions about the future of such donor-driven initiatives: How can these countries ensure the sustainability of the initiatives once external assistance is stopped? Can they find the necessary resources to fund the initiatives? How can they ensure that these externally driven initiatives become institutionalised within national educational practice? What types of policies should they put in place to guarantee that all teachers have access to the in-service training opportunities offered by these initiatives? Indications from the countries are that once external funding from donors stops, the projects also come to an end. Even where efforts exist to continue with projects, financial resources are often insufficient for the projects to continue.

The study also reveals diversity in teachers' profiles in all the study countries. In addition to trained teachers, there is a heavy reliance on uncertified voluntary and contract teachers to fill vacant teaching posts created by the massive expansion of education at the basic education level. Although this mix has helped in placing teachers in classrooms in many countries, it has disadvantages – the effects of which are now being seen in the poor performance of school children across all the study countries.

Furthermore, the prevalence of uncertified teachers in the education systems of these countries has raised the demand for continuing professional training. The examples of Senegal, Nigeria and Madagascar show that this is not only expensive, but also that it is difficult to raise these teachers to qualified teacher status, as they lack the necessary initial academic background to prepare them.

There was also a lack of alignment of INSET activities with clearly defined career paths in all the countries, except for the a brief expression of intent in some policy documents (Mozambique and Ghana) and the attempt in Nigeria to link qualified teachers' registration requirements with the new teachers' salary scale (TSS) introduced by states for the primary school teachers. This collaboration between the Teachers Registration Council of Nigeria (TRCN) and the states is helping them to recruit more qualified teachers for basic education schools. For INSET programmes to become less one-off and ad-hoc, it is important for them to be fully integrated in the regular education and development of teachers.

Many of INSET programmes are delivered through the cascade model, which involves the training and use of national 'master' trainers, who then train regional and district trainers down to school level. Although this model has proved helpful in reaching large numbers of teachers with few facilitators (for example, in Nigeria), it has some problems. One of these is that training may become diluted to an unacceptable level with every step down the cascade. There is a need therefore, for effective training of facilitators and close monitoring of training activities.

A number of countries in the study (Nigeria, Ghana, Zambia and Mozambique) also acknowledged the need to move teacher education in the direction of the schools, in line with international best practice. There are several initiatives (both pre-service and in-service) that attempt to make teacher education more school-based. In both Ghana's 'In-In-Out' system and Nigeria's STUP, pre-service students are required to spend more time in schools overseen by mentors and supervisors. In Ghana, they spend their third year of training attached to schools, while in Nigeria they spend the whole two years of training in their respective schools, interspersed with face-to-face contact at the training college. Similarly, many of the INSET initiatives in CAR, Niger and Senegal are school based, using self-help models based on teachers working together at the school or cluster levels. These training models have great potential to improve the quality of both teachers and teaching in the schools, provided they are backed by professional support structures and good mentors. In many of the study countries, it is difficult, though not impossible, to find good primary schools with adequate support materials and a good number of experienced senior teachers that can support an effective internship and mentoring system, making school-based training effective.

b. *Lessons learned*

Some of the lessons learned include:

- i. Heavy reliance on uncertified voluntary and contract teachers only compounds the problem of teacher shortages, and further escalates the costs of teacher quality and development. The experience of Senegal

illustrates the gaps that exist between actors and the structures for INSET, which does not contribute to its optimisation.

- ii. In Zambia, short-term education management initiatives, which are often donor driven, have failed to provide systemic improvement to quality education and effective schools in the long term. The Diploma in Teacher Education Management is a much-preferred option for a long-term sustainable professional development programme.
- iii. In Mozambique, the absence of criteria for valuing CPD training has resulted into poor outcomes and performance of the INSET system.
- iv. In Nigeria, linking teachers' registration requirements with the implementation of the teachers' salary scale (TSS) showed that, if INSET is aligned with promotion and/or positions of responsibility, more teachers will take part and even excel in it.
- v. In Ghana, lack of teachers' motivation hampers their participation in the SBI and CBI activities. Teachers perceive SBI/CBI as time-consuming and unnecessary extra work. They also initially did not want to show their own teaching to their colleagues. The combination of the timing of the SBI/CBI activities, mainly after school hours and other school activities, creates a further obstacle to the successful implementation of SBI.

All this goes to show that where the INSET system has not gained enough credibility from the standpoint of its demonstrable relevance to teachers' career paths and working conditions, it may not be easily acceptable to

teachers. In this regard, it is also important to emphasise the significant importance of sensitisation and advocacy among teachers. With regard to the timing of the SBI and CBI activities, it is clear from the Ghana experience that, to determine the most appropriate timing and ensure full participation by trainees, the involvement of teachers is crucial. It is for this reason that prior consultation with teachers and their unions is necessary. With consultation, teachers become more aware of the importance of the SBI/CBI and will participate actively.

The DLS and e-learning INSET approaches being tried by Nigeria and Senegal, respectively, illustrate the potential of such approaches in guaranteeing that the majority of teachers have opportunities for continuing professional development related to their needs, and that these will not be limited to one-off programmes linked to a new project or initiative. The use of DLS and ICT are also the preferred options of Madagascar and, to a small extent, the CAR. The NCE/DLS programme run by NTI complements the NCE teacher graduate output from the regular pre-service programme with an additional 50,000 teachers annually. The success of the Senegalese RESAFAD network in changing teachers' values by localisation and personalisation further supports the effectiveness of distance learning modes in teacher education.

- vi. While many teachers have attained the qualified teacher status in all the study countries as a result of 'qualification-driven' college- or university-based INSET programmes, there appears to be no commensurate improvement in the quality of basic education in these countries. The

experience of Nigeria in the provision of the MDG and SMASE INSET, and that of Ghana in the management of SBI and CBI INSET, both demonstrate that the ability to guarantee quality is the most relevant success factor for INSET, and one that is central to its sustainability. In both cases, the quality of training was the outcome of a combination of three factors: effective utilisation of resources, a network of vibrant quality assurance mechanisms and elaborate assessment processes.

c. Recommendations

Given these observations on the main findings of the INSET study in the study countries, an attempt is made in this section to offer recommendations that could assist policy-makers in designing more effective strategies to address teachers' continual desire and need for in-service education. The recommendations have been generated from the evidence presented in the country reports regarding the efficacy of policies, programmes and practices in the provision of in-service training for teachers.

- *The need for comprehensive and integrated education policies that include in-service education*

The review of the different policy documents from the eight countries points to the need for more comprehensive policies that guarantee the integration of PRESET and INSET in national policy frameworks. The reports show that the provision of INSET is often donor driven and not supported by elaborate national policies, resulting in an apparent lack of budgetary provisions and an absence of elaborate structures for the effective management of in-service training programmes.

Evidence from country experience (e.g. the MDG workshops in Nigeria) clearly shows that the operating costs of INSET are generally high, involving huge investments in the co-ordination of complimentary activities and key players, the effective implementation of which can only be supported by national budgets. Moreover, the inclusion of INSET in national policy frameworks will guarantee equity in its provision, as all teachers will have opportunities for professional development related to their needs, rather than the few that are normally accommodated by donor-driven initiatives.

- *The need to link INSET with elaborate career paths for teachers*

The review of the different INSET initiatives in the eight countries points to the need for policy frameworks that address both the concerns of the educational systems as a whole and the particular concerns of teachers and their professional lives. More often than not these concerns are neglected in the way that policies are formulated.

The experience of Ghana in implementing SBI and CBI is indicative of policies that, although they have the interests of the education system and the students in mind, end up being resisted or ignored by teachers because they are not linked to their own interests. This means that where teachers cannot see any direct link between the training programmes offered and their career progression or some monetary benefit accruing from participation (e.g. the MDG workshops in Nigeria, where teachers are paid for participation), they may be reluctant to take part or will be less committed to the training.

All the eight countries have emphasised the need to align INSET activities with incentives and rewards systems within the context of teachers' formal career paths.

- *The need for co-ordinated policy frameworks and structures*

The country studies agree that the prevailing disparate nature of the provision of INSET across the eight countries requires an integrated approach involving the effective co-ordination of activities and actors. National structures that can assume this responsibility already exist in some countries (Nigeria, Ghana, Senegal and Zambia).

What is required is the establishment or strengthening of these structures where they exist, with competent staff and resources to manage and co-ordinate the INSET activities in the various countries. The NTI in Nigeria and NITSCOL in Zambia are already doing some work in this direction. Efforts should be made to harmonise donor-driven initiatives with national programmes to ensure quality of content and form, as well as methods of delivery.

- *The need for private sector support for INSET*

Although many of the country studies reported inadequate or absence of public funds for INSET, none presented any compelling evidence of private sector funding of in-service training for teachers. While the public sector can and must remain the focal point for the provision of INSET to teachers, since the majority of them are public servants, the potential of the private sector in the training and retraining of teachers should be exploited to complement governments' efforts. The private sector already has enough reference points on the educational landscape to alleviate any fears or doubt about its ability in this regard.

Leveraging private sector support can be achieved through sensitisation of relevant stakeholders in the community. Head teachers can use the opportunities offered by school-based management committee and PTA meetings to canvass support

for the professional development of teachers, by presenting the schools' INSET plans and advocating for support, both financial and material. Otherwise they may use capable people from the community as resource persons. Private–public partnerships must be facilitated to provide INSET.

- *The need for an effective decentralised INSET system*

Attempts to decentralise the implementation of INSET in some countries (e.g. Senegal, Mozambique and Ghana) have proved ineffective due to weak governance structures and lack of clearly defined roles and responsibilities at the district and zonal levels. This points to the need for regulatory frameworks that define authority, funding, roles and responsibilities for providing and managing INSET at the various levels. Decentralized units must have authority and funding to ensure effective delivery of quality training.

- *The need to strengthen quality assurance mechanisms*

Another key observation in all the case studies is the need to set up powerful systems/ mechanisms of follow-up and evaluation of the training programmes to ensure that norms and standards are adhered to. This means, within the context of school and cluster-based INSET, we should link support to accountability. This can be achieved by making head teachers responsible for the quality of INSET activities within their schools.

- *The need to replicate and sustain the INSET programmes*

Many of the successful INSET initiatives described in this report also illustrate problems associated with replication and sustainability of the programmes, due largely to financial

constraints. This is not limited to the donor-driven initiatives; it is also true of the government-supported initiatives. All the countries reported an increase in the number of teachers participating in INSET activities, which raises the issue of cost of the training. Another major problem associated with the school-based initiatives is the apparent lack of capacity and infrastructural support structures in most schools to sustain the programmes. The SMASE project in Nigeria, which is run on a cost-effective approach that makes use of secondary school classrooms and dormitories instead of rented accommodation and does not provide for daily allowances for trainees (though meals are provided), is a notable exception. This approach makes organising training financially feasible, as costs for the Nigerian government, which is in charge of the running cost component of the project, are low. Nonetheless, these two problems underscore the need for major investments in the INSET systems of all the study countries and the building of capacity of teachers at all levels of their education systems.

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