In-Service Teacher Education in Sub-Saharan Africa

A Synthesis Report

Muhammad Ibn Junaid and Francois Maka 5/15/2014

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Acronyms and Abbreviations

ACE	Advanced Certificate of Education	
ADEA	Association for the Development of Education in Africa	
AIDS	Acquired Immune Deficiency Syndrome	
ANE	Adult and Non-Formal Education	
B. A. Ed.	Bachelor of Arts in Education	
B. Ed.	Bachelor of Education	
B. Sc. Ed.	Bachelor of Science in Education	
CAPED	Cellule d'Animation Pedagogique (Cell of Teaching Animation).	
CAR	Central African Republic	
CBI	Cluster-Based INSET	
CIDA	Canadian International Development Agency	
CNFR		
CODEC	Collectif des Directeurs d'école	
COE	College of Education	
ComSec	Commonwealth Secretariat	
CPD	Continuing Professional Development	
CPR		
CRFPE	Centre Régional de Formation des Personnels de l'Education	
DFID	Department for International Development	
DIU	District Inset Unit	
DLS	Distance Learning System	
DPEC		
ECCE	Early Childhood and Care Education	

Ed Data	Education Data		
EFA	Education for All		
EFI	Ecole de Formation des Instituteurs		
ESP	Education Sector Plan		
ESSPN	Education Sector Strategic Plan		
FME	Federal Ministry of Education		
FTI	Fast Track Initiative		
FTS	Federal Teachers Scheme		
GDP	Gross Domestic Product		
GES	Ghana Education Services		
GMR	Global Monitoring Report		
НАТ	Housing for All Teachers		
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome		
ICT	Information and Communication Technology		
IICBA	International Institute for Capacity Building in Africa		
ISTE	In-service Teacher Education		
JICA	Japanese International Cooperation Agency		
JSS	Junior Secondary School		
MDG	Millennium Development Goals		
MOE/MEC	Ministry of Education		
MOESVTEE	Ministry of Education, Science Vocational Training and Early Education		
NISTCOL	National In-service Teachers College		

NTC	National Teaching Council	
NTI	National Teachers' Institute	
INSET	In-service Education and Training	
M. Ed.	Master of Education	
NCCE	National Commission for Colleges of Education	
NCE	Nigeria Certificate in Education	
NGO	Non-governmental Organization	
NUC	National Universities Commission	
ODA	Official Development Assistance	
PES	Primary Education Studies	
Ph. D	Doctor of Philosophy	
PIZ	Zona de Influência Pedagógica (Pedagogic Influence Zone)	
PSTE/PRESET	Pre-service Teacher Education	
РТА	Parent Teacher Association	
PTPDM	Pre-tertiary Teacher Professional Development and Management	
RESAFAD	Reseau Africain de Formation a Distance (African Network for Distance In-service Training).	
SBI	School-Based In-service Training	
SBMC	School-Based Management Committee	
SDEJT	Serviço Distrital de Educação, Juventude e Tecnologia (District Service of Education, Youth and Culture)	
SMASE	Strengthening Mathematics and Science Education	
SMC	School Management Committee	
SSA	Sub-Saharan Africa	
STM	Science, Technology and Mathematics	

STUP	Special Teacher Upgrading Programme	
TED	Teacher Education Division	
TRC	Teacher Resource Centre	
TRCN	Teachers Registration Council of Nigeria	
TSS	Teachers Salary Scale	
UCC	University of Cape Coast	
UEW	University of Education, Winneba	
UNESCO	United Nations Educational, Scientific and Cultural Organisation	
USAID/EDB	USAID/Education De Base	
USD	United State Dollar	
WSD	Whole School 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 no doubt 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 in teaching vacancies that would otherwise remain unfilled underscoring the need to prepare such 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 the preservice 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, UNESCO-IICBA, UNESCO Office in Dakar, the 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 INSET programmes and approaches in eight countries namely, Central African Republic, Ghana, Madagascar, Mozambique, Niger, Nigeria, Senegal and Zambia. Through this study of INSET, the collaborating agencies sought to fill in the 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.
- Identify the major challenges encountered and the 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 coordinated the country studies, as well as reviewed and synthesized the country reports into a harmonized report that summarized the key issues and recommendations of the study.

Methodology

The INSET study was carried out in the following four stages:

- a. **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.
- b. In-country Fieldwork: The second stage involved 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, trainers as well as an analysis of existing structures and policy networks that may influence sustainability of the INSET programmes.

- **c. Review of the Reports:** This involved three main activities: review of the country reports by the lead consultants to ensure compliance with the agreed research and reporting template, harmonization 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.
- d. Validation Workshop: A consolidated report was presented for review and comments by the institutional partners, lead and country consultants at a validation workshop held on 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.
- e. **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 socio-economic indicators, as well as, international commitment to EFA and Millennium Development Goals (MDGs) by the countries studied have influenced their growth in education in the countries giving rise to issues of equity and quality in their education systems. The reports discuss some common trends principally, 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 focusing 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 of 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 summarizes 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 including, IICBA, ADEA and other relevant agencies will find this report useful in providing policy support for future interventions, particularly in relation to the effectiveness of the 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 re-training 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 Pedagogique) strategy employed by Niger in particular, is an elaborate INSET programme that is organized around schools known as "ecole sieges" (pole schools), which become the designated centres for coordinating INSET training activities.

Alternatively, it may take the form of a full- or part-time study at a college or university for upgrading teachers' qualifications such as from diploma to bachelor's degree or from bachelor' degree to 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 (Azizou, 2012). The school-based approach involving mentoring teachers in their schools on the other hand, gives greater opportunities to provide one-on-one support to individual teachers in their classrooms (Adeyanju, 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 who would mentor the multitudes of trainee teachers as exemplified by the experience of Niger in implementing "la CAPED".

Both approaches require sufficient funding for effective implementation. However, what is 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 of the 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 its la CAPED. In 2001, for example, out of approximately 14,000 teachers, only 1179 (representing 8.42% of the teaching personnel) were visited by the mentor teachers and advisors and this was attributed to insufficient funding and a lack of 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 (Azizou, 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 schools with emphasis on child-centered approaches with a great deal of successes.

Similarly, the World Bank and DFID under its Education Sector Support Programmes in Nigeria (ESSPIN) have supported school-based teacher professional development programmes in selected states in Nigeria (Adeyanju, et. al, 2004; & Adeyanju, 2012). 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. But, even where they 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 the effective implementation of the policies (Asare, et al, 2012; Isyaku, 2012 and Azizou, 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 teacher classroom needs,
- (iii) embed the 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 decentralized INSET system, and
- (v) align 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 the donor-driven initiatives; it is also true of the government supported initiatives. All the countries studied reported 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 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 la CAPED strategy in Niger, which takes care of only the catering, transport and photocopying expenses of the participants are notable exceptions. The two approaches make organizing training financially feasible with low costs for the two governments which 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 la 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 advisors. 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: Socio-economic 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 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 the SSA countries (Adedeji & Olaniyan, 2011). The demographic and socio-economic 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 in the last two decades include:

- i. Improved health services and facilities have impacted positively on the growth and life expectancy of the populations in SSA countries with majority of the populations in the young age bracket contributing to the great pressure on education services.
- The economic situation in the sampled SSA countries characterized by steady growth in ii. the countries' gross domestic product (GDPs) over the last decade (6.9% per annum in Nigeria, 5.8% in Ghana, 3.8% in Niger, 1.7% in CAR, 4% in Senegal, 5.4% in Madagascar, and 7.8% in Mozambique), had supported a gradual increase in government spending on education in these countries, even though high inflation rates (for example, 10% in Mozambique, 8.5% in Zambia) led to significant limitations on the development of national policies and programmes further aggravating the existing social inequalities between regions (rural-urban), social groups (sedentary-nomadic) and between the sexes (male-female), 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 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 resulting 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), which has led to significant increases in school enrollments and 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 (Figure 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 in 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 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 characterized 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 % in Ghana, 52% in Mozambique, 49% in CAR and 58% 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 annum. The general demographic indicators of the sampled countries had created an explosive growth in basic education characterized by high primary net enrollment rates.

As Figure 1 below shows, by 2007, Ghana had a primary net enrollment rate of 80%, CAR 98%, Madagascar 84%, Mozambique 71%, Senegal 83%, while Zambia recorded 93%, (EFA FTI Annual Report, 2009; the Word Bank and UNESCO Institute for Statistics, *http://www.indexmundi.com/facts/indicators*), suggesting that many of these SSA countries were approaching the FTI benchmark of 100% for the primary gross intake ratio. Nigeria and Niger had no data for 2007. By 2012, however, Niger had reported 62% primary net enrollment while Ghana, Senegal, Zambia and Mozambique had maintained their 2007 figures. Only CAR had its figure dropped to 72% from the 2007 figure of 98%. The most current available primary net enrollment rate for Nigeria was that of 2010 which stood at 62%, while Niger recorded its highest primary net enrollment rate of 62% in 2012.

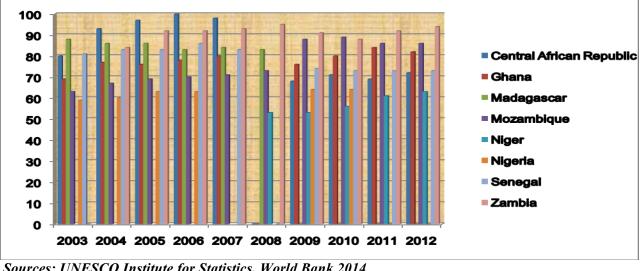


Figure 1: Primary Net Enrolment Rate by Country and Year

Sources: UNESCO Institute for Statistics, World Bank 2014 (http://www.indexmundi.com/facts/indicators) & 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 terms of transition rates from primary to general secondary education. The improvement in transition rates had been particularly notable in Ghana, Madagascar, Mozambique, Senegal and Zambia where, by 2007, it exceeded well over 50% of the primary school leavers in these countries. By contrast, in CAR, Niger and Nigeria, despite significant improvements in primary school enrollments, transition from primary to secondary had been at a very slow rate, well below the 50% mark (Figure 2).

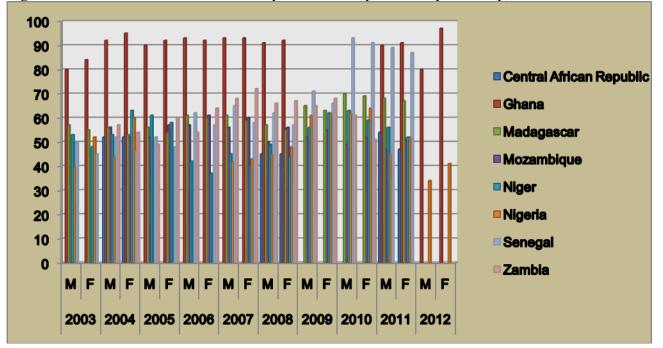


Figure 2: Transition Rate from Primary to Secondary School by Country, Year and Sex

Sources: UNESCO Institute for Statistics, World Bank 2014 (http://www.indexmundi.com/facts/indicators) & INSET Country Reports.

Figure 2 above also shows that gender parity is becoming 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 which 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 it for their livelihood. Similarly, majority of the sampled countries' labour forces are engaged in agriculture (75% in Nigeria, 55.8% in Ghana and 65% 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, gradually gave way to petroleum and solid minerals exploration. In Nigeria, for example, by 2006, agriculture contributed 32.5% to the country's gross domestic product (GDP) compared to 38.8% contributed by oil and gas. Currently, oil and gas dominate the country's economy contributing 99% of export revenues and 78% of government revenues (Nigeria DHS EdData Survey, 2010).

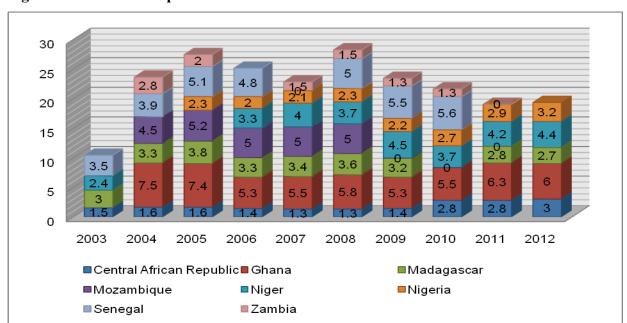
In terms of real economic growth, with the exception of CAR whose GDP per capita had been in clear regression from 4.3% in 2006 down to 1.7% in 2009, all the other seven countries in the study had reported appreciable improvements in the performance of their domestic economies over the last ten years. Nigeria's GDP growth rate increased from 2.7% in 1999 to 6.6% in 2004 and averaged around 6.5% per annum between 2005 and 2008 and rose to 6.9% in 2012 (Isyaku, 2012). Ghana's GDP growth rate averaged 5.7% per annum over the period 2000-2009 and rose to 5.8% in 2010, while the growth rate in Senegal averaged at 4% per annum in 2011. Mozambique reported the highest average GDP growth rate of 7.8% per annum since 1992.

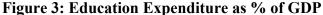
However, while these recorded growths had resulted in some improvements in the living conditions of people in the sampled countries, poverty and income inequalities remained high in these countries, particularly among the rural populations. In Ghana, for example, 54% of the population still live under USD2 per day despite the reduction of its poverty level from 52% at the beginning of the 1990s to 28.6% in 2006 (Asare, et al, 2012), while in Nigeria a whopping 92% live under USD2 per day (GMR, 2012). This was compounded by high inflation rate, which averaged at around 10% across the sampled countries excluding Senegal, which had stabilized inflation rate at 5.8% and rapid population growth rate which averaged 2.5% per annum across the sampled countries. This has far reaching implications for the education of the teeming 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 had reported steady increases in enrollments into basic education, which is feeding the increase in numbers in secondary education. This had raised the issue of adequate funding of education, particularly at the basic education level, which had witnessed much greater expansion than the other levels of education. As evidenced in the country reports, government spending on education in these countries had shown gradual increase over the years. For example, in Niger, the education sector's share of the country's GDP had increased to 3.7% in 2008 and 4.4% in 2012 compared to a mere 2.4% in 2003, even though funding levels were still much lower than the average government expenditure on education in the other sampled countries such as Ghana, Mozambique and Senegal where education expenditure as a share of GDP had risen to 5.8% and 5% respectively in 2008. In contrast, government's expenditure on education as a percentage of GDP in the period 2003 – 2012 averaged about 1.8% for CAR, 2.9% for Madagascar, 2.5% for Nigeria and 1.7% for Zambia.





Sources: UNESCO Institute for Statistics, World Bank 2014 (http://www.indexmundi.com/facts/indicators) & 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 commitment to the provision of basic education for all and the Millennium Development Goals. As Figure 4 below shows, Ghana and Senegal had exceeded the UNESCO suggested benchmark of spending 20% of their national budgets on education, while Madagascar, Mozambique and Central African Republic were well on schedule to achieving that. By contrast, Nigeria, Niger and Zambia, hovering around less than 10% of their national budgets, are not on schedule to attaining this benchmark despite significant improvement in the funding of basic education in recent years (Fig. 5).

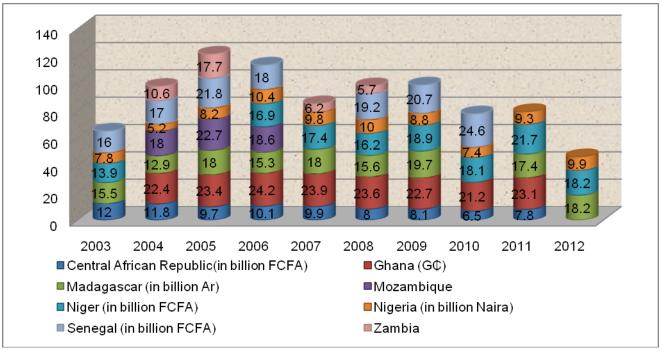


Figure 4: Education Expenditure as % of Government Budget by Country and Year

Sources: UNESCO Institute for Statistics, World Bank 2014 (http://www.indexmundi.com/facts/indicators) & INSET Country Reports.

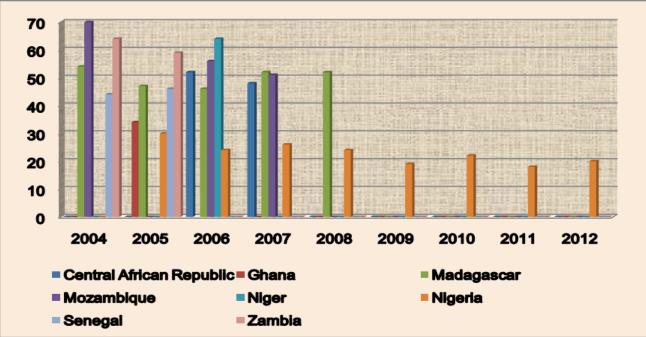


Figure 5: Share of Primary Education in Recurrent Education Budget (%)

Sources: UNESCO Institute for Statistics, World Bank 2014 (http://www.indexmundi.com/facts/indicators) & INSET Country Reports.

Despite the increases in the expenditure profiles of these countries, however, gross underfunding of education was observed resulting in heavy reliance on external sources for financing government development expenditure. Ghana, for example, was one of the top 10 countries in Africa receiving the Official Development Assistance (ODA) of USD1, 207m in 2008. In Mozambique, external sources of funding contributed about 30% of the country's budget for education in 2010 alone. Figure 6 below 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 for Ghana and Nigeria on external funding for education for the three years were not available in the country profiles.

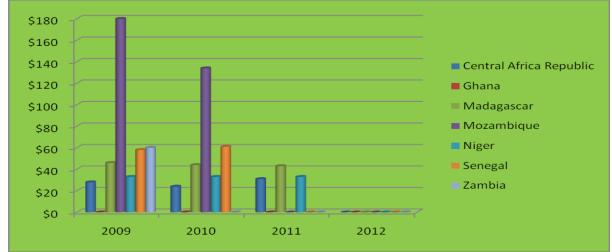


Figure 6: Projected Donor Funding for Primary/Basic Education (US\$ million) by Country and Year

Source: Education for All Fast Track Initiative, 2009 Report & Country Reports, 2012.

In addition, the escalating salary bills that accompanied the expanded state provision of education for all increasingly precluded significant support for the provision of quality education in the sampled countries. In Zambia, Niger and Senegal, for example, about 90%, 86.6% and 85% (respectively) of government's expenditures on primary education were devoted to personnel emoluments, leaving very little for educational development in the three countries.

Another indicator that is relevant for this report is the proportion of the countries' populations that live in the rural areas. The country reports reveal that a large share of the population in most of the countries lives in the rural areas (for example, 70% in Mozambique, 60% in Nigeria, and 50% in Senegal). Evidences from reports (DHS EdData, 2010), show that rural dwellers are about twice as likely to have no schooling as urban dwellers (in Nigeria, for example, 46% versus 20% respectively). All the country reports also 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 favored.

Literacy Rate

Adult literacy rates varied across the eight countries ranging from 28.7% in Niger to 67% in Ghana. Although not all countries disaggregated their literacy rates according to gender and urban-rural divide, from the few that did (Nigeria and Ghana), it was clear that there were more literate adult males than females (73.8% versus 64.8% in Nigeria; 73% against 60% in Ghana

67.1% against 47.5% in Senegal (ESPS 2005-2006) and 27.8% versus 11.6% in Niger respectively). Furthermore, the literacy rates for urban areas were much higher than those for the rural areas (for example, 93% versus 81% respectively and there were also very significant variations between zones and states in Nigeria). Apart from UNESCO and UNICEF which have continued to give technical support in the areas of policy and strategies, other development partners and non-governmental organizations (NGOs) have not given 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 reducing the adult literacy rate by 50% 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 manned by qualified teachers, let alone, provide them with good incentives structures that would both motivate and retain them on their jobs. Given the preponderance 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 in these countries over the past decade. This chapter looks at the policies, structures and management of teacher education in the eight countries focusing 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 universalizing access to primary education and reduction of 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 of the education sector include, among other things, soaring enrollment 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 the schools. In Nigeria, for example, according to an MDG Report, "nearly 9 out of every 10 children, (representing 88.8%), were enrolled in basic education schools by 2010". In Ghana, in the period 2002 - 2012, basic education enrollment increased by 75%. In Niger, between 2000 and 2011, the number of primary 1 pupils increased from 657,000 to I, 900, 000, representing an increase rate of 2.9% 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% to 76.1% representing a gain of 42%. The gross rate of schooling in CAR rose from 74% in 2007 to 84% in 2009.

Unfortunately, teacher production had not kept pace with the increases in enrollments in these countries forcing many of them to resort to employing untrained teachers to teach in their basic education schools. The manifestation of this mismatch between rising enrollment 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 have been found to be above the national norm of 35:1 in terms of pupil-teacher ratio and about a fifth of the classes have 41 to 50 pupils while a little less than a third have over 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 100:1 particularly in the suburbs of Dakar where some teachers have double stream classes (Papa Filey, 2012). In CAR, the ratio is as high as 90:1. Indeed, as Figure 7 below shows, Madagascar, Mozambique, Niger and Zambia have all exceeded the recommended standard pupil-teacher ratio of 35:1. 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 the existing teacher gaps in the selected countries.

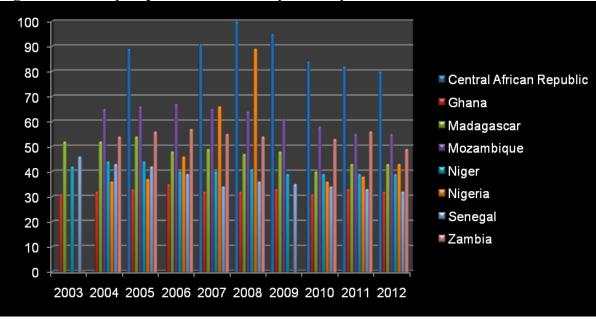


Figure 7: Primary Pupil Teacher Ratio by Country and Year

Sources: UNESCO Institute for Statistics, World Bank 2014, (http://www.indexmundi.com/facts/indicators) & INSET Country Reports, 2012.

Specific Teacher Education Policies

The way teachers are trained, the efficacy of the teacher education programmes, the opportunities teachers have for continuing professional development and the extent to which their well-being and motivation are addressed, is a key factor in improving the quality of teaching and retaining good teachers in schools. It is also a good measure of ensuring 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 sampled countries recognize 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 would guarantee their contribution to quality education. For this reason over the years, all the

studied countries had attempted to reform and restructure their teacher education systems in response to demands of new visions and agenda 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 at producing 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) training aimed at ensuring coherence and continuity of training opportunities throughout the career of teachers. 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.

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 would be able to teach at the four distinct levels of basic education namely, early childhood and care education (ECCE), primary education (PES}, Junior secondary education (JSS) and adult and non-formal education (ANE). This new focus on level-specific training of teachers it is hoped will, once fully institutionalized, replace the prevailing subjects-specific training of teachers, that 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 Junior Secondary education level.

Similarly, both **Ghana's** new education act (Act 778) of 2008 and its Education Sector Plan (ESP 2010-2020) emphasize the need for INSET. The Act established the National Teaching Council (NTC) with responsibility for setting and ensuring professional standards and code of practice for professional development, registration and licensing of teachers. In addition, the "ESP (2010 -2020)" captures the importance of continuous teacher professional development

and makes management of INSET obligatory for stakeholders at the community, school, district and national level (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 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 PTPDM introduced in 2011, aims at fostering the development of a world-class teacher capable of contributing significantly to students' learning and achievement and s stipulates the principles for effective teacher management in order to motivate excellence in teacher performance and commitment to lifelong learning It 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 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, the improvement of the methods and contents of teacher training through the review and development of the teacher training curricula with emphasis on Competency Based Instruction (CBI), the introduction of the "Bachelor - Master – Doctorate" (LMD) programmes within the higher education system and the institutionalization of the on-line teacher training.

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

i. Units of formation (UF) constituting 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.

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 Advisors, 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 5 year post-primary school qualification while the NCE is a 3 year post-secondary qualification. Similarly, in **Ghana**, a Diploma in Education replaced a 3-year certification in education with a new structure that requires pre-service students to spend their last year of training on practical teaching attachment to schools to provide 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 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 +1 year training.

In **Senegal**, following the reform of its teacher education in 2010, the Government extended the duration of pre-service training from 6 to 9 months, stopped the recruitment of volunteer teachers and insisted on the baccalaureate diploma as minimum qualification of candidates.

Few of the reviewed plans included strategies to deploy and retain good teachers through incentives. For example, the **Zambian** government gives housing allowance for teachers to rent houses, pays rural hardship allowance to teachers in difficult and remote areas, pays retention allowance to teachers with degree qualifications in order to motivate them in their work and decentralizes the procurement of teaching and learning materials to allow the schools procure the materials that are needed most in the schools.

Nigeria and Ghana, on the hand, celebrate the best teacher with an annual National Best Teacher Award Scheme. In addition, both countries introduced other monetary and non-monetary incentives such as the trade-offs in the working conditions of teachers being proposed by the Federal Ministry of Education in Nigeria in the form of Housing for all Teachers (HAT) Scheme; and the provision of accommodation near the school for teachers in Ghana to entice them to work, particularly, in the second cycle institutions and some deprived areas. The major objective of the scheme is to motivate teachers for higher performance and also restore the respect the profession should enjoy. It further aims at retaining qualified teachers and improving their work performance and overall effectiveness in the classroom.

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

Types of Existing Teacher Training Programmes

The two main models of teacher training (pre-service and in-service teacher education) were prevalent in all the studied countries. However, while the Anglophone countries (**Ghana**, **Nigeria and Zambia**) seemed to lay greater emphasis on the pre-service model in the training of teachers, the Francophone countries (**Niger, CAR, Madagascar and Senegal**) relied more on the in-service model. This difference in emphasis can be explained by the mode of recruitment of teachers in the two blocs of countries. While the Anglophone countries insist on teaching certification as a yardstick for recruitment, the Francophone countries offer pedagogical training to untrained teachers while on the job through INSET. The difference in emphasis is further reflected in the way teacher education programmes are organized. 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 programmes 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, all the training programmes aim to ensure that teachers meet the 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 such widely varied programmes. In **Ghana**, for example, though many teachers now hold diplomas and degrees in basic education as a result of the 'qualification-driven' university-based INSET upgrading programmes, very 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**, the 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 the subject matter considered, the results of the primary school pupils' performance in Niger were very low with the average percentages in all the subjects and all the courses well below 50% (Azizu, 2012). This low performance was attributed to the low level of capacity of the teachers whose classroom practice is largely "chalk-and-talk" and heavily teacher-centered. This weakness characterizes both the pre-service and in-service training of teachers. Only three out 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 Organization of Teacher Education

The structures for teacher education across the countries studied comprised a diverse group of institutions that include colleges of education (CoEs), institutes and faculties of education of universities, national and regional training centres and other designated institutes for the training

of teachers. The growth of these structures across the countries studied was influenced by both the explosive expansion of universal education and the concern for quality in its provision.

The eight countries in the study structured teacher education programmes differently, though some patterns were very clear. Almost every country in the study organized teacher education into two main categories: teacher training programmes for the production of teachers for the basic education level and programmes of study for the preparation of teachers for the Senior Secondary level. The former could last between 9 months and 3 years, while the latter could last between 1 and 4 years. In francophone countries (Madagascar, Niger, CAR and Senegal) the breakdown is more variable ranging from 9 months to 2 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), the length of the course for the basic and senior secondary levels lasts between 1 and 2 years. Most Anglophone countries (Nigeria, Ghana and Zambia) run a 3 year programme of study for basic education teachers and 3 to 4 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 produced by these colleges taught at the basic education level. In Ghana, such colleges number up to 41 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 of the training on campus and the last year on practical teaching attachment to schools. In Nigeria, at the time of this study the colleges were 112 in number, including federal, states and privately owned institutions. The trainees at these college level and visits to neighboring schools for observation are made mandatory to trainees 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 were trained in regional training

centers called Centres Regionaux de Formation des Personnels de l'Education (CRFPE). These centers number up to 12, and the training which lasted for 9 months was based on a dual system approach including theory and practical teaching attachment to schools.

	Number of Trainee	
Country	MF	F
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

Table 1: Number of Trainee Teachers by Country and Gender

Source: INSET Study Country Reports, 2012. DNA = Data Not Available

Table 1 above shows the number of students undergoing training at the institutions during the period under review. Incidentally, apart from Madagascar which provided only the total number of its teacher trainees, the other Francophone countries did not provide data on their trainees. It is 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 inservice training programmes than the other two Anglophone countries, with **4,253** out of the **7,298** students in the teacher training institutions being females. Thus, although gender gap seemed to be narrowing as noted in the transition rates from primary to secondary (Figure 2), there still exist wide variations 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 Faculty of Education runs a 2 year training programme leading to Certificate of Aptitude for Teaching at Lower Secondary for Baccalaureate holders; a 1 year training programme for university BA. /BSc. holders leading to Certificate of Aptitude for Teaching at Lower Secondary; a 1 year training programme for university MA/MSc. Holders leading to Certificate of Aptitude for teaching at Senior Secondary. The National School of Arts offers 4 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 university faculty of sports offers a 6 year training for baccalaureate holders leading to Certificate of Aptitude for teaching in senior secondary schools, whereas the national center of sports runs a 2 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 listed in Table 2, 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 and consequently the training programmes that lead to them, are defined according to the skills desired for the 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 specialization. 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 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 had already attained some reasonable proficiency with the basics of their disciplines 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 very 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 such 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 emphasized more by Ghana and Nigeria where there exist statutory agencies regulating teaching.

b) Curriculum Content

Content wise, the organization of the curriculum of the training institution 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, 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 specialize in one or two subjects.
- **Teaching practice**: The length of teaching practice varies from country to country and also depending 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 the practicum since trainee teachers had already undergone training in their specialized areas.

c) Mode of Delivery

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

- i. Face-to-face training: Majority of the training programmes were delivered through fulltime 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 9 months (Senegal) to 1 or 2 years (CAR, Madagascar, Mozambique, Niger, Senegal and Zambia) to 3 years (Ghana and Nigeria).
- **Distance Learning Mode:** Few countries (Nigeria, Madagascar, Zambia and Senegal) had experimented with distance learning mode 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 very low enrollments in the training institutions, there were other challenges faced by all the countries in the study in their efforts to determine the appropriate structures and functions of their teacher training institutions. The first is 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, 2008). 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 are even more pronounced in countries which 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 students-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 in Figure. It is not surprising therefore, that the systematic use of ICT for teaching and learning was still on a very small scale across the countries. Only Senegal and Madagascar mentioned the use of e-learning for training of teachers, though not much detail was provided in the country reports about how it 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 organization 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, no doubt, 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 the 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 Eduction (NCCE) in collaboration with TRCN and other professional bodies conducts accreditation for all programmes in the colleges of education, while the National Universities Commission (NUC) does that of the universities. Accreditation of the colleges of education is done once in every 5 years and until recently, usually by the external accreditors/regulators only. However, since 2012, the NCCE has embarked on the process of institutionalizing internal institutional 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), the responsibility for the quality of the teacher education programmes was entrusted to a university board, or a ministerial central department known as the Inspectorate Department vested with the powers to devise curricula, allocate financial resources as well as the hiring 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 are regulated through accreditation and other quality assurance measures by designated authorities, and (iii) responsibility for managing and regulating teachers is often assigned to organizations 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 3 out of which are private. In addition to the provision of comprehensive pre-service and in-service teacher education, the TED is also responsible for the registration of newly qualified teachers in the GES, management and implementation of distance education and sandwich programmes for basic school teachers as

well as, the 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, 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 Centers. As for the 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 levels teachers) are generally recruited by the MoE, the Directorates of Human Resources, Administration and Finance and that of the lower and senior secondary are involved in the planning and financing of this level of training.

On the contrary, the in-service training scheme is rather confusing in the sense that almost all the Central Directorates, the Regional Inspectorates, and the sub-Regional Inspectorates sometimes develop separate training activities based on their action plans or NGOs' and IDPs' funding at national or local levels. In this context, lack of clearly defined roles and responsibilities makes the management of such a system very ineffective and difficult.

In Zambia, the governance of teacher education is highly centralized with most of the decisionmaking regarding it starting from the headquarters in Lusaka and then cascading down to the 10 Provincial Education Offices, 103 District Education Boards, 837 Zonal Offices down to schools spread across the country. The main Ministry of Education, Science Vocational Training and Early Education (MOESVTEE) has a highly centralized structure, though attempts have been made with the introduction of the country's new national policy on Education, "Educating the Future: National Policy on Education" in 1996, 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 on the concurrent list with federal, states and local governments vested with constitutional rights to provide education. This means setting up of teacher training institutions can be done by anybody provided the norms and standards established for setting up such institutions 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 the responsibility of 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 the 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 chairmen 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 the 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 teacher training institutions.

Mozambique has a fairly decentralized system of governace 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 elementary schools construction up to the placement and movement of teachers. There is an on-going process of decentralization of the management of primary schools to the municipalities. Higher Education institutions are autonomous in terms of administrative and financial governance.

The governance structure of Madagascar is similar to that of Mozambique from the decentralization of the management of teacher education perspective with its central, regional and district directorates, which 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, decentralized responsibilities for teacher education. In the majority of cases, though, decision-making responsibilities remain highly centralized in national governments, which are the main funders of education in these countries. As 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 a 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 CIDA USAID and the Commonwealth of Learning) in all the countries . However, all countries reported gross under funding of teacher education, though only a few of them gave some indications of governments' expenditures on teacher education. Figure 8 below shows a graphic representation of the funding trend in 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, let alone that of teacher education. Furthermore, the figures from Nigeria included federal funding for teacher education at the federal colleges of education only. Funding for teacher education at the university level was not included.

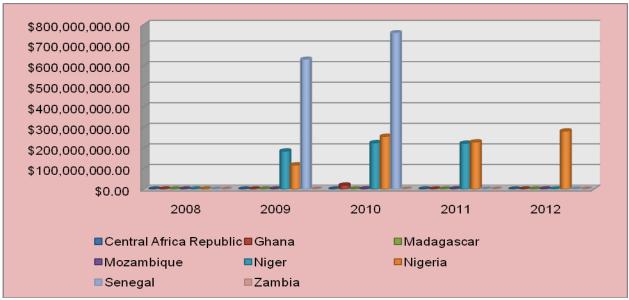


Figure 8: TEACHER EDUCATION BUDGET BY COUNTRY AND YEAR

Statistics of Teacher Profiles

From the data in the country profiles an impression might emerge that most teachers in these countries are qualified. Even countries which admit to employing huge numbers of unqualified contractual and volunteer teachers such as CAR, Niger, Madagascar and Senegal, still claimed that efforts made through what can best be described as crash programme teacher upgrading routes had raised the status of these teachers to qualified teacher status. While this may be true in the formal sense, it does not guarantee that the so called qualified teachers do in fact 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,

Source: INSET 2012 Country Reports, 2012

there is considerable out-of-subject teaching by qualified teachers. The figures in Table 2 below showing the statistics of teachers by level should be seen in light of the issues raised above.

Country	Total Number of Teachers	Number of Teachers required
Central Africa Republic	8,000	10,560
Ghana	190,198	36,519
Madagascar	84,895	_
Mozambique	93,597	92,762
Niger	42,619	36,0000
Senegal	48,771	1,143
Zambia	16,497	32,592
Nigeria	2,892,692	500,000

 Table 2: Actual Number of Teachers and Teachers Needed by Country as at 2012

Source: UNESCO Institute for Statistics and 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 give some indications 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 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 Monitoring Report indicates that Nigeria, for example, would need 500,000 additional qualified teachers to achieve EFA by 2015. In Ghana, only 44.8% of the required target of qualified teachers for kindergarten, 66.3% of primary school target and 82.9% 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%) are qualified, even though there is a deliberate attempt with its new teachers' selection criteria to upgrade all the unqualified teachers to qualified teacher status through 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, 6800 teachers in Ghana and 4500 in Zambia reflecting the 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). The colleges of education suffer even greater dearth of students because of the preferential option for university education among young people making teaching a last resort after university and polytechnic education. Enrollment in teacher education is higher in the francophone countries because training comes after employment.

Furthermore, the problem of qualified teacher shortages is confounded by teacher attrition. Various countries (for example, Nigeria, Senegal, Ghana, and Zambia) reported that most trained teachers leave teaching as soon as they have opportunity for so called greener pastures in spite of enhancement in teachers' salary and other non-monetary incentives accorded to teachers across the countries.

In Senegal, for example, the attrition rate is estimated at 3% per year and is mostly due to deployment of teachers to non-teaching positions (headmasters, principals, prefects, study leaves, etc.), or to other departments within administration and transfers sought after by teachers themselves to other public sectors, which they see as more lucrative than teaching. In Ghana, it is estimated that over 10,000 teachers leave the classroom yearly for different reasons, including exodus of basic and secondary teachers to tertiary institutions to acquire higher qualifications in order to obtain enhanced salaries and more attractive conditions of service. In other conflict stricken countries such as CAR, Madagascar and more recently in some parts of Northern Nigeria, teacher attrition is very high due to insecurity resulting in wide teacher gaps in the affected areas.

A part 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 with regard to efforts that are being made 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 recognized 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 himself/herself to 100 hours of training every year.

A 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 the pre-service teacher education provisions and to improve on the quality of teachers and teaching. However, the nature, scope and success of the provisions varied as a function of who the initiators of the programmes are and how much official support and finances are available for the programmes. While INSET is recognized as important and integrated into 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 and 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 a more extensive school-based professional development involving educator mentors visiting classrooms to observe and mentor teachers over a long period of time.

Alternatively, it may take the form of a full- or part-time study at a college or university for upgrading teachers' qualifications such as from diploma to bachelor's degree or from master's to

doctorate degrees. 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 the 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 the INSET strategies. A great part of the challenge is that of establishing policy frameworks that would guarantee the institutionalization 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 sub-set of teacher policies, which themselves are a further sub-set of the 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 the 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 emphasize the role of INSET in finding solution to the low proficiency levels of primary school pupils in basic education, which the 2008 report states that "less than 25% of Ghana's youth reach proficiency level for P6 English and 10% 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 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 emphasize the need for quality teachers as the bedrock for quality education for all culminating into 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) training aimed at ensuring coherence and continuity of training opportunities throughout the career of teachers. 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 life-long 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 coordinate 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" recognize the growing demand for in-service capacity building of 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 organized and not haphazard. Therefore, in-service training undertaken by any teacher must be relevant to his or her present career and in line with 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 was largely focused on preparing the multitudes of unqualified teachers in their 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 had 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 for the selection of teachers for tenure based on content knowledge examinations without the assurances that teachers 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. Lessons learnt from this long experience led the Government to take three major decisions in 2010/2012: (i) to stop 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.

This practice has tended to place greater emphasis on content knowledge than on pedagogical knowledge. The high rate of teacher failure in such examinations questions 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 following repeated recommendations from the annual reviews on the education sector, which reported a growing disquiet of the education community (including teachers themselves) regarding the teaching force and the poor performances of the students.

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 paucity of funds and commitment to the Jomtien 1990 Declaration of EFA and the Dakar Framework for Action of 2000, much of the attention and the mobilized resources are directed primarily to the initial training of teachers.

In Niger, like in CAR, the 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 of proximity for the Principals, Education Advisers and Inspectors was aimed at building the capacity of such senior education officers and equipping them with the mentoring skills vital for the successful implementation of the adopted school-based initiative embodied in la 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 mixture of both models are 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 places high premium on in-service training and teacher performance evaluation in schools and classrooms. The plan focuses on improving teacher skills and 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 schoolbased in-service training of teachers. Schools are expected to provide teachers with opportunities for improving on their knowledge and skills of teaching as well as 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 characterized by "uneven levels of merit and with a very specific and localized impact." In general, lack of a well defined teacher policy and appropriate strategies and 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. The 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 the preservice training and the preponderance of unqualified community and contract teachers in the country's basic education sector, government is now directing attention towards reducing the number of these 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 has proved unrealistic and has been reduced to 50% of teachers certified by 2012. It is still doubtful if this target has been 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 initiatives of in-service training of 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 in terms of financial accessibility to a majority of teachers whose very 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 programme could be very high. For example, for the period 2011-2012, the total costs of pre-service and in-service training in that country was estimated at \$18.6m 46% of which was devoted to 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. In Nigeria, on the other hand, the sum of \$25m is being spent annually by government on re-training of 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 re-training of its teachers, there do not appear to be any centrally coordinated 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 organizations in Table 3 one can see that INSET programmes take place within formal institutional structures that are used for pre-service education.

S/NO	COUNTRY	INSTITUTION/ ORGANIZATION	
1	Central Africa	a) Teacher Training Schools	
	Republic	b) National Institute of Research in Pedagogy and Teaching animation	
		c) National Center for In-service Training (CNFC)	
		d) Regional Teaching Centers (CPR)	
2	Ghana	a) Colleges of Education	
		b) University of Cape Coast	
		c) University of Education, Winneba	
		d) National INSET Unit	
		e) Staff Development Center for Ghana Education Services	
		f) Development Partners (UNICEF, JICA, USAID etc)	
2	Madaaaaaa	g) Ghana National Association of Teachers (GNAT) DNA	
2	Madagascar		
3	Mozambique	a) Teacher Training Colleges	
		b) Institute of Primary Teacher Training	
		c) National Institute for Literacy and Adult Education Training	
		d) Pedagogical University Educatione) Faculties of Education	
		f) Institute of Open and Distance Educationg) Catholic University of Mozambique	
4	Niger	a) Teacher Training Schools	
7	141501	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) Initiative Francophone pour la Formation a Distance des Maittres	
		(IFADEM)	
		g) Agence Universitaire de laFrancophonie (AUP)	
5	Nigeria	a) Colleges of Education	
		b) University's 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 Center 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	

Table 3: In-service Training Institutions/Organizations by Country

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 decentralized regional and district offices to schools. Management processes include the definition and discharge of roles and responsibilities and the transmission and channeling of information through the different parts of the governance structure and decision-making. In Ghana, for example, INSET is both a national and district jurisdiction and there are national and district INSET Units that govern and administer INSET. The national structures (National INSET Unit and National INSET Committee) take charge of overall administrative and policy issues while the district structures (District INSET Committee and District Teacher Support Team) are to ensure effective implementation of INSET at the school and cluster levels including monitoring and evaluation of the status of the school and cluster based INSET. The School-based INSET (SBI) and the 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. The District Education Officers are charged with the responsibility of preparing action plans, mobilizing funds, budgeting for INSET activities and implementing the training programmes.

In much the same vein, INSET in Nigeria is both a federal and state jurisdiction with clearly defined structures at 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 over 300 study centres spread across the length and breadth of the country coordinates the provision of INSET training programmes for basic education teachers in the country. Figure 10 below reflects both the frequency of the training and the numbers of primary school teachers trained by NTI in the last seven years.

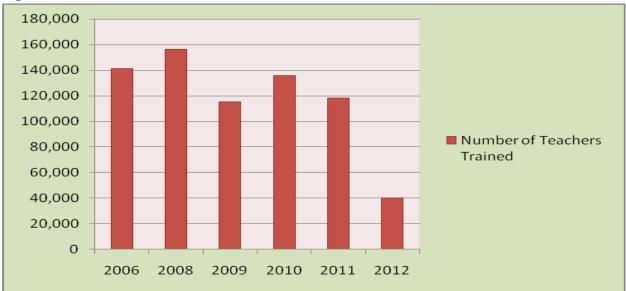


Figure 9: TEACHERS TRAINED BY NTI BY YEAR

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

In addition, the Universal Basic Education Commission (UBEC) devotes 15% of its intervention funds for 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 (Daily Trust, 30-09-10).

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 the school-based INSET initiatives though centrally driven by the national Ministries of Education of the affected countries is intended to involve a balance of autonomy and responsibility between the schools and the coordinating Ministries. Training funds though limited are made available to schools for INSET activities and the Head teacher and the Curriculum Leader are responsible for administration and coordination of both the school-based and the cluster-based INSET.

Part of the public funding of basic education in the 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 coordination, operation and funding agreements between the national and regional/district structures define the principles for the organization of the decentralized INSET systems in the affected countries. 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 of niger are decentralized Units with clearly defined roles and responsibilities of developing the INSET plans, programmes and budgets as well as ensuring the effective implementation of the INSET 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 inservice 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 being Niger which though 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 its in-service teacher training is to set up a school-based system of teacher 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 will be organized for these heads of schools through the la CAPED, in order to reinforce their capacities in administration and 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 sheer size of their basic education teachers both certified and uncertified that 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 the INSET programmes with clearly defined career paths in all the countries apart from mere expression of intent in policy documents of some countries (e.g., Nigeria, Ghana and Mozambique) has rendered most of the existing INSET programmes, particularly those focused on pedagogical renewal both ineffective and unattractive to teachers who do not perceive any relevance or link of the training programmes to their career progression.

Even in 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 proven both ineffective and very expensive as the experiences of Senegal, Madagascar and Central African Republic illustrate.

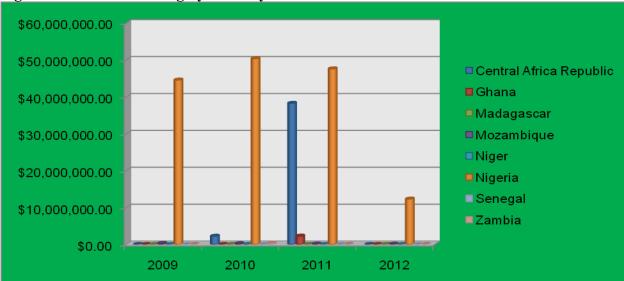
Thirdly, the patronizing nature of the provision of INSET exemplified by the popular one-shot training workshops raises questions about the relevance of the INSET programmes to teachers who are reduced to being mere receptacles of knowledge. The prevailing mixture of certified and uncertified teachers in the education systems of these countries calls for differentiated training programmes based on established training needs of the 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, location and also change over time. This means teachers' cognate experiences, mode of certification and location need to be utilized in the preparation of differentiated training programmes for them. 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 thus need to be re-examined and refocused on actual training needs of teachers and their career aspirations. The effectiveness of INSET will not be achieved without a stress on the critical issue of engaging teachers and their organizations 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.

Funding of INSET

The level of public funding of INSET varies among the eight countries and is affected by the annual budgets allocated to the general education systems by the national governments and their laid out priorities. As discussed in chapter 1, the Sub-Saharan African Countries are 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 the available resources/funds for education in these countries are devoted to establishing schools and increasing enrollments to the detriment of teacher education. There is a recurrent problem of under-funding of education in general and INSET in particular, across the countries studied with many of them reporting inadequate or no budgets for the INSET programmes (Figure 10 below). It is understandable therefore, that only few of the sampled countries have addressed INSET in any depth.





Source: INSET Country Reports.

If the resources are not there it becomes difficult to set up and manage the INSET system. The Nigeria and Madagascar examples illustrate how costly it is to provide INSET opportunities to teachers. For instance, the annual one week re-training of over half a million primary school teachers in Nigeria launched in 2006 required a budget in the order of \$25m per annum over a four year period. Likewise, the launch of the Special Teacher Upgrading Programme (STUP) required an initial funding of \$2.5m.

In Madagascar, 46% 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). The 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 OSUWELA project in Mozambique funded by Netherlands and the school-based 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 the projects cycles given the very limited government resources in these countries. 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 the eight countries. While no doubt the public sector can and must remain the focal point in the provision of INSET for teachers, the potentials of the private sector must also be fully exploited. It already has enough reference points in the provision of education and other social services that demonstrate its potency as a viable source of funding.

Modes of Delivery of INSET

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

• Face-to-Face Mode of Delivery

Many of the in-service education programmes found in the eight countries employ the face-toface 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 crop of national trainers are trained first who, in turn, train large numbers of teachers at designated centres or schools. In some cases, there might even be another cascade to 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 organizers of these in-service activities include the teacher training institutions and government agencies listed in Table 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 part-time basis by the colleges, universities and the National Teachers' Institute in Ghana and Nigeria in which teachers upgrade their qualifications to teach at higher levels or assume leadership positions. The latter is exemplified by the Senegalese RESAFAD and USAID/EDB (for teachers professional development), and the Faculty of Education (for certification training), and Nigeria's recent use of mobile technology to provide support to teachers of the English language in the Federal Capital Territory.

School-based Mode

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The school-based mode uses self-help models based on teachers working together at 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 la CAPED, Ghana's In-In-Out system at the colleges of education and Nigeria's 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 good examples of the use of school-based mode of delivery.

A 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 inservice training to teachers in these countries. From the summary of the INSET programmes in the Table 4, 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.

<i>S/NO</i>	COUNTRY	PROGRAME	
1	Central Africa Republic	 a) The INSET provision on the level of fundamental1 b) The INSET provision on the level of fundamental 11, General Secondary and Technical fundamental 2 c) CPR d) CNFC 	
2	Ghana	 a) Induction and Initial INSET program b) Continuing INSET for upgrading Professional Knowledge and Skills c) In-service Teacher Education programe (Distance Education Mode) 	
3	Madagascar	a) In-service Education for Qualification	
4	Mozambique	 b) Continuing Professional Development Programe 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) The training of proximity for the Principals, the Education advisers and the Inspectors c) Teaching Cell of Animation (CAPED) d) Face-to-face Training 	
6	Nigeria	a) In-service Education for Qualificationb) In-service Education for specific Skills or Knowledge	
7	Senegal	 a) Institutional provision for INSET/Requalification INSET b) Continuing INSET for upgrading 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 	

Table 4: Types of In-service Programes by Country

Source: 2012 INSET Country Reports, 2012.

INSET for Qualifications

In all the countries in the study teachers both qualified and unqualified were provided with opportunities to upgrade their qualifications or obtain one through college and university diplomas/certificates and degrees. Some countries (Ghana, Nigeria and Zambia) even offer inservice 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 at the root of the widespread phenomenon of the upgrading routes for teacher qualifications: the first was that often an insufficient number of teachers were produced by the teacher training institutions to match 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 of these countries resorted to filling their teacher gaps at these levels, particularly, the basic education level with uncertified and, or under-qualified teachers. Providing such teachers with opportunities for formal teacher education was viewed by many of these countries as a quick and cost-effective way of producing teachers.

A Second reason was that INSET for qualifications 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 to the teaching profession, especially if the programme, as it was in many cases, is subsidized by the employer.

However, as pointed out by Ottevanger, et. al (2008), both the policy and practice of teacher upgrading requires a very close scrutiny, most especially if the 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 end up lowering 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 degree is too big academically, then it may well be more cost-effective to expand enrollments 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 they focus on improving the competencies of teachers in the subjects they teach and at the level they are already qualified for, 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. This is however, 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 posts or levels to higher levels or different class within the school system. This means, 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 toward leadership and administrative functions. Many of the universities in the countries studied offer Master's degrees in Educational Management and Administration for secondary school teachers who aspire to assume leadership positions in their schools as principals or directors in the ministerial departments. These programmes are run both on full-time and on part-time basis.

INSET for Special Skills

There are many examples of continuing professional development programmes for subject teachers such as Science and Mathematics teachers (Nigeria and Ghana) or English language teachers (Nigeria and Zambia) from the countries in this study. 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 limited life span. 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, running consistently for 14 years since 2006 as a federal government intervention, is a notable exception in this regard. In addition, as noted in several of the country reports, though INSET programmes may be initiated and offered by one or several agencies of government, institutions and NGOs, they are rarely streamlined and coordinated in a collaborative manner; many of them exist as disparate attempts by different operators. An exception must be made, though, of 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 these INSET programmes. First, most INSET initiatives are based on workshops at designated centres and 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 the desired changes in classroom practices. This, normally, would require a much longer learning process (Ottevanger, 2001). Secondly, the successful implementation of the skills learned requires active support and coaching in the school environments which are varied both in terms of teachers and the resources available to them. If practical problems are encountered within the school contexts, the impetus for change is often very quickly lost. Thirdly, as reiterated by Ottevanger, et. al (2008), without the complete support of the school community (both material and social), individual teachers can easily meet resistance in starting to do things differently on their own.

Promising INSET Initiatives

In this section of the report, without seeking to be exhaustive, attempt is made to give examples of some innovative approaches to in-service education in the sampled countries that have proved effective and relevant in terms of producing the desired outcomes in relation to 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) MDG supported re-training of primary school teachers nationwide on an annual basis since 2006. This covers the over 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 & Plateau) and,

 iii) Special Teacher Upgrading Program (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 USD 25m per year) has been invested into every aspect of the planning and execution of the training workshops from 2006 to date.

A recent impact study of the MDG teacher re-training project, 2006-2010 revealed many of the academic content knowledge, skills and methods learnt by the participants at these workshops as testified by the participants and, or observed in their performance in the post workshop tests on the four core subjects and 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 re-training approach is usually a one-off training of one week duration in 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 that are 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 the 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 2-year fast tract training for serving Grade II teachers to qualify them for the award of 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 2 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 only 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%) teachers were upgraded to qualified teacher status.

The Zambian, Nigeriene, 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 is offered by the National In–Service Teachers College (NISTCOL) in basic schools since 1970 and in the recent time it has extended the training 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 Counseling

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, the CAPED constitutes the main approach to in-service training of teachers and is organized around the schools (*ecole sieges*). The schools become the basic units of INSET and the head teachers are in charge of the daily supervision of the teachers under their responsibility.

Training courses are organized for these heads of schools through the 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 schoolbased approach lasts for a much longer duration 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** in the face of limited qualified teachers has been one of the major challenges of the 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, do away with 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, re-invigoration of the District INSET Clusters, and the creation of the Association of Schools Headmasters known as (Collectif des Directeurs d'Ecoles or (CODEC), and the creation of a corps of education inspectors for lower and senior secondary education.

It should however be noted that in Senegal, the District INSET Clusters stand out and remain the only formal and institutional main 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 expose them to a programme of capacity building whose content is guided by the common challenges and concerns of teachers in a particular district. Their activities also include recommendations coming from national level deriving from analysis of students' performance indicators or based on curriculum reforms.

The coordination of the training activities of these INSET District Units revolve around the head of schools in such localities who, with the support of experienced teachers in their schools undertake mentorship and share teaching experiences with the 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 teachers/inspector ratio is very low. To make up for the shortfall of teachers/Inspectors vis-a-vis the large number of schools to be coordinated and supervised, Headmasters of Schools of the various localities through a union known as "Collectif Des Directeurs d'Ecoles" (Union of Principals of Schools). On these principals falls the responsibility of supervision of the District INSET Clusters operating under their respective jurisdictions, where for reason of distance and coverage, many teachers cannot have access to training opportunities.

Though the strategy in no doubt has its weaknesses, nonetheless, because of the peculiarity of its arrangement which brings together teachers of the same cultural environment and who suffer from similar teaching challenges, the strategy is found to meet the principles of effectiveness, efficiency and relevance. This system is one strategy which tackles the real difficulties of the teachers in their daily classroom practices in a given locality.

Ghana presented the Whole School Development Programme (WSD) supported by DFID and the Science, Technology and Mathematics (STM) 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 institutionalization of INSET across the length and breadth of the country. These structures have the prospects of sustaining Inset programmes in the country. For effective quality control, an instrument has been developed to annually monitor the implementation and impact of the projects.

INSET approach in the **Central Africa Republic** is holistic in its coverage. The approach covers the Inspectors of Education, In-Service and newly recruited teachers, School Administrators and Principals, Parents and Teachers Association 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 direct contact or face to face approach. It is conducted in the form of class visits, teaching animation in the schools, and 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 in line with a program of activities 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 allowed many teachers who otherwise would not have had time to partake in the Inset Training. Besides, it is also found to be cost effective.

INSET System of Reward and Sanctions

The link between the INSET training programmes and a reward system is an essential success factor. This is usually achieved through aligning the 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 provide indications about 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 recognized for re-licensing and promotion, while in Nigeria an attempt is made to link qualified teachers' registration requirements with the new teachers' salary scale (TSS) introduced by sates for the primary school teachers. This collaboration between the Teachers Registration Council of Nigeria (TRCN) and the states is helping the states in recruiting more qualified teachers for the 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. The INSET programmes are monitored by the same agencies that regulate the preservice teacher education in the various countries. Quality control is achieved through training of Master Trainers and training of Administrators at both provincial/state and district/local government levels. The established structures comprising the National Coordinating Units and the States Implementation Committees in collaboration with the National and State Trainers as well as the Administrators at the local level to guarantee the quality of the INSET training activities. In particular, the Administrators are trained in INSET system management and quality control strategies. This crop of Administrators are used to train relevant officials at the local levels on how to manage the quality of the 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 recognized as important in all the teacher policy documents of the eight countries even though progress on its implementation is at varying degrees. 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), to particular needs such as the use of ICT (Nigeria), or improvement in the teaching of curricular subjects such as Science and Mathematics (Ghana, Niger, Nigeria and Mozambique).

That 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 underfunding of teacher education generally and INSET activities in particular. The studies reported inadequate or lack of funding of INSET due to 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 very 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 the external assistance is stopped? Can they find the necessary resources to fund the initiatives? How can they ensure that these externally driven initiatives become institutionalized within the 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 the external funding from donors end, the projects also come to an end. Even where efforts to continue with the projects exist, financial means 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 in vacant teaching posts created by the massive expansion of education at the basic education level. Although this mix has helped in placing teachers in the classrooms in many countries, it does have its own disadvantages the effects of which are now being seen in the poor performance of school children across all the study countries.

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

There is also a lack of alignment of INSET activities with clearly defined career paths in all the countries except for the mere 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 the states in recruiting more qualified teachers for the basic education schools. For the INSET programmes to become less one-off and ad-hoc, it is important that it becomes fully integrated in the regular education and development of teachers.

Many of the INSET programmes are delivered through the cascade model, which involves the training and use of national master trainers who, in turn, train regional and district trainers down to school level. Although this model has proved very helpful in reaching large numbers of

teachers with few facilitators (for example, in Nigeria), it does have its own problems, one of which is that training may get diluted to unacceptable level with every step down the cascade. There is need therefore, for effective training of the facilitators and close monitoring of the 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) which 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 supervised 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 contacts 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 school or cluster levels. These training models, no doubt, have great potential of improving 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 that will make school-based training very 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 as well as the voluntary character of the actions of the managers of INSET, which does not contribute to its optimization.
- ii. In Zambia, the short term education management initiatives that 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 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 did not want to show their own teaching to their colleagues initially. The combination of the timing of the SBI/CBI activities mainly after school hours and other school activities constitutes 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, its offer may not be easily acceptable to teachers.

In this regard, it is also important to emphasize the significant importance of sensitization 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 which timing is most appropriate and ensure full participation of the trainees, the involvement of teachers is crucial..

It is for this reason that prior consultation with the teachers and their unions is necessary. When all this is done teachers will become more aware of the importance of the SBI/CBI and will participate actively in the activities.

The DLS and e-Learning INSET approaches being experimented on by Nigeria and Senegal respectively illustrate the potentials of such approaches in guaranteeing that the majority if not all teachers will 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 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 mode in teacher education.

vi. While there is no doubt that many teachers have attained the qualified teacher status in all the study countries as a result of the "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 no doubt, one which 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, attempt has been made in this section to proffer recommendations that could assist policymakers in designing more effective strategies for addressing teachers' continual desire and need for inservice education. The recommendations were 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 inservice education.

The review of the different policy documents of 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 apparent lack of budgetary provisions and absence of elaborate structures for effective management of the in-service training programmes.

Evidence from country experiences (e.g. the MDG Workshops in Nigeria) clearly shows that the operating costs of INSET are generally very high involving huge investments in the coordination 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 the 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 life. More often than not these concerns are neglected in the way policies are formulated.

The experience of Ghana in implementing SBI and CBI is indicative of policies, which though have the interest 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 where teachers cannot see any direct link between the training programmes offered with their career progression, or some monetary benefit accruing from participation (e.g. MDG workshops in Nigeria where teachers are paid for participation), they may be reluctant to take part in the training programmes or worse still, be less committed to the training.

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

The need for Coordinated Policy Frameworks and Structures

The country studies agree that the prevailing disparate nature of the provision of INSET across the eight countries requires integrated approaches involving effective coordination of activities and actors. Already, there exist in some countries (Nigeria, Ghana, Senegal and Zambia) national structures that can assume this responsibility.

What is required is establishing or strengthening of these structures where they exist with competent staff and resources to manage and coordinate 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 harmonize the donor-driven initiatives with the national progammes 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 no doubt the public sector can and must remain the focal point for the provision of INSET to teachers since majority of them are indeed public servants, the potentials of the private sector in the training and re-training of teachers should be exploited to complement governments' efforts. Already, the private sector has enough reference points on the educational landscape to defray any fears or doubt about its ability in this regard.

Leveraging private sector support can be achieved through sensitization of relevant stakeholders in the community. Head teachers can use the opportunities offered by School Based Management Committees (SBMCs/SMCs) and Parents Teachers Associations (PTAs) meetings to canvass support for the professional development of their teachers by presenting the schools' INSET action plans and advocate for support both financial and material, or the use of capable persons from the community as resource persons. Private-public partnership to provide INSET must be facilitated.

• The Need for Effective Decentralized INSET System

Attempts to decentralize 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 pointing to the need for regulatory frameworks that define authority, funding, roles and responsibilities for providing and managing INSET at the various levels. The 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 the 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 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 organizing training financially feasible with low cost for the Nigerian government which is in charge of the running cost component of the project. 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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