This paper attempts to present a picture of the need for supply of qualified teachers required in the provision of quality education for all children in Africa. None of the African countries has been able to meet the demand through the conventional approaches of teacher education. More teachers are needed as a result of the upsurge in the enrolment since the 1990s necessitated by the commitment of many countries to meet the EFA goals. This led to the increase of recruitment of untrained teachers to cope up with the large numbers. The situation has further been aggravated by the HIV/AIDS pandemic. The outcome is low levels of pupils’ achievement, low access and completion rates especially at primary level in most parts of the continent. For Africa to live to this challenge of inadequate supply of teachers there must be a paradigm shift that will lay more emphasis on embracing new approaches to teacher education which will reach large numbers of student teachers. In line with their national policy on education, governments should adopt implementation strategies of distance education and e-learning to increase access to distance educational programs. Government should therefore develop the National DE policy framework which must stipulate clearly the training and retraining strategies in the light of the changing challenges of distance education. The rise of civil societies and the expansion of transnational education, proper planning should be essence to ensure that urgent demands are met and of foremost importance should be the initial investment in infrastructure and capacity building through the system. In case of donor funding sustainability should be emphasized by being made time-bound and by institutionalizing DE programmes.