The Federal Democratic Republic of Ethiopia

Education Sector Development Program V (ESDP V)

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Program Action Plan

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Section 1

Development context

National development context

Education development context

Education policy framework

Full integration of cross-cutting issues

Figure 1: list of abbreviations used in this plan

ABE	Alternative Basic Education	**IFAE**	Integrated Functional Adult Education
ANFE	Adult and Non-Formal Education	**IFMIS**	Integrated Financial Management Information System
BPR	Business Process Reengineering	**KG**	Kindergarten
BSC	Balanced Scorecard	**KPI**	Key Performance Indicator
CEICT	Centre for Educational Information and Communication Technology	**MoE**	Ministry of Education
CLC	Community Learning Centre	**MoFED**	Ministry of Finance and Economic Development
CPD	Continuous Professional Development	**MSE**	Micro and Small Enterprises
CTE	College of Teacher Education	**NEAEA**	National Educational Assessment and Examinations Agency
DSA	Drug and Substance Abuse	**NER**	Net Enrolment Rate
ECCE	Early Childhood Care and Education	**NGO**	Non-Governmental Organisation
EGMA	Early Grade Mathematics Assessment	**NIR**	Net Intake Ratio
EGRA	Early Grade Reading Assessment	**NLA**	National Learning Assessment
EMIS	Education Management Information System	**OS**	Occupational Standards
ESDP	Education Sector Development Programme	**PSTA**	Parent, Student and Teacher Association
ETWG	Education Technical Working Group	**REB**	Regional Education Bureau
GDP	Gross Domestic Product	**SIP**	School Improvement Programme
GEQIP	General Education Quality Improvement Programme	**SMIS**	School Management Information System
GER	Gross Enrolment Rate	**SNE**	Special Needs Education
GIS	Geographical Information System	**TMIS**	Teacher Management Information System
GPI	Gender Parity Index	**TVET**	Technical and Vocational Education and Training
HIV/ AIDS	Human Immunodeficiency Virus infection and Acquired Immune Deficiency Syndrome	**WASH**	Water, Sanitation and Hygiene
ICT	Information and Communications Technology	**WHO**	World Health Organisation

National development context

Geography and population

Ethiopia is a big, diverse country with a population of over 95 million, in more than ninety ethnic and linguistic groups. The country's total land area is about 1.1 million square km, with a population density of 86 people per square km. Four in five of the population lives in the highland, temperate parts of the country. The remaining one in five of the population, mostly pastoral and agro-pastoral groups, lives in the lowland that covers 60% of the country's land area.

Ethiopia is one of the least urbanised countries in the world, with only an estimated 19% of its population living in urban areas. It is one of only sixteen countries with a level of urbanisation below 20% and amongst these countries it is comfortably the largest by population. With an annual population growth rate of 2.6% and a high rate of in-migration to towns and cities producing an annual urban population growth rate of 4.4%, the share of Ethiopia's population living in urban areas is expected to double by 2050 (an estimated 70 million urban dwellers in a population of 190 million).

A rapidly growing population, swift urbanisation and an age structure in which 44% of the population is between 0 and 14 years and 53% is between 15 and 65 years provide insights about Ethiopia's potential for social, political and economic change and development.

Politics, welfare and economics

Ethiopia has a federal structure with nine regional states (Afar, Amhara, Benishangul-Gumuz, Gambella, Harari, Oromiya, Somali, Southern Nations, Nationalities and Peoples' Region and Tigray) and two city administrations (Addis Ababa and Dire Dawa). Since 1991, Ethiopia has embarked on an ambitious transition from a centralised undemocratic nation to a democratic state, currently under the leadership of the Ethiopian People's Revolutionary Democratic Front (EPRDF). In this period, the country has held five elections and has established a decentralised system of governance with many fiscal and decision making powers devolved to regional levels.

Ethiopia is driven by its vision to become a middle-income country by 2025. The vision has been backed by prudent macro-economic policy and significant investments in infrastructure. As a result, the economy has experienced strong and broad-based growth over the past decade, averaging around 10% per year over the period 2003/04 to 2012/13, compared to the regional average of around 5%.

Agricultural production remains dominant in economic composition and is the source of livelihood for a great majority of the population. In recent years, however, the share of services and industry sectors in the economy is increasing in contrast to that of agriculture which is declining. For example, in 2013/14 the shares of services, agriculture and industry stand at 46%, 40% and 14%, respectively, in contrast to 45%, 43% and 12%, in the preceding year. The annual growth in the industry sector was substantial (21%), mainly driven by strong performance in the construction sub-sector.

The changing economic structure has obvious implications for education and training but it should not be interpreted as heralding a move away from agriculture. Despite the growing share of industry and service sectors in economic performance – and the desire for these to take a larger role in a new productive structure – agriculture will remain a priority for the second Growth and Transformation Plan given its critical importance to livelihoods.

Sustained economic growth brought with it positive trends in reducing poverty, in both urban and rural areas. While 39% of Ethiopians lived in extreme poverty in 2005 (national poverty line of less than $0.6 per day), five years later this was 30%, a decrease of nine percentage points. The rate of poverty reduction in this period was higher than in the preceding five years, during which a decrease of six percentage points was observed. The continued decrease in poverty is attributed to the pro-poor programmes that have been implemented in rural areas such as extension programmes to support commercialisation of smallholder agriculture and the Productive Safety Net Program, among others.

Ethiopia has achieved the Millennium Development Goal (MDG) for child mortality and the sub-goal of halving the number of people without sustainable access to water. Due to these and other MDG and developmental improvements, the life expectancy at birth in Ethiopia is now estimated at almost 65 years, compared to around 60 years in 2009 and a mere 52 years at the start of the millennium. Further, the Human Development Index shows Ethiopia performing better than many low-

income countries and Ethiopia also scores better than the median African country on governance attributes—especially social welfare, education and health.

National development policy

Ethiopia is embarking on its fourth macro-economic development programme since 1995, all of which have been designed to accelerate the reduction of poverty. The central objectives of these national strategies are to address the human development needs; achieve the Millennium Development Goals and future Sustainable Development Goals; and move Ethiopia towards a middle income economy by 2025. National development plans are summarised here.

Years	Prevailing plan	Themes
1995 to 2005	Sustainable Development and Poverty Reduction Program	Devolution to regions
		Government establishment at all levels
		Open economy
		Develop social sectors
2005 to 2010	Plan for Accelerated and Sustained Development to End Poverty	Pro-poor growth
		Poverty reduction
		Government strengthening
		Aid management
2010 to 2015	First Growth and Transformation Plan	Economic growth
		Industrial development
		Infrastructure development
		MDG attainment
2015 to 2020	Second Growth and Transformation Plan	Economic growth and diversification
		Industrialisation and mechanisation
		Advanced sciences and technologies
		SDG attainment

Implications for the education sector

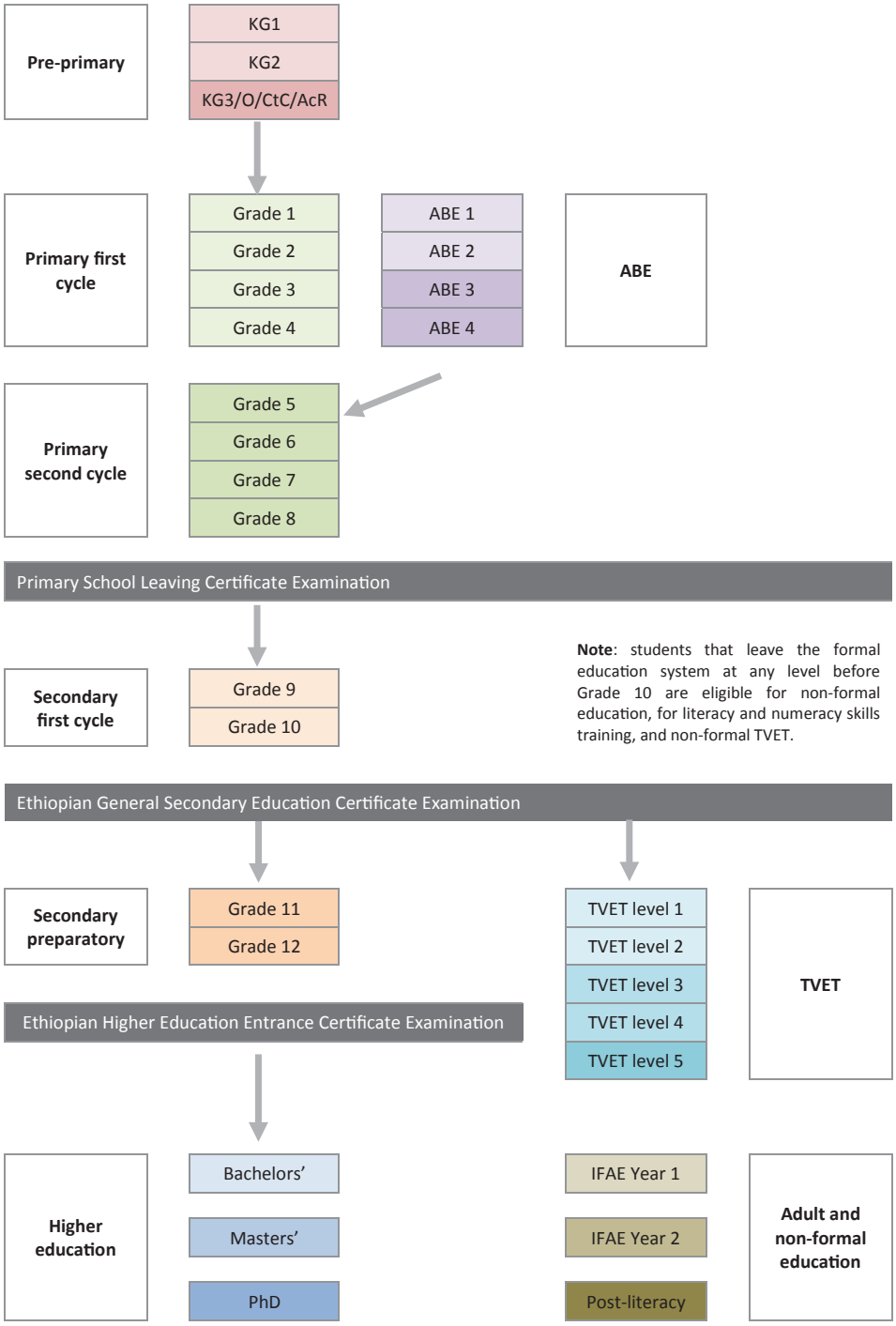
The fact that a large majority of the Ethiopian population lives in rural areas and in fairly dispersed communities poses specific problems for the education sector: spreading education and ensuring equitable access to education presents specific challenges in such a geographic context. In addition, the existence of many pastoral and semi-pastoralist groups raises issues of organisation of the school system and also of the relevance of the curriculum. The demographic pressures of the country increase the demand for quality education and offer a great window of opportunity for development if investments are made to ensure a fair distribution of education at all levels.

The application of science, technology and innovation as the major instruments to create wealth has now taken its place as the foundation for achieving the long-term vision of transforming Ethiopia into a middle-income country. Progressively, greater shares of economic production will come from industry and manufacturing with consequent demands for middle- and higher-level skilled manpower.

Achieving this vision will also require further expansion of access to high-quality basic education and special efforts to improve the overall literacy and numeracy level of the population. It demands that human resource development be strengthened by training competent and innovative people and demands that regular adjustments to education and training be made so that human development investments focus on equipping a workforce that can meet the various productive sectors' needs.

ESDP V preparation has been inspired by this vision: maintaining the momentum of expanding equitable access to quality general education, establishing Technical and Vocational Education and Training (TVET) institutes in all woredas, strengthening tertiary education institutions and providing lifelong learning opportunities so that all can contribute and benefit from rapid growth and economic change. In pursuit of these goals, the following ambitious ESDP V is prepared, supported by government commitment to the education and training sector and the sector's potential to deliver the goals that make up the plan.

Figure 2: the Ethiopian education and training system at a glance [1]



1 Kindergarten (KG); Alternative Basic Education (ABE); Technical and Vocational Education and Training (TVET), Integrated Functional Adult Education (IFAE)

Education development context

General education

Two main goals were identified under ESDP IV. The first was to improve access to quality primary education in order to make sure that all children, youth and adults acquire the competencies, skills and values that enable them to participate fully in the development of Ethiopia. The other was to sustain equitable access to quality secondary education services as the basis and bridge to the demand of the economy for middle- and higher-level human resources.

Each sub-sector had further priorities and targets in ESDP IV; progress against these during the ESDP IV period is reviewed here.2

If expansion of pre-primary education continues to follow the same pattern across regions and kindergartens remain accessible almost exclusively to those in urban areas, it may only increase educational advantages for children from urban areas whose families are able to send them to kindergarten.

Access and equity in general education

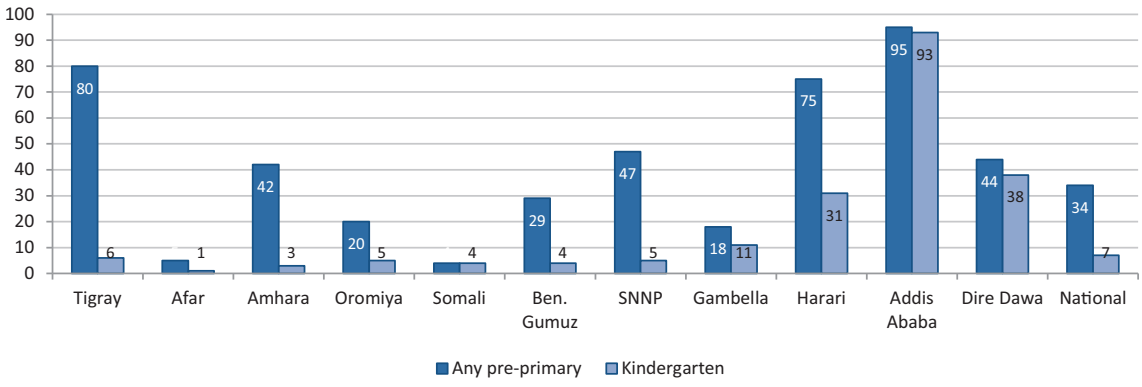
Access and equity in Early Childhood Care and Education (ECCE)

In the first year of ESDP IV, the government established a Strategic Operational Plan and Guidelines for ECCE. The strategy encourages private investors, faith-based organisations and Non-Governmental Organisations (NGOs) into the delivery of ECCE. In the last years of ESDP IV, ECCE has been prioritised by government, with the establishment of a national steering committee, regional councils and woreda technical committees and rapid expansion of access to O-Classes as a reception year prior to grade one. These structures function in collaboration with other relevant ministries, with a view to coordinate, support and monitor the involvement of stakeholders in ECCE. They have provided a foundation from which rapid expansion of ECCE is possible.

These efforts have allowed the Gross Enrolment Rate (GER) for pre-primary to reach 34% in 2013/14, of which around a quarter is in three-year kindergarten and the remainder one-year O-Class and Child-to-Child instruction. This is above the ESDP IV target for ECCE which was 20% (from a baseline of 6.9% at the start of the plan).

Total access and variation in modalities across regions, however, has implications in terms of preparedness for grade one. A child who has completed three years of kindergarten (predominantly in urban areas) is currently better prepared to enter school than a child who has received one year of O-class or Child-to-Child instruction – modalities that are emerging rapidly and are gradually improving in quality. If expansion of pre-primary education continues to follow the same pattern across regions and kindergartens remain accessible almost exclusively to those in urban areas, it may only increase educational advantages for children from urban areas whose families are able to send them to kindergarten.

Figure 3: GER in pre-primary versus kindergarten, by region, 2013/14 (%)



2 Where progress in another time period is discussed, this will be stated. Otherwise, all progress is assumed in the ESDP IV period from 2009/10 to 2014/15.

Access and equity in primary education including Alternative Basic Education (ABE)

The government has continued to expand access to achieve universal primary education in line with the Education for All goals. Considerable progress has been made through school construction by reducing the distance between schools and pupils' homes. The national ABE strategy (since 2006) has guided the extension and transformation of existing ABE centres into regular schools and the establishment of new ABE centres. This alternative education provision responds to different needs and contexts and, along with the special support programme to improve implementation capacity in the emerging regions, it has improved the enrolment of disadvantaged and previously under-served ethnic groups.

As a result of concerted efforts since 1996, the number of primary schools (including ABE) has risen from 11,000 to 32,048 and student enrolment at this level has grown from less than 3 million to over 18 million within the same time frame. This progress represents a considerable achievement. The current supply of schools allows for full intake of students into grade one when they reach the age of seven. As of 2013/14, the Net Intake Ratio (NIR) was 106% (102% for girls and 109% for boys) compared to the target of 100%. Rates of more than 100% are technically impossible but arise due to imprecise population figures and challenges in measurement of student age at the point of entry (e.g. lack of uniform birth registration).

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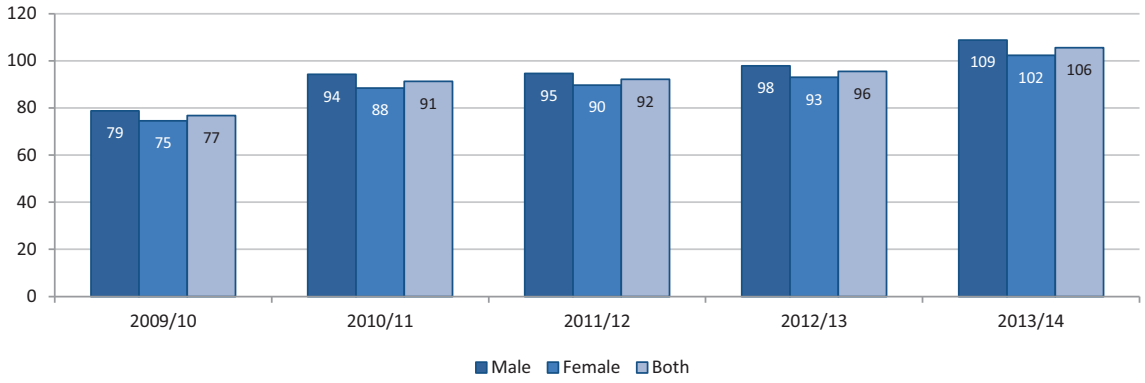
Figure 4: NIR to grade one, by gender, 2013/14 (%)

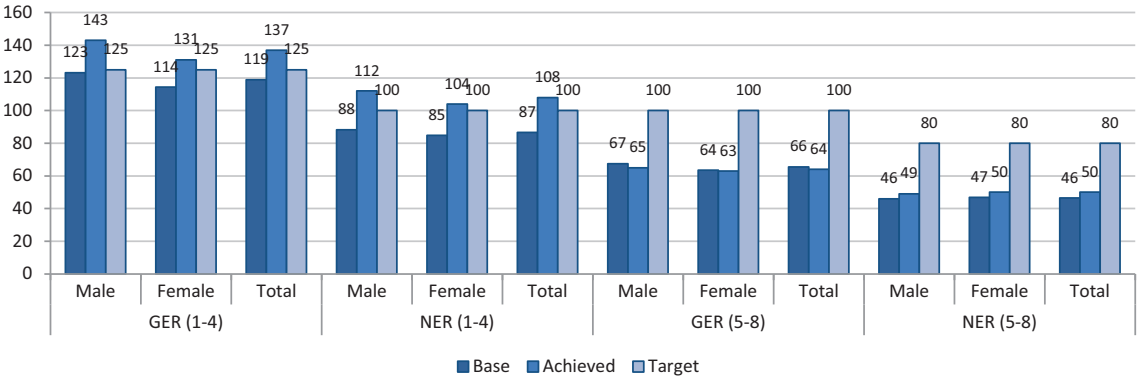


There exist, however, large regional variations in enrolment on time (i.e. at the age of seven), which is shown through NIR that are generally in the range of 50-120%.

Despite the dramatic achievement in access, equivalent attainment to higher grades is not apparent. Too many students leave the system early which is reflected in a grade eight completion rate of only 47%. Targets for first cycle primary (grades one to four) GER, set at 125%, have been surpassed for males and almost achieved for females. These are combined with great increases in NER, indicating that children are now far more likely to enter and transition in the correct grade-for-age. By the time the primary second cycle is reached, however, the picture is less impressive. The overall GER and NER in second cycle stand at 64% (63% for girls and 65% for boys) and 50% (50% for girls and 49% for boys) respectively in 2013/14. These are against targets of 100% and 80%, respectively.

Despite the dramatic achievement in access, equivalent attainment to higher grades is not apparent. Too many students leave the system early which is reflected in a grade eight completion rate of only 47%.

Figure 5: primary NER and GER in 2013/14, against baseline in 2009/10 and ESDP IV targets (%)



Low enrolment rates in primary second cycle reveal the persistent challenge of reducing dropout and repetition. For both boys and girls, the targets set in ESDP IV for dropout (1% in all primary grades) and repetition (1% in all primary grades) were ambitious and these dictated enrolment rate targets. Performance against these targets, however, has been poor. As ESDP V begins, repetition rates persist at around 8% and dropout, although with improvement in 2013/14, remains at 22% in grade one and 11% thereafter. Both repetition and dropout rates are approximately the same for girls and boys.

Access and equity in secondary education

Within the last twenty years secondary school enrolment has expanded rapidly, roughly fivefold, from an enrolled population of 371,000 in 1994/95 to almost 2 million in 2013/14. A remaining constraint is uneven access to secondary schools, with supply favouring urban areas. With 32,048 primary schools and 2,333 secondary schools, the supply step is large. In addition, factors that influence demand for secondary education include: poverty, lack of transport, the need to work (time and economic restrictions), early marriage (gender biases), lack of accommodation near schools (financial, cultural and social) and disability. These supply and demand effects are reflected in variable regional enrolment rates of, for example, less than 10% in Afar and more than 100% in Addis Ababa.

Figure 6: GER trends in secondary education grades nine to ten, 2009/10 to 2013/14 (%)

Largely due to lower than expected primary completion (flow through the system), the GER in grades nine to ten has changed little, starting from 39.1% and reaching 39.3% against a target of 62%. The relatively higher growth of enrolment in second cycle secondary (grades eleven to twelve) is influenced by demand from universities for students to fill places. This has motivated an increase in transition for students from grade ten to grade eleven, reaching 30-35% in the final years of ESDP IV, against a policy of 20%.

The NER for these cycles – 20% for first and 6% for second reveal that around half of students are over-age and half are in the grades on time. Gender equity in secondary education has, however, greatly improved with parity indices reaching 0.94 and 0.85 respectively in 2013/14, from 0.80 and 0.46 in 2009/10.

Access and equity in Adult and Non-Formal Education (ANFE)

The high level of illiteracy in the adult population is a barrier to achieving development goals, particularly that of achieving lower middle income economy status by 2025. Improving adult literacy rates will also support other development goals such as children with literate parents staying in school. Each extra year of education for mothers is also associated with a significant decline in infant mortality and improved child health.

The National Adult Education Strategy implemented through ESDP IV put a special policy focus on Integrated Functional Adult Education (IFAE). The two-year IFAE programme for 15-60 year olds provides mother tongue reading, writing and arithmetic skills development integrated with practical knowledge and skills. It is designed to make use of inputs from other development workers (agriculture, health, etc.) and builds on indigenous knowledge. It seeks to link numeracy and literacy skills to livelihoods and skills training in agriculture (including off-farm activities), health, civic and cultural education and requires delivery by various governmental and non-governmental service providers.

The ESDP IV target was to enrol 36.4 million adults in the two year IFAE programmes. In 2012, however, the Central Statistical Agency Welfare Monitoring Survey Report estimated that there were 20.4 million illiterate adults, so in 2012/13 the ESDP IV target was adjusted to 19.4 million.3 Of this number, approximately 10.2 million illiterate adults (53%), of which 42% are female, have participated in year one and nearly 5 million (24%) have graduated from year two of the IFAE course. The participation of adult women in the programme is limited and accessibility of the programme in the four emerging regions is seriously impaired.

Quality of general education

Learning outcomes

Early Grade Reading Assessment (EGRA)

In 2010, an EGRA of student literacy was conducted in grades two and three. It showed that children in primary first cycle were not developing the basic skills required to learn effectively in later years. For example, 34% of students in grade two were unable to read a single word of a grade-level relevant story; 48% of students were unable to answer a single comprehension question on a reading comprehension test; and only 5% of students were able to reach 60 words per minute in reading fluency (the then expected standard).

The high level of illiteracy in the adult population is a barrier to achieving development goals, particularly that of achieving lower middle income economy status by 2025. Improving adult literacy rates will also support other development goals such as children with literate parents staying in school.

Poor basic skills acquisition in the early grades prevents children from learning effectively in their mother tongue, in Amharic and in English, affecting all subsequent levels of education and impacting skills acquisition in other subjects. In response to the EGRA results, huge efforts have begun through the development of a national mother tongue curriculum in the seven main languages, the training of teachers to deliver this curriculum and the production and distribution of linked teaching and learning materials.

A follow-up benchmarking exercise, conducted in 2014, serves as a basis for setting standards to guide future assessment in the seven main languages (and will be extended as further mother tongue languages are added). This exercise establishes the baseline levels of oral reading fluency, at four competency levels. These baseline levels have been categorised for ease of monitoring as 'None' (Non-reader); 'Below Basic' (Reading slowly with limited comprehension); 'Basic' (Reading with some fluency and comprehension); and 'Proficient' (Reading fluently with full comprehension).

3 A national census will be conducted in the ESDP V period. This, along with updated Welfare Monitoring Survey Reports, will be used to update the target population of illiterate adults.

Figure 7: baselines for oral reading fluency in seven languages, at grade two (%)

Language	Reading fluently with full comprehension	Reading with some fluency and comprehension	Reading slowly with limited comprehension	Non-reader
Proficiency level	'Proficient'	'Basic'	'Below Basic'	'None'
Afaan Oromo	5	20	21	54
Af-Somali	34	27	13	26
Amharic	6	21	48	25
Hadiyyisa	4	7	13	76
Sidaamu Afoo	3	13	15	69
Tigrinya	2	33	34	31
Wolayttatto	12	20	18	50

National Learning Assessments (NLA)

Every four years an NLA is conducted in grades four, eight, ten and twelve. For ESDP IV, the shares of students scoring at least 50% and 75% in NLAs were set as targets. In general, there remain huge gaps between what was planned and targeted and what has been achieved at all levels, with some progress made in grade ten but little elsewhere.

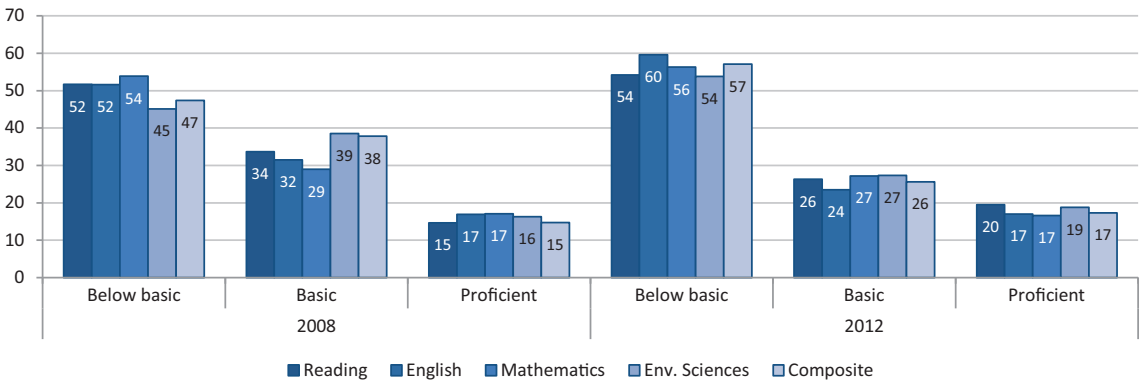
Figure 8: NLA results against targets set in ESDP IV (%)

Grade (Assessment Year)	4 (2012)		8 (2012)		10 (2014)		12 (2014)	
Benchmark	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
Scoring 50% or above	75	25	70	7.5	70	23	70	34
Scoring 75% or above	25	2.3	25	0.1	25	3	25	4

Grades four and eight

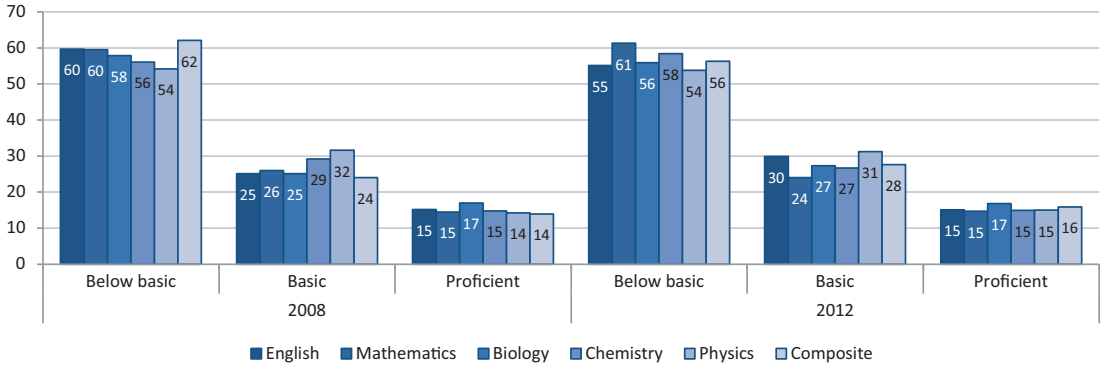
At grade four, the overall picture for learning outcomes, as measured in 2008 and 2012, is of a movement of students out of 'basic' and into 'below basic' or 'proficient'. In the same period, the average composite score fell from 41% to 40% and remains below 50% in all regions except Addis Ababa.

Figure 9: proficiency levels by subject in the grade four NLA, 2008 compared to 2012 (%)



In grade eight, a slightly higher proportion of students were classified as proficient in 2012 compared to 2008 (16% in composite score, up from 14%). In contrast to grade four, the grade eight NLA shows a general increase in basic proficiency, with a loss of six percentage points in the below-basic category.

Figure 10: proficiency levels by subject in the grade eight NLA, 2008 compared to 2012 (%)



Grades ten and twelve

In grade ten, the share of students that achieved an average score of 50% across the five core subjects (mathematics, English, physics, chemistry, biology) stood at 23% in the 2014 assessment. In the same assessment, only 3% achieved 75% or above in their average score. Among subjects, performance in biology was relatively high, with 40% achieving 50% or above and 11% achieving 75% and above. This contrasts with performance in physics, in which 14% and 2% of students achieved 50% and 75%, respectively. Although all results remain low, they do reflect an improvement on the same assessment conducted in 2010, in which only 14% of students achieved an average score of 50% and 1% an average score of 75%.

At grade twelve, performance is better, as is expected due to selection on student performance following grade ten. In the latest, 2014, assessment 34% of students achieved an average score of 50% across the five core subjects (mathematics, English, physics, chemistry, biology); and 4% of students achieved an average score of 75%. In relation to the same assessment conducted in 2010 these rates reveal a slight decline in average student performance, which carries implication for quality of entrant to higher education institutions but is not surprising given the rapid expansion of enrolment in preparatory education.

Quality of ECCE

The rapid expansion of pre-primary education, particularly O-Classes, raises concern regarding the quality of education offered. Presently, primary school teachers are using available periods to provide O-Class instruction. In addition, school communities are directly contracting staff to provide instruction to children in O-Classes. These innovations are well-received but come with drawbacks in terms of consistency and appropriateness of instruction, which are not generally apparent in kindergartens.

Steps have been taken to address these shortcomings. In the final year of ESDP IV, 7 out of 36 Colleges of Teacher Education (CTEs) began a multi-year diploma specifically for pre-primary teachers. Among these, one has skilled teacher educators for ECCE and during ESDP V, activities will seek to improve teacher educators' knowledge, skills and experience for ECCE instruction across all CTEs. In addition, standards for learning materials in O-Classes and a specific curriculum are under development, along with the preparation of a one-year certificate training curriculum. These activities, along with pilots of accelerated child readiness programmes, evaluations of Child-to-Child and assessments of O-Class provision will provide valuable inputs to improve the quality of pre-primary education during ESDP V.

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Quality of primary and secondary education (including ABE)

The low quality of outcomes and persistent high dropout and repetition rates identified above, reflects low quality of educational inputs, i.e. skilled teachers, relevant teaching and learning materials etc. For every 1,000 children that begin school, around one-half will pass uninterrupted to grade five and only one-fifth to completion of grade eight. The failure of the education system to ensure student learning and acquisition of basic skills such as literacy and numeracy contributes to observed poor attainment and achievement.

Concerning teachers and leaders

During the implementation of ESDP IV, it was planned to fill all levels of general education with academically qualified, motivated and ethically

fit teachers, in accordance with the teacher development policy. Accordingly, the share of primary teachers with a diploma was expected to increase from 38% to 100% by 2014/15. By 2013/14, 70% of primary-level teachers held the required qualification (55% in first cycle, 92% in second cycle). Although off-target, this development should not be underestimated as the share of teachers qualified to diploma-or-above has almost doubled, during a time in which the number of teachers increased by more than 30% and pupil teacher ratios fell from 51 to 47. In addition, at the secondary level, 93% of teachers are appropriately qualified (with a first or a masters' degree).

Amongst the regions there is much variation in the share of qualified primary school teachers. In the compact, urban centres of Harari and Addis Ababa, teacher qualification rates are as high as 82% and 91%, respectively whereas these rates stand at 35% in Somali and 42% in Afar. In Somali, incentives have been used effectively to increase the share of qualified teachers in all areas but the variation in qualification rates across regions remains an indication that full implementation of the teacher development policy has not yet occurred, especially provisions related to placement and incentives. Of all primary teaching staff, 63% are male and 37% female but of the males, 68% are qualified to standard versus 73% of females.

Under the General Education Quality Improvement Program (GEQIP), massive textbook production and distribution has continued, so that a student to textbook ratio of 1:1 has been achieved at all levels, although surveys suggest that the rate is lower in terms of textbook availability and use in the classroom.

It was also planned to license all teachers by 2015. This target was set, however, before the work volume was clearly identified, or a regulatory body established. In 2011/12, the licensing directorate began to function and supports the on-going efforts to ensure suitably qualified and capable teaching staff. Its growing system of licensing and re-licensing assesses professional competencies on the basis of pre-determined standards.

In terms of relevance and quality of training, the new three-year diploma programme for primary teachers is entering its second year of implementation in all CTEs. A 'linear' curriculum remains for teachers of second cycle primary schooling and a move towards the 'cluster' format (in which teachers focus on groups of related subjects, to ensure broad knowledge) is expected to better prepare teachers for the first cycle of primary school where broad subject knowledge is expected.

Within CTEs there remain weaknesses in the practical experience of teacher educators and in the subject knowledge of teacher trainees. In addition, teacher pedagogical skills – which now receive greater emphasis in the diploma programme – are still below the level needed to apply the active teaching and student-centred methods required by the new curriculum. To overcome these challenges, bridging courses for new teacher trainees are now included to ensure that all candidates entering from grade ten hold the necessary subject knowledge. To improve in-practice experience among teacher educators, CTEs and universities that train teachers are encouraged to establish partnerships with nearby ECCE, primary and secondary schools. These links will be strengthened during the ESDP V period.

The Leadership and Management Programme was redesigned during ESDP IV and has now provided training to more than 25,000 school principals and supervisors. The new training course, which began two years ago, continues to provide both theoretical understanding and practical skills in core areas of supervision/management and school leadership. In addition, a refreshed emphasis on instructional leadership is included, to improve leaders' support to the teaching and learning process through, for example, classroom observation skills.

Concerning curriculum, textbooks and assessment

Implementation of the new curriculum proceeded through the period of ESDP IV. All schools have now been reached, even though roll-out at the primary level has been slower than for secondary. The ABE curriculum for over-aged students has also been developed and relevant and appropriate training on its implementation delivered.

Under the General Education Quality Improvement Program (GEQIP), massive textbook production and distribution has continued, so that a student to textbook ratio of 1:1 has been achieved at all levels, although surveys suggest that the rate is lower in terms of textbook availability and use in the classroom. There remains a lack, however, of educational and curricular materials adapted for learners with special educational needs. In addition, the absence of competent printing agencies in Ethiopia limits quality production options and can inflate prices.

The new curriculum revisions were well received but a common complaint among students, teachers and higher officials was a lack of linkage between examinations and curriculum. The Ministry of Education (MoE), in collaboration with the National Educational Assessment and Examinations Agency (NEAEA) is in the process of assessing all national examinations to ensure compliance with new curriculum content and materials. Regional Education Bureaus (REBs)

will conduct a similar assessment for regionally set and administered examinations.

Concerning the use of Information Communications Technology (ICT)

In ESDP IV, it was planned to equip all secondary and preparatory schools with the equipment necessary to access satellite television education and e-learning programmes in well-organised computer laboratories. To date, 69% of secondary schools have benefited from the educational satellite television broadcast programme. To overcome shortages of power supply in schools and interruption of satellite transmission, newly developed educational television programmes were digitised and dispatched to all REBs on DVDs.

Only 28% of secondary schools have access to an internet service and, of these, only 6% have high capacity content servers. Disparities, linked to power/network limitations, are common in ICT utilisation in education among the regions.

English language interactive radio instruction programmes have been developed by the Centre for Educational Information and Communication Technology (CEICT) of the MoE for use in primary schools. During ESDP-IV, these programmes, as well as educational audio programmes in other subjects, were aired to primary schools.

Concerning the quality of school infrastructure and facilities

The School Improvement Programme (SIP) is intended to improve the capacity of schools to prioritise needs and to translate these into actions captured in a school improvement plan. School grants (based on enrolment) are disbursed to schools to finance planned improvements. Improvements in school infrastructure and facilities have not yet reached the expected standard in most schools. For example, while over 92% of primary schools report having latrines, almost 60% of primary schools have no access to water, only 20% have a clinic and around half have a pedagogical centre for teaching aids. Resource centres to support inclusive education have recently been established on a pilot basis in 113 clusters. The condition of secondary school facilities is better than that of primary schools. Almost all secondary schools have latrines; four in five have water and the same share a supply of electricity. Library services are provided in 72% of secondary schools.

School standards are now assessed by a school inspection service, established in 2012, which combines school self-inspection with independent visits to measure performance in relation to inputs, processes and outputs. The first school self-assessments, in eight regions in 2014/15, support the argument that progress is underway but that standards generally remain below the expected levels.

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Figure 11: school performances levels in 2013/14

Level	Well above the standards (Level 4)	Meet the standards (Level 3)	Require improvement (Level 2)	Well below the standard (Level 1)	Total
Primary	855 (3%)	5,197 (18%)	15,043 (53%)	7,117 (26%)	28,212 (100%)
Secondary	59 (3%)	466 (27%)	1,054 (60%)	184 (10%)	1,763 (100%)

Technical and Vocational Education and Training

The main objective of TVET is to produce a lower and middle-level, competent, motivated, adaptable and innovative workforce. Through the supply of demand-driven, quality TVET, this workforce can transfer demanded technologies and contribute to poverty reduction and social and economic development.

Access and equity

During ESDP IV, formal TVET was expected to provide training for up to 80% of students that sit for the grade ten exams. In this period, however, a decline in the transition rate of students from grade ten entering TVET has been observed, along with an associated decrease in absolute

terms of formal TVET enrolment. The transition rate to TVET reached 45% of grade ten completers in 2013/14, representing a total enrolment of 276,105 students (from 80% transition and an enrolment at the beginning of the period of more than 340,000). In terms of gender, however, with 51% female enrolees, equity has been achieved and surpassed – although disparities remain by training type.

While there were TVET training opportunities in all regions, enrolment in some regions was not sufficient according to geographic area and population. In Afar, Gambella, Benishangul-Gumuz, Somali and Harari, TVET enrolments are particularly low.

The far-reaching reforms of the TVET system over the past years have not been explained properly to the public and this lack of communication and awareness has affected the maximum expected intake in formal TVET.

There are five main reasons, affecting both supply and demand, for the failure to reach the 80% enrolment target. Firstly, the number of students attending/completing grade ten was much smaller than projected in ESDP IV, which reduced the pool of eligible enrolees. Second, the policy is for 20% of grade ten completers to pass to grade eleven and the remainder to be available for TVET. In recent years, however, the share passing to grade eleven has been between 30% and 35% in response to higher education enrolment capacity.

Third, about 15% of grade ten completers follow other programmes, including those at teacher training institutions, police and military academies. Fourth, TVET institutions do not exist in all woredas. Although there were 1,348 TVET institutions in 2013/14 (compared to the planned 1,074), only 334 public institutions and 282 private/NGO institutions can deliver with full capacity (i.e. up to level V, the highest level) and the remaining 732 (325 public and 407 private) deliver only short-term trainings (some up to level II to respond to the requirements of those seeking jobs through short term training). Fifth and finally, the far-reaching reforms of the TVET system over the past years have not been explained properly to the public and this lack of communication and awareness has affected the maximum expected intake in formal TVET.

It should be noted, however, that the number of trainees enrolled in short-term training during the years 2012/13 and 2013/14 are not included in the number of formal enrolments since these trainees represent a mix of those who complete grade ten and many others. For example in 2013/14, the number of trainees enrolled in short term training was 1,955,826 which means that overall enrolment in TVET was not, in fact, decreasing. In addition, it was planned that 40% of TVET learners would be enrolled in the private sector; however, this figure has been close to 20% over the period and the share is slowly decreasing. The private sector has not provided training to the extent expected and this has limited access.

Quality

As a major intervention to raise the quality of TVET programmes, the competence of all TVET trainers has been assessed and where necessary several in-service training sessions were conducted. The topics of these sessions were related to the technical gaps identified but also included entrepreneurship training, occupation-specific curriculum development, training methodology, institutional assessment and quality and productivity improvement. Further training on the cooperative training modality was conducted, which requires trainees to spend 30% of their time in the TVET institution to develop basic skills and 70% in industry to acquire practical skills in the workplace.

The tasks performed at the input and process levels contributed to an increase in the annual competency rate from 20% in 2009/10 to 60% in 2013/14 and an increase in the number of technologies transferred to Micro and Small Enterprises (MSEs). The total number of trainers has increased from 11,153 in 2010/11 to 17,322 in 2013/14 and the planned distribution of trainers of 1:3:24 for A: B: C level trainers was achieved (A highest skill; C lowest skill)4. There is, however, a lack of female trainers (17% of the total) and managers/leaders (only 3% out of a total of 2,604).

Research

TVET research activities are still weak and not systematically planned. The Federal TVET Agency, though lacking an appropriate organisational structure, has been conducting minor research in the areas of Occupational Standards (OS), assessment, curriculum development and quality management with support of expatriate experts. The setting-up of a research agenda and the design of selected research projects are two aspects which need serious consideration in the future. Research at the TVET-level will focus on the links and relations between the TVET system and the labour market and contribute to the

4 An A-level trainer has a masters' degree, has been assessed as competent to train at level five and has undertaken A-level training methodology; a B-level trainer has a bachelor's degree, has been assessed as competent to train at level-four and has undertaken a course in B-level training methodology; and a C-level trainer has graduated from a TVET institution above level-three, has been assessed as competent to train at that level and has undertaken a course in C-level training methodology.

analysis, improvement and further development of vocational education and training in the country.

Occupational Standards

The TVET sub-sector implements an outcome-based system that uses OS as benchmarks and reference points for training and assessment. Since the OS reflect workplace realities and needs are formulated by experts from the relevant industries, the outcome-based organisation of the system can be considered as the cornerstone of a demand-oriented TVET system. The system promotes flexibility in teaching and learning and allows for recognition of competencies irrespective of how, where and when learning took place. It is therefore a tool to foster the integration of formal and non-formal TVET training, which is essential for the country to make the most efficient use of its diverse and scarce training resources. It also facilitates skills testing of the existing workforce, which allows for the identification of skills gaps and the design of tailored skills upgrading programmes, thereby increasing the productivity and quality of industry.

Between 2009/10 and 2013/14 an additional 613 OS were approved. Most of these were pragmatically adapted from standards used in other countries, though, as far as possible industry experts were involved in revising and verifying standards.

Assessment

Occupations are broken down into levels of qualifications and each qualification has specific OS. Occupations are linked to the national TVET qualifications framework which comprises five levels used for training and certification after assessment. In the system, the responsibility/supervision for the training operations is strictly separated from the assessment operations. While qualifications are defined and assessment tools are developed at federal level, the responsibility for the management of assessments is explicitly designated to the regional Centres of Competence (CoCs), based on federally agreed regulations. Subsequently, each region maintains a specific authority that is in charge of planning, organising and documentation of assessments and the issuance and record-keeping of certificates takes place at the federal level.

Cooperative training

Cooperative training describes a partnership model between TVET institutions and in-industry work places with the aim of delivering training jointly. This is in contrast with institutional training, which is exclusively carried out by TVET institutions or with limited industry participations. Cooperative training has the advantage of systematic learning in and exposure to, workplace realities, making training more relevant, holistic and sustainable. Current standards for cooperative training stipulate that 70% of a formal TVET course is delivered in industry. This target is not, however, widely met (and precise information is unavailable). One reason is the challenge that TVET institutions face in securing ample training places in the industry. In order to increase these places, the TVET institutions are now required to turn their attention to MSEs, which provide a lot of potential industrial training opportunities and represent the target labour market for most future TVET graduates.

Industry Extension and Technology Transfer services

The potential role of MSEs in economic development, employment generation and poverty reduction has been increasingly recognised in the national development framework. Although no direct support was planned in ESDP IV, strategies were developed to assist MSEs to emerge and grow. One of these is the industry extension service delivered by TVET trainers, which was established in August 2011. This service has four linked packages, designed to support MSEs in improving their product quality and productivity: technology capacity development, technical skills development, entrepreneurship capacity development and Kaizen capacity development.

The industry extension service has now reached 214,743 MSEs but the quality of the service is not yet at the expected level. In addition, by 2013/14, 2,627 technologies had been transferred to MSEs, from a target (established during ESDP IV implementation) of 3,000 by 2014/15.

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Higher education

The introduction of higher education in Ethiopia began in the mid-1960s. It is only in that past fifteen years, however, due to the government's and development partners' commitment to prioritising the sub-sector, that access to higher education has opened to the wider population.

The proportion of females in higher education needs to increase. The share of female students at undergraduate level has now reached 32% and in 2015 the intake rate was 38% female. The number of female students eligible for higher education is constrained by the number of girls who complete grade twelve.

Access and equity

In the past ten years, the government has demonstrated continued commitment to expanding equitable access to quality and relevant higher education. Since 2004/05, the number of public higher education institutions has increased, from 8 to 36 (33 take students directly from grade twelve), distributed across all regions of the country. Private higher education institutions have also expanded, reaching 98 institutions in total, accommodating around 15% of all student enrolment by the end of the ESDP IV period.

This extra capacity has allowed rapid increases in intake. Undergraduate enrolment (government and private) rose from 447,693 in 2010/11, to 593,571 in 2013/14. Against a target of 90%, the transition rate from grade twelve stands at 84% in 2014/15. Of total enrolment, 57% of students now participate in regular undergraduate classes and 43% in a combination of distance, summer and extension courses. Likewise, total Masters' enrolment in public higher education institutions increased from 7,211 in 2007/08 to 27,643 in 2013/14. Recently private institutions began enrolling postgraduate students and now they accommodate 3,000 masters' students. Consequently, the total enrolment at this level reached 30,643 by the end of ESDP IV. Enrolment in third degree programmes (Doctorate) has increased from a low base of only 258 in 2007/08 to 3,169 in 2013/14. Doctorate candidates are enrolled predominantly in public institutions with only one private university receiving Doctorate students. New universities are being established to provide equitable geographic distribution across the regions, to provide benefit to all from higher education's broader development effect on a local economy.

To improve the quality of the teaching and learning process several initiatives have been implemented including harmonising curricula for all of the undergraduate programmes, adopting a modular approach for course delivery so as to enhance active learning

The proportion of females in higher education needs to increase. The share of female students at undergraduate level has now reached 32% and in 2015 the intake rate was 38% female. The number of female students eligible for higher education is constrained by the number of girls who complete grade twelve. In addition, the gender-sensitivity of curriculum and/or teaching in general education means that, from the pool of females that do sit the grade twelve examination, performance is poor (19% of females reaching a mark of 350 versus 36% of males in 2013/14). Affirmative action strategies are in place but the pool of females that are formally prepared to enter higher education is small. The share of female academic staff and females in leadership positions remains far below plan, with no progress since 2009/10 in terms of females in leadership roles.

Quality

Many students joined higher education institutions with results below the 50% threshold in the higher education entrance examinations. Also, in physics, a basis for engineering studies, students' results are extremely low. To compound this, the graduation rate of regular undergraduate students is as low as 79%. This, perhaps, implies a low quality of instruction or perceived low relevance of the higher education courses being offered. It could also be a reflection of the low-quality of students introduced to higher education, who, irrespective of teaching quality, have not been prepared for learning at this level.

To improve the quality of the teaching and learning process several initiatives have been implemented including harmonising curricula for all of the undergraduate programmes, adopting a modular approach for course delivery so as to enhance active learning, instituting Quality Assurance Offices at each university and equipping libraries and laboratories. In addition, the Ethiopian Qualification Framework is nearly complete and the Ethiopian Education and Research Network, a two billion birr project is well underway and expected to be completed by 2015. In spite of massive resource allocations to higher education, universities still report insufficient supplies of text and reference books, laboratory and workshop equipment and access to ICT facilities.

The teacher-student ratio has improved considerably recently, reaching 1:16 in 2014 when only students enrolled in regular classes are considered (when students of regular and non-regular classes are considered, the ratio rises to 1:23). This compares favourably with international standards (1:19) and the experiences of similar countries. The qualification mix of these 21,109 staff, however, has implications for quality of instruction. Given the target of 0:70:30 (Bachelor: Masters': Doctorate degree holders, respectively), so far only a ratio of 27:58:15 has been achieved.

The supply of teaching staff with postgraduate qualifications has not kept pace with the increase in student enrolment. As a result, a large share of undergraduate students is taught by staff with a bachelor's degree. If university intake capacity continues to expand at the current rate, it must be assured that sufficient staff, with an appropriate skills mix to provide quality instruction, will be available.

Research, technology transfer and community engagement

Financial support to research is low. In 2011/12, the research allocation of all universities accounted for only 1% of their total budget. In addition, there are limited numbers of personnel available to conduct high quality research and higher education research is conducted predominantly by postgraduate students. To improve the relevance of research and technology development for societal and national development needs, institutions have identified their thematic research areas considering their staff profile, topics of excellence and local needs. On completion of the National Research Undertaking Framework and sorting National Research Priorities, institutions will be supported through provision of funding for innovation, perhaps on a contestable basis. In addition, a national forum co-chaired by the Ministry of Science and Technology and the MoE has been formed to enable institutions to collaborate with industries and mega-project implementers in their respective development corridors. Efforts to form business incubation centres at the institutes of technology and science and technology universities are progressing well; and these may serve as valuable sources for income generation.

Cross-cutting issues

Gender and education

To achieve gender parity in the education and training sector – as a basis for ensuring that all children and young people can fulfil their potential – targets and action programmes were established in ESDP-IV. Measures were taken to establish and strengthen gender offices, gender forums, girls' clubs and female student associations in REBs and higher learning institutions. In addition, gender mainstreaming guidelines were revised; a life skills training manual for secondary education prepared; a system to mitigate gender based violence, supported by a Code of Conduct, established; and the former girls' strategy and action plan revised and updated ready for the beginning of ESDP V. These efforts were all planned to increase female enrolment and participation in the education and training sector.

Pre-primary enrolment has increased rapidly for both boys and girls; however, the Gender Parity Index (GPI) dropped from 0.98 in 2009/10 to 0.95 in 2013/14. In Primary and Secondary Education there were significant strides made towards achieving gender parity. Although the GPI in first cycle primary has fallen to 0.91 in 2013/14 from 0.93 in 2009/10, GPI in the second cycle of primary education has improved nationally to 0.97 from 0.94 over the same period.

The GER for girls in secondary education has increased considerably over the past four years. The GPI for the first cycle of secondary education (grades 9-10) improved from 0.80 in 2009/10 to 0.94 in 2013/14 and the GPI for the second cycle of secondary education (grades 11-12) improved from 0.46 to 0.85 over the same period. Yet despite progress, there remain some critical gaps in reducing gender disparity in primary and particularly in secondary education. In particular, while the intake rate of girls in grade one over the past four years has been increasing, it remains consistently lower than the intake rate for boys.

Gender disparity not only deals with enrolment and completion but is also concerned with learning outcomes. The share of females that sat the General Secondary Education Certificate Examination in grade ten and scored 2.00 or above remains lower than males (45% compared to 61%). Similarly, in the grade twelve Higher Education Entrance Certificate Examination, while 36% of males scored 350 or above (the official pass mark), only 19% of females reached the equivalent benchmark.

The number of female primary school teacher trainees still remains lower than the number of males (41% female and 59% male). It has increased, however, by 3.8% annually (against a male increase of 3.4%) from 2009/10 to 2013/4. Likewise, there were 1,974 male teacher-trainers and only 182 female teacher educators in 2014/15.

Among illiterate adults, 66% are females. Among regions, the proportion of females and males with no education is highest in Afar (69% of females and 53% of males) followed by Somali (for women 68%) and about seven rural women in every ten (71%) are illiterate compared with three urban women in every ten (31%). Recent adult education enrolments have not yet demonstrated the bias in favour of females' enrolment that will be needed to ensure 100% literacy.

The percentage of female trainees in TVET increased to 51% (2012/13) from 46% in

(2009/10). This is slightly over achievement of the target set for 2011/12. Although there are regional variations, national data tend to show a concentration of female students in short-term (levels one and two) programmes as opposed to long-term ones (levels three to five). The reason is short-term programmes normally focus on traditionally accepted fields for females, such as business, ICT and hairdressing.

Increased numbers of universities have introduced noticeable initiatives to support female students' achievement through tutorial classes, regular forums attended by university presidents on young women's education, the launching of a national Code of Conduct for eliminating sexual harassment and the introduction of a life skills module in all university resource packs across the country. Despite the efforts made, females remain underrepresented at all levels of higher education, with 32% in undergraduate, 19% in postgraduate, 12% in teaching staff and a single female in a top leadership position, against a target of sixteen.

Special needs and inclusive education

The exact number of children with a disability in Ethiopia is not known. Instead, for planning purposes, the World Health Organisation (WHO) estimates for people with a disability are used. In 2011 the WHO estimate was that 15% of people in any population have a disability. The school age population from age 4-18 is more than 33.5 million, which implies that there are an estimated 5 million children with special education needs. In 2013/14 only 77,850 children (42% girls and 58% boys) with identified special educational needs are recorded as enrolled in grades one to twelve. Currently information on children with special educational needs who are enrolled in pre-primary is not collected but is planned beginning in the first year of ESDP V. With regard to primary education only 4% of the estimated children with special needs are enrolled, which is a barrier to the achievement of universal primary education.

Participation of students with special educational needs in TVET and higher education has risen from a base of 398 in 2009/10 to more than 1,000 in each sub-sector by the end of ESDP IV. The number of students eligible for higher education that have special educational needs is partially constrained by the number who complete grade twelve. In addition to improving access in higher education institutions – and to training staff with appropriate skills and offering adapted learning materials – joint initiatives with general education are required to rapidly increase the participation rate of students with special needs. In addition, students with special educational needs do not have equal access to all fields of study and often tend to be placed to study Special Needs Education (SNE).

Poor progress during ESDP IV in supporting children with special education needs has a number of causes. These include:

- lack of awareness
- lack of knowledge, skills and commitment to implement activities to support SNE, which is true from the federal to the school level
- lack of reliable data to help understand the status of children with special needs and target suitable interventions
- no clear structure for coordination and administration of SNE issues from federal to woreda and school levels
- absence of a financing mechanism to support SNE and inclusive education
- poor school infrastructure, facilities and adapted teaching and learning materials for SNE – along with the absence of standards and guidelines
- weak pedagogical skill of teachers for SNE
- lack of a career structure to support itinerant teachers that are expected to work in inclusive education resource centres and surrounding satellite schools.

Human Immunodeficiency Virus infection and Acquired Immune Deficiency Syndrome (HIV/AIDS) and education

Available information indicates that currently the prevalence and incidence of HIV/AIDS decreased substantially, from a peak of 7.3% in 2000 to 1.5% in 2011 but wide variations remain among regions. In relation to education, HIV/AIDS activities are intended to prevent and control the spread of the disease. In this respect, awareness is a measure of performance.

In Ethiopia, there are only a few studies that have assessed the level of the comprehensive HIV/AIDS knowledge of in-school adolescents. An 'Assessment of comprehensive HIV/AIDS knowledge level among in-school adolescents in eastern Ethiopia' suggests that only about a quarter of the in-school adolescents had comprehensive HIV/AIDS knowledge. Although females are highly vulnerable to HIV infection and its effects, they were less likely to have comprehensive HIV/AIDS knowledge compared

to males. They were also less likely to have comprehensive pregnancy knowledge, even though they had more knowledge on pregnancy occurrence dates related to the menstrual cycle. In addition, for both genders, the comprehensive knowledge of modes of HIV transmission of in-school adolescents was lower than that of the general awareness or the separate modes of transmission.

A study conducted in higher education institutions indicated that in-school youth are more at risk and more predisposed to the risk of HIV infection most importantly because of their age and the increased prevalence of risky sexual and other behaviours. The study identified early initiation of sex, multiple and concurrent sexual partners, low and inconsistent condom use, the abuse of drugs or substances and intergenerational and transactional sex as the major risky behaviours. The situation is exacerbated because of unintended pregnancies, abortion and STIs – which are also more prevalent in this age group.

Schools and higher education institutions have been supported to establish HIV/AIDS clubs; HIV/AIDS was incorporated to school curricula and school conversation programmes including issues of comprehensive sexual education were organised. As a result, over the past four years, school community conversations were implemented in all regions of the country. While in 2007/8, there were 3,255 schools which had organised school community conversations, in 2010/11 the number of schools which organised such activities increased four-fold by 2014/15.

Capacity development for improved management

Capacity constraints in management and planning inhibit effective delivery. A management and planning capacity study was conducted in 2010. This report informed the capacity development programme aimed at improving management at federal and at decentralised levels and within higher education institutions. The study identified that regions lack comprehensive skills to develop strategic plans. Critical skill gaps reported include: budget analysis (disaggregated by budget category, education sub-components and line items); projection and formulation of strategic choices or alternatives to influence policy and secure adequate allocation of resources for the sector.

In February 2015, a second capacity study was conducted at the federal level. This identified a number of issues, including: a general weakness in leadership and personnel management; that the structuring of the MoE into separate directorates could be improved to align these specialisms with the MoE objectives; that weaknesses in the nature, timeliness, relevance and quality of data on key performance areas in the sector reduce MoE effectiveness and limit leadership ability to manage; and that institutional memory in the MoE is adversely affected by a number of factors such as high staff turnover, high levels of circulation of people among roles, inadequate handover procedures and inadequate arrangements for sharing learning.

Capacity constraints in management and planning inhibit effective delivery.

The human resource department in the MoE has supported capacity development at the federal levels by providing short-term training, undergraduate and masters'-level degrees in key areas for existing staff. Similar activities occurred at regional levels, for which aggregated data do not exist. For example, in the last three years, REB capacity building interventions have been supported including (a) training of 10,074 experts, supervisors and principals on management, planning and result based monitoring and reporting; (b) providing 1,000 computers to woreda education offices and cluster resource centres in two regions; (c) equipping their Education Management Information System (EMIS) units with computers, Geographical Information System (GIS) resources and digital cameras. Other capacity development activities have included: a planning and management course was given for seven senior education officers at the MoE, organised by the United Nations Educational, Scientific and Cultural Organisation and the International Institute of Educational Planning; and more than 60 senior education officials from REBs, the MoE and Universities attended a two-week leadership and management skills development course focused on skills in problem solving, ICT, goal setting and action planning, communication, conflict resolution methods and team building.

Major challenges remain and these include lack of adequate information regarding (a) capacity development activities conducted at all levels in recent years; and (b) an understanding of the gaps that remain after these efforts, in order to properly understand the scale of the task that remains. This links directly to a lack of documentation for activities that have taken place across all levels and poor communications links between directorates within the MoE and from the MoE to REBS and below. In addition, an inadequate EMIS at woreda and school levels is characterised by limited capacity in the collection, analysis and use of educational data and information; lack of staff with required skills; and poor ICT infrastructure.

Environmental education and protection

Environmental education was included as a cross cutting issue to raise public awareness and promote understanding of the essential linkage between the environment and development. Sound management of natural resources promotes sustainable socio-economic development. During the curriculum revision, environmental protection and control issues were included at all grade levels, from a core environmental science course in grades one to four to modules in social studies, civics and ethical education, biology, geography and integrated sciences, amongst others.

In addition to curriculum integration, teacher manuals to support instruction have been distributed to all schools and training on how to apply these manuals was provided in multiple regions (including the Southern Nations, Nationalities and Peoples' Region, Amhara, Oromiya, Tigray, Benishangul-Gumuz and Addis Ababa). Further training will follow to ensure full transmission of content and to enable teachers and students to understand environmental issues better and improve the quality and resilience of their local environment.

Education in emergencies

The Education in Emergencies (EiE) cluster was established in October 2008 as a partnership between donors and the MoE to strengthen strategic humanitarian responses. Accordingly, the main purposes of the education cluster is to establish and maintain better linkages between the MoE, donor partners and other relevant government authorities; maintain high standards of predictability, accountability and partnership, with a commitment to minimum standards of response; and enable more strategic actions, with better prioritisation of available resources. Part of the cluster's work has led to the publication of the 2013 "Ethiopia: minimum standards for education and emergencies", which articulates the minimum level of educational quality and access in emergencies through recovery and is based on the Inter-Agency Network for Education in Emergencies' minimum standards for education.

A review of the number of children affected by emergency situations in Ethiopia and the response from 2010 to 2014, shows that the number of children affected by an emergency situation averages 250,000 annually and has been as high as 385,000 and as low as 181,000 in the period. In this period, 42% of children affected received a financed response. This implies that, in any year, around 60% of children facing an emergency situation do not receive the support required to continue their education. In addition – and outside these figures – Ethiopia now has the highest number of refugees in Africa. At various education levels, short term training has been provided to refugees to allow their integration into the education system where possible.

Part of the reason for the weak response is a lack of information collection and sharing from the school to the regional or federal levels. This slows resource requests and action. Children, households, communities and systems have received little support or training through the education system that allows them to anticipate, manage and overcome shocks and cumulative stresses, such as drought and other natural and human-induced crises that may affect different parts of the country.

School health and nutrition

The National School Health and Nutrition Strategy guides activities that are designed to improve access to better health and nutrition services for school-age children. Training in relation to this strategy has been provided to all regions. Around seven million school age children (plus up to three million out of school) live in food-insecure areas. The School Feeding Program reaches 670,000 children and an additional 43,000 children take part in the Home Grown School Feeding Program which began in ESDP IV. In addition, a take home food ration is provided to families in pastoralist regions who send their girls to school. These national programmes do not include other activities in single regions or activities which come through the Ministry of Health. In the last year of ESDP IV, plans for a national school feeding strategy were being prepared. An inter-ministerial body will improve the organisation and scale of school feeding activities, drawing on resources from many areas and benefiting from economies of scale and efficient collaborations.

In 2015, the MoE began full implementation of the OneWASH (WASH: Water Sanitation and Hygiene) strategy to improve school health through adequate supply of water and sanitation facilities. At the point of beginning this strategy, 41% of primary, 84% of secondary and 100% of universities have access to water. Efforts will seek to ensure full access, based on accepted quality standards, to water and sanitation facilities in all educational institutions.

Drug and Substance Abuse (DSA) prevention in education

In some parts of the country, chat and alcohol have been produced and consumed for centuries and their continuing use is linked to ongoing cultural practice. The distribution of substance users follows global norms: e.g. there is a higher prevalence of consumption by males; and vulnerable populations include the poor and young people both in and out of school.

The strongest evidence about use of drugs and alcohol among the youth (15-24 years old) in Ethiopia is provided by a study of 24,434 young people in and out of school. Among the young people who were in school, 0.4% drank alcohol daily and 5.8% used chat weekly. Use among the young people who were out of school was significantly higher – 2.7% drank alcohol daily and 13.3% chewed chat weekly. Use of cannabis, solvents and cocaine was also reported among the youth in and out of school (0.7% and 3.8% respectively).

The MoE signed agreements to be part of national efforts related to DSA. The National Drug Control Masterplan ran for the period of ESDP IV, along with an Inter-Ministerial Coordinating Committee was established. In addition, the MoE, in 2014, signed the National Integrated Plan for Ethiopia led by the United Nations Office on Drugs and Crime, along with other ministries. Its activities for 2014/15 are to: review and improve DSA curriculum, organise trainings for target groups and roll-out to regions. These activities have begun slowly and reflect the limited DSA activities conducted within the education and training sector during the period of ESDP IV. One activity that has taken place – although for which no reliable data are available – is the establishment of drug-free clubs in schools and youth clubs. These have links to HIV/AIDS clubs in similar institutions as some of the training and life skills development is overlapping for these topics.

In mid-2014, Addis Ababa Youth Association, with support from the Food, Medicine and Healthcare Administration and Control Authority, coordinated a three-day training exercise for 70 youths (including students) within the ten sub-cities of Addis Ababa. After the three-day training, the authority led an awareness creation programme for a consecutive eight days across the city. The authority is now looking to roll-out these activities through its branches in each of the regions. Through youth forums, training, of a similar type to that in Addis Ababa, has also been given in Tigray for 330 youths. In addition, a DSA handbook on Substances of Abuse for Trainers was finalised in 2013 by the authority, with support from the United Nations Office on Drugs and Crime.

Section 2

Education policy framework

Introduction

Priorities

The choice and overall structure of priority programmes

Plan goals

Expected plan outcomes

Education policy framework

This chapter sets out an Education Policy Framework for ESDP V. It explains how the education policy will be framed and highlights the plan priorities, goals and the expected outcomes.

Introduction

The Education and Training Policy of 1994 has, to date, been the inspiration for four medium-term Education Sector Development Programmes (ESDP). ESDP V will be the fifth medium-term plan which serves as the central strategy document for educational development in Ethiopia from 2015/16 to 2019/20.

The core messages of the Education and Training Policy remain.

Education is a process by which we transmit, 'experiences, new findings and values accumulated over the years... Education enables individuals and society to make all-rounded participation in the development process by acquiring knowledge, ability, skills and attitudes.'

The 'complex problems of relevance, quality, accessibility and equity' remain but with different faces. Now, our education sector respects the varied needs and expectations in our diverse society and we must continue to strive for a system that strengthens, 'the individual's and society's problem-solving capacity, ability and culture starting from basic education and at all levels'. Education 'plays a role in the promotion of respect for human rights and democratic values, creating the condition for equality, mutual understanding and cooperation among people. Education does not operate in isolation; rather it has to be integrated with research, practice and development to contribute towards an all rounded development of society'.

'Education, as a very important factor to human development, is of a high priority in the overall development endeavour of the government'. The policy 'directs that there be appropriate nexus between education, training, research and development through coordinated participation among the relevant organisations... Overall, the education and training policy envisages bringing-up citizens endowed with humane outlook, countrywide responsibility and democratic values having developed the necessary productive, creative and appreciative capacity in order to participate fruitfully in development and the utilisation of resources and the environment at large'.

ESDP V, as with previous sector plans, is consistent with this policy base. ESDP V will involve a concentrated focus on a few select important policy priorities (for example, improving teacher quality, developing core foundation skills, reducing high drop-out and repetition rates and ensuring relevance of middle- and higher-level training) rather than on trying to spread limited resources across too many priorities. These align with the priorities established in the second Growth and Transformation Plan which emphasise economic growth and industrialisation. This government-wide national policy document makes clear the expected changes in the structure of the economy over the next five years and the implications for education and training, as a main source of supply of human capital to the emerging economic and productive sectors. The priorities of ESDP V are also consistent with those of regional and international agreements, such as Education for All, the Sustainable Development Goals and the Convention on the Rights of the Child.

'Education, as a very important factor to human development, is of a high priority in the overall development endeavour of the government'. The policy 'directs that there be appropriate nexus between education, training, research and development through coordinated participation among the relevant organisations...

Managing the massive investment that is necessary to support education for an expanding population is not easy. Strong leadership and direction and effective cooperation and communication across all education levels and amongst ministries in multi-sectoral efforts, will be essential. This endeavour will be supported by the approval and introduction of an education law, currently at the draft stage, during the period of ESDP V.

In order to bring about the improved outcomes that are expected within the education sector over the next five years, those approaches that have been successful must be identified and expanded. Focus is essential if every child, youth and adult is to achieve at least the core foundation skills needed to contribute to national development objectives. The following priorities, plan goals and outcomes are motivated by identified challenges and set the scene for the detailed priority programmes and strategies that follow.

Priorities

The priorities of the education and training system in Ethiopia are to:

- Provide equal opportunities and participation for all, with special attention to disadvantaged groups

- Deliver quality education that meets the diverse learning needs of all children, youth and adults
- Develop competent citizens who contribute to social, economic, political and cultural development through creation and transfer of knowledge and technology
- Promote effective leadership, management and governance at all levels in order to achieve educational goals by mobilising and using resources efficiently
- Assist children, youth and adults to share common values and experiences and to embrace diversity

The choice and overall structure of priority programmes

Six priority programmes have been selected for ESDP V. Priority programmes are guided by educational levels and reflect the objectives and strategies for the whole sector – from pre-primary to tertiary education. Given the scale of general education, two priority programmes are included. The first focuses on quality; the second focuses on access, equity and internal efficiency. For the other levels, these quality, access, equity and efficiency concerns are dealt with together. In addition, given its importance to the implementation of the plan, a priority programme for management issues is presented. The priority programmes (from which the key plan goals of ESDP V are derived) are:

- Capacity development for improved management
- General education: quality
- General education: access, equity and internal efficiency
- Adult and non-formal education
- Technical and Vocational Education and Training
- Higher education

The skill levels and capacity of personnel – including their use of performance management and planning tools, such as the Balanced Scorecard (BSC) approach – will be developed as a priority.

Plan goals

Capacity development for improved management

The **goal** for improving management in the education sector is:

"to improve the management of the education system so that decisions are made and implemented which improve institution performance and student achievement".

Objectives and activities: The final purpose of the educational administration is to deliver quality education services to all students. In all regions, woredas have important autonomy in the management of material, human and financial resources. Woredas allocate budgets to schools – based on their planned needs – and should provide school leaders and communities with the information that can help them to improve management decisions. ESDP V will ensure that management of the education sector is both efficient and effective.

This will require a review of the structure of the education administration and especially clarity about the roles and responsibilities of all actors in this system, particularly the relationship between the MoE and the REBs and the levels of accountability for resource-related output targets. Strong leadership and direction is essential in the MoE, in REBs, in TVET offices and in higher education institutions.

The skill levels and capacity of personnel – including their use of performance management and planning tools, such as the Balanced Scorecard (BSC) approach – will be developed as a priority. The approach will learn from the lessons of ESDP IV and will ensure that there is better alignment between the new national education strategic plan (ESDP V) and the annual and monthly plans of MoE directorates, regions, zones, universities and woredas.

The proper functioning of the administration demands that information is collected, analysed and used to inform decisions. Where evidence on performance is available, the management system needs to be able to respond quickly. More autonomy will be provided for institutions at TVET and higher education levels in order to improve the quality of education and this will be matched with better accountability for quality and efficiency. The sharing of performance information will help improve coordination between actors but other activities will be implemented to further strengthen such coordination.

Reforms are needed to improve the efficacy of education funding systems, especially at TVET and higher education levels. A more responsive funding system, linked to established student demand and linked to a more effective quality assurance system will be developed. New financial management, planning and reporting systems will be developed and staff will be trained in their use.

Finally, a productive administration needs competent staff and sufficient resources. Professional development programmes will be provided for all posts, to improve staff implementation skills and all offices will be provided with the required minimum resources.

General education: quality

The **goal** for improving the quality of general education is:

"to improve the quality of general education in order to motivate children to complete primary and secondary school and provide them with the knowledge, skills and values to become productive and responsible citizens".

Objectives and activities: Great efforts are underway to improve the quality of education and these must continue with a focus on core foundation skills in early grades, which affects all subsequent stages of the education system. Schools will be supported with advice and appropriate resources. Teaching will be developed as a profession of choice. Education policies and practices that will improve teachers' and facilitators' skills through a national programme of teacher professional development will be adopted. Pedagogical skills, core foundation literacy, numeracy and mother tongue skills and English language instruction will be prioritised in revised professional development programmes. The development of a licensing system will assure that all teachers are competent.

As part of ensuring an effective quality assurance system is in place, school principals and supervisors will be supported through a professional development programme that focuses on school leadership and management. A revision and modernising of the school curriculum will continue with an academic focus on mathematics and sciences in response to economic needs and will be supported through the development and dissemination of good quality learning materials. The use of ICT will help teachers and students develop the skills and technologies that Ethiopia will need in its future work force.

Each school will be encouraged and supported in the development of a school improvement plan, supported by financial grants to cover the budget needs of facilities. Each school will develop a strategic plan for that school to help it to deliver a quality environment and education for its students. Each school improvement plan will extend beyond planning the development of effective school facilities and a sound learning environment: each school improvement plan will also ensure that core foundation skills are taught effectively to learners, that teachers are well qualified and prepared and that communities are involved in the support of the school.

School improvement plans will be used as a major driver of change with a particular focus on core foundation skill outcomes. School minimum standards will be adopted and implemented as a key feature of school improvement plans. The school inspection system will be developed and properly resourced. A national programme of regular assessment of student achievement will feed results back to schools in order to monitor the overall performance of the education system.

A national programme of regular assessment of student achievement will feed results back to schools in order to monitor the overall performance of the education system.

General education: access and equity

The **goal** for improving access and equity in general education is:

"to provide all children with access to pre-primary education for school preparedness and access to nearby institutions in which they can complete the full eight years of primary and two years of general secondary education".

Objectives and activities: All children will have access to schooling and remaining barriers to learners' participation in schooling will be removed. There will be fair treatment for each child and no child will be discriminated against because of low income, gender, creed, race, location or disability. The policy intention is that no child should be out-of-school at any stage during the primary school years. To reach the policy objective, an action plan and implementation strategy including mechanisms, funding and duties and responsibilities of education and other governmental and NGO authorities will be prepared.

The system will endeavour to increase the numbers of pre-school children who have access to ECCE in all regions, with a focus on providing first for the most disadvantaged groups. Final efforts will be applied to ensure full on-time enrolment, particularly of girls. Thereafter student participation and completion is prioritised, especially in the second cycle of primary and in the first cycle of secondary education. All young people will be encouraged

The urban/rural divide disadvantages those living in more isolated rural areas and those of lower socio-economic status do not have equal access to education after grade four.

to enrol in secondary schooling after primary schooling has been completed. The MoE, in collaboration with REBs, zone (where relevant) and woreda education offices, will put policies in place that ensure that there are sufficient secondary school places – in all areas – available to achieve the objective of a secondary education place for each child.

The government will examine the reasons for the incidence of high repetition rates and will develop policies that will reduce and eventually eliminate the need for children to repeat classes. Similarly, the reasons for children dropping out of school will be examined and appropriate policies will be put in place to support children to continue in school and to eliminate the need for children to drop out of the system. Additional support and resource will be provided to schools and teachers in areas that repeatedly face emergency situations. These strategies will permit continuation of learning irrespective of external shocks.

The urban/rural divide disadvantages those living in more isolated rural areas and those of lower socio-economic status do not have equal access to education after grade four. No parent should be in a position where financial barriers prevent the enrolment and continuous attendance of a child in school. Children in remote areas and/or woredas who face geographic barriers such as flooding and difficult topography for transport will not be excluded from the education system. Equitable provision of funding with special consideration for the disadvantaged areas, which local schools have access to, will assist in devolving responsibility to local communities for delivering education.

Institutional capacity will be strengthened through the development of a more coordinated structure for adult education provision in communities and the introduction of minimum standards and a quality assurance system.

Gender issues remain problematic at all levels of the education system. Students with special learning needs are not yet provided for adequately. Barriers that get in the way of girls' participation in education will be addressed, so that there is equitable access in the education system for both boys and girls. Equal opportunities in the education system will be available for both male and female teachers. Policies will be developed so that students with special needs are able to access help and support (both financial and non-financial) to assist them with their education.

Adult and non-formal education

The goal for adult and non-formal education is:

"to create a learning society by providing adult and non-formal education linked to lifelong learning opportunities that meets the diverse learning needs of all and which contributes to personal, societal and economic development".

Objectives and activities: The key policy objective is to increase participation in ANFE programmes. Some encouraging progress is being made. As a result of the expansion of primary schooling over the last decade, the youth literacy rate has increased from 34% in 2000 to 52% in 2011 but this is still one of the lowest rates in sub-Saharan Africa and there is a considerable way to go.

Activities that will be supported focus on creating and sustaining a literate environment. Institutional capacity will be strengthened through the development of a more coordinated structure for adult education provision in communities and the introduction of minimum standards and a quality assurance system.

Training programmes for facilitators and adult education tutors will be provided and will include andragogy as a core component. The development of relevant quality materials that can be used to teach learners and apply literacy in real life situations, through the IFAE course, will continue. Regions will develop appropriate learner centred curricula in their own languages, which will serve as lead frameworks for IFAE materials development to the woreda-level. Adult literacy curricula and programmes will be strengthened for relevance, particularly to females. IFAE graduates will be provided opportunities to transfer to formal education and TVET, or to pursue post-literacy courses.

Technical and Vocational Education and Training

The goal for TVET is:

"to produce a lower- and middle-level, competent, motivated, adaptable and innovative workforce, which can contribute to poverty reduction and social and economic development through facilitating demand-driven, quality TVET training and transfer of demanded technology".

Objectives and activities: The policy objective is to increase the quantity and quality of effective and accredited TVET and to increase the relevance of TVET in terms of courses and technologies developed and transferred to industry. This policy objective will be approached by fostering and supporting industry ownership of the TVET system. A main focus of activity will be on the development of more well qualified industry trainers at appropriate levels. OS will continue to be developed through collaboration between industry and training institutions. Standardised assessment tools will be developed and used by industry assessors.

Accessibility to TVET will be increased by expanding and developing TVET institutions (both existing institutions and new ones where necessary) so that more people can enrol in TVET and so that relevant training is available in woredas which previously did not have access to appropriate training. Multiple pathways will be developed so that various kinds of training are available: short-term informal training, on-the-job training in work places, training involving various combinations of on-job and off-job training and longer-term training to achieve work-relevant qualifications of from one to three years in duration. Industry extension services will support MSEs to improve skills and organisational management, leading to increases in productivity, relevance and competitiveness. These services will focus on the technical and entrepreneurial skills of crafts-men and crafts-women with a view to supporting the development of export-quality manufacturing.

Higher education

The goal for higher education is:

"to produce competent graduates who have appropriate knowledge, skills and attitudes in diverse fields of study; to produce research which promotes knowledge and technology transfer based on national development and community needs; and to ensure that education and research promote the principles of freedom in exchange of views and opinions based on reason, democratic and multicultural values".

Objectives and activities: The key policy objective is to increase the quantity and quality of higher education. Increasing the enrolment capacity of higher education institutions will be achieved through a programme of university expansion and consolidation. New universities will be established and existing institutions will be strengthened. Disparities in participation among disadvantaged groups will be addressed. Increased participation in higher education by female students and greater involvement of female staff in teaching, research, leadership and management are key policy objectives. Initiatives to increase participation in higher education by students with disabilities will also be undertaken.

New cost recovery policies will be investigated for tertiary education in order to help reduce government expenditure at this level and to achieve a more equitable distribution of public expenditure by sub-sector. There will be a focus on ensuring that there is a better match between higher education graduates and the employment market locally and internationally through improving communication channels between employers and universities. Staff qualifications at universities will be improved, with the objective of increasing staff qualification levels to Masters and Doctorate levels.

Research capacity at universities will be enhanced through the development of performance-based systems that recognise and reward research excellence and research that supports community and national development objectives. Policies to develop and implement inter-institutional quality assurance systems and the existing programme of external evaluation and review will be extended. Increased collaboration across universities and with other international institutions will be encouraged.

Accessibility to TVET will be increased by expanding and developing TVET institutions (both existing institutions and new ones where necessary) so that more people can enrol in TVET

Expected plan outcomes

The outcomes described here are linked elsewhere in ESDP V to performance indicators that are designed to include measures of quantity, quality and timeliness for each dimension of anticipated performance. The design of ESDP V is intended to cascade down into regional and local annual work plans. These more specific plans will be derived from the broad goals and objectives of ESDP V.

The ultimate objective of this five-year plan is to improve the attainment and learning outcomes for all students. Strategies are designed and selected to improve the learning opportunities for children, youth and adults. All efforts combined will affect these outcomes.

In order to monitor whether strategies are leading to the expected outcomes, student and system performance must be regularly evaluated. This starts in the classroom with continuous assessments and school-level testing. In addition, the tools are available for regular and periodic assessments of learning progress. These assessment tools allow the comparison of achievements and the evaluation of progress towards higher learning outcomes. If the rate of improvement at one level is slower than at another level, an adjustment to resource allocations can be made to improve the slower performer. The following table sets out selected learning outcome, attainment and management targets, reflected in a list of Key Performance Indicators (KPIs) for ESDP V. This list is repeated in the Implementation, monitoring and evaluation chapter as the core reference for monitoring and evaluation activities.

The key policy objective is to increase the quantity and quality of higher education. Increasing the enrolment capacity of higher education institutions will be achieved through a programme of university expansion and consolidation.

Figure 12: KPIs for ESDP V (all targets stated as female / male where relevant)

KPIs (All targets stated as female / male where relevant)	**Baseline** (2013/14 unless stated)	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
Finance and management						
Government public expenditure on education and training (%)	23.3 (2012/13)	25.0	25.0	25.0	25.0	25.0
Annual operational plans (all implementing bodies) that adequately address all relevant cross-cutting issues	N.A.	100	100	100	100	100
Schools receiving school report cards as an input to planning and management	0	10	20	30	40	50
ESDP V implementing 'units' (federal directorates and TVET agency, REBs and TVET agencies, universities) with multi-year strategic plan	N.A.	100	100	100	100	100
Access						
Pre-primary GER (%)	33/35	48/50	56/58	64/65	72/73	80/80
Grade one NIR (%)	102/109	102/107	101/105	100/103	99/100	98/98
Grade one to four, including ABE, GER (%)	131/143	122/132	120/129	118/124	116/120	115/115
Grade one to four, including ABE, NER (%)	104/112	104/110	103/107	102/105	101/103	100/100
Grade five to eight, GER (%)	63/65	67/70	74/75	82/83	90/90	95/95
Grade five to eight, NER (%)	50/49	53/52	56/55	59/59	62/62	65/65
Grade nine to ten, GER (%)	37/40	41/44	48/50	55/55	62/62	74/74
Grade nine to ten, NER (%)	21/20	24/24	28/28	34/34	41/41	47/47
Number of students enrolled in TVET formal training	265,745	280,006	304,775	365,154	447,248	564,054
Undergraduate GER (%)	6/13	7/13	8/14	10/15	12/16	14/17
Formerly illiterate 15-60 year olds that have graduated from two-year IFAE course (%)	14/41	20/45	27/49	35/53	43/56	52/60
Efficiency						
Grade one dropout rate (%)	23/21	20/19	17/15	13/12	9/8	5/5
Grade one to eight dropout rate (%)	11/11	10/10	9/9	7/7	4/4	2/2
Grade one to eight repetition rate	8/9	7/7	6/6	4/5	3/3	2/2

KPIs (All targets stated as female / male where relevant)	**Baseline** (2013/14 unless stated)	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
Survival rate to grade five	57/54	59/57	62/61	64/63	68/68	70/70
Completion rate to grade eight	47/47	50/50	55/55	61/61	67/67	74/74
Total MSEs supported through industry extension services	428,529	429,608	430,864	437,337	448,008	464,169
Year one undergraduate completion rate	N.A	95/95	95/95	95/95	95/95	95/95
Quality						
Share of pre-primary teachers holding the ECCE diploma	0/0	0/0	2/2	5/5	9/9	15/15
Share of grade one to four teachers appropriately qualified (%)	63/48	70/58	77/68	84/79	92/89	100/100
Share of teachers in grades one to twelve that are licensed (%)	0/0	10/10	21/21	38/38	55/55	70/70
Primary schools at level three or above classification (%)	21	29	37	44	52	60
Secondary schools at level three or above classification (%)	30	36	42	48	54	60
Schools (grade one to twelve) access to broadcast and digital technologies assisted instruction (%) [all varieties]	46	53	63	73	79	83
Adult learning centres that are upgraded to Community Learning Centres (CLCs) (%)	0	10	20	30	40	50
TVET training completers that are assessed as competent (%)	60	63/63	66/66	69/69	72/72	75/75
TVET OS approved in all priority sectors	650	701	738	775	812	850
Academic staff mix in universities (Bachelor : Masters' : Doctorate)	27 : 58 : 15	22 : 60 : 18	16 : 63 : 21	11 : 65 : 24	5 : 68 : 27	0 : 70 : 30
Equity						
GPI in pre-primary	0.95	0.96	0.97	0.98	0.99	1.00
GPI in grades one to eight	0.93	0.94	0.95	0.96	0.98	1.00
GPI in grades nine to twelve	0.91	0.92	0.94	0.96	0.98	1.00
Females as a share of students in formal TVET system (%)	51	50	50	50	50	50
Females as a share of undergraduate enrolment (%)	32	34	36	38	41	45
Females as a share of IFAE (2-year) programme graduates	38	39	41	45	52	60
Enrolment rate of children with SNE, grades one to eight (%)	4	18	32	47	61	75

KPIs (All targets stated as female / male where relevant)	**Baseline** (2013/14 unless stated)	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
Enrolment rate of children with SNE, grades nine to twelve (%)	7	15	22	30	37	45
Females as a share of school leaders [principals and supervisors] (%)	8	9	10	13	16	20
Outcomes						
% of grade two students reaching 'Below Basic' or above proficiency in reading and comprehension, by language	See Figure 7		60/60			95/95
% of grade two students reaching 'Basic' or above proficiency in reading and comprehension, by language	See Figure 7		40/40			70/70
% of students assessed reaching basic or above proficiency in the Early Grade Mathematics Assessment (EGMA)	None				70/70	
% of grade four students who achieve 50% and above (composite score) in NLA	25 (2012)	35/35				50/50
% of grade eight students who achieve 50% and above (composite score) in NLA	8 (2012)	30/30				50/50
% of grade ten students who score 50% or above (average score) in NLA	23			50/50		
% of grade twelve students who score 50% or above (average score) in NLA	34			70/70		
% of grade ten students that score 2.0 or above (pass mark) in Ethiopian General Secondary Education Certificate	45/61	50/63	55/65	60/66	65/68	70/70
% of grade twelve students that score 350 or above (pass mark) in Ethiopian Higher Education Entrance Certificate	19/36	25/39	31/42	37/45	44/47	50/50
Number of demanded technologies identified through value chain analysis and transferred to MSEs	2,627	3,252	3,623	4,066	4,635	5,442
Share of university graduates (first degree) with degree-relevant employment within 12 months after graduation (%)	N.A.	80	80	80	80	80

Full integration of cross-cutting issues

The education system faces a number of challenges which are not limited to one sub-sector, such as primary or higher education but are present throughout the system, in most, if not all sub-sectors. They relate to the following cross-cutting issues:

- Gender
- Special needs and inclusive education
- HIV/AIDS
- Education in emergencies
- School health and nutrition
- Drug and substance abuse prevention
- Water, sanitation and hygiene

Precisely because these issues present a challenge within each sub-sector, it is important that there are programmes and activities within each of these sub-sectors to overcome them. It is equally important that the actors and bodies with responsibility for each respective sub-sector, feel accountable for their successful implementation. A full-integration approach ensures that the issues are 'mainstreamed', that they become the joint responsibility of all implementing bodies.

This plan therefore has opted to integrate these cross-cutting themes within those sub-sectoral priority programmes, wherever action is needed. For example, strategies focusing on gender disparities appear everywhere. Strategies for the DSA issue are being addressed in teacher and leader development, in relation to institution facilities, in relation to access and to quality. Similarly, education in emergencies will feature in the case of access and equity, teacher skills, curriculum content and in teaching and learning materials.

It is clear that the risk of such mainstreaming is that these crucial issues lose visibility. Therefore, after the presentation of the priority programmes, a chapter that summarises the integration of cross-cutting issues has been included. This chapter is helpful in two ways: it will help ensure that these issues are comprehensively addressed throughout the plan, by summarising the main programmes for each issue; it will allow readers to see quickly how each issue has been addressed and where further details of strategies for each cross-cutting issue can be found in the plan.

Figure 13: cross-cutting issues integrated in ESDP V [5]

Gender	Special needs and inclusive education	HIV/AIDS	Education in emergencies	School health and nutrition	Drug and substance abuse prevention	Water, sanitation and hygiene

This approach is very different from the one followed in ESDP IV, where cross-cutting issues were included as priority programmes in their own right. Unfortunately, the existence of these programmes did not guarantee that significant attention was paid to them during the plan's implementation, rather the opposite. In the analysis of the implementation of ESDP IV it was observed that progress on cross-cutting issues' implementation was weaker than expected. The presentation of cross-cutting issues in ESDP IV failed to encourage joint action. The existence of separate programmes for each of these issues tended to mean that officers with responsibility for the sub-sectoral priority programmes considered that cross-cutting issues were the responsibility of others and that there was no need for them to focus on these. Although they were priorities of the plan, they were not considered as priorities for each sub-sector.

This became particularly problematic when there did not exist a specific body responsible for the implementation of an issue and when (partly as a result) there was no budget assigned to this issue and its accompanying programme. Only for gender, special educational needs and HIV/AIDS, a directorate or coordination unit at the federal level, with similar structures at lower levels, has been in place. This is not the case for the other cross-cutting issues. Without such a unit in place

5 The review of progress under ESDP IV showed that thorough curriculum integration for environmental education had been accomplished – from a core environmental science course in grades one to four to later modules in social studies, civics and ethical education, biology, geography and integrated sciences, amongst others. As a result, environmental education and protection, is not included explicitly as a cross-cutting issue in this plan but targeted activities still exist. The focus will move to improving teacher and school leader skill and awareness – to improve teaching in relation to environmental protection. Environmental protection issues will remain central to education in emergencies activities which favour drought prone and environmentally insecure areas.

– as was common – implementation in relation to the issues was weak.

To ensure more successful implementation of the programmes related to the cross-cutting issues, ESDP V therefore foresees the following actions. When the national plan is cascaded to directorate, region, TVET and university plans, each cross-cutting issue will become the concern of multiple implementing units, precisely because the cross-cutting issues form an integral part of the sub-sectoral programmes for which they are responsible. They can no longer be considered the responsibility of another person.

To provide additional support to the coordination and implementation of cross-cutting issues, in the capacity development for improved management priority programme an explanation of how the cross-cutting issues' strategies will be coordinated and monitored across the sector has been included. In addition, these issues demand strong multi-sectoral coordination and collaboration and wherever necessary links to other ministries and sectors will be established and strengthened.

At the federal and regional levels a 'unit' for effective communication and monitoring of implementation will be established within the relevant planning process. In each zone (where relevant), woreda, TVET and higher education institution, where such a role does not already exists, a focal person will be identified to monitor progress for all issues in their area. This structure will not duplicate the roles of the already established responsible bodies for HIV/AIDS, gender and special educational needs but will instead play a supporting role to ensure that all officers at all levels are taking full responsibility to deliver their part in respect of joint targets.

Section 3

Priority programmes

This section contains the detailed plans for the six priority programmes included in ESDP V.

- Each programme is divided into components, each of which includes a description of the priority strategies and their rationales.
- In addition, a matrix is presented for each component that lists the main strategies (shaded in green) with accompanying indicators, targets and baselines (if known) and the source of the information for monitoring purposes.
- Underneath the main strategies, the major planned activities are identified. Indicators for these activities will be included in annual operational plans.

Priority programme: capacity development for improved management

Priority programme: general education quality

Priority programme: general education access, equity, internal efficiency

Priority programme: adult and non-formal education

Priority programme: Technical and Vocational Education and Training

Priority programme: higher education

Summary of cross-cutting issues in the priority programmes

Priority programme: capacity development for improved management

The **goal** of this priority programme is:

"to improve the management of the education system so that decisions are made and implemented which improve institution performance and student achievement".

Introduction

The final purpose of the educational administration is to deliver quality education services to all students. In the decentralised system in Ethiopia, each higher level has the responsibility to support its dependents to make better resource allocation decisions. The MoE funds and supports universities directly and REBs fund and support zones, woredas and TVET agencies. In all regions, woredas and TVET agencies have important autonomy in the management of material, human and financial resources. Woredas allocate budgets to schools – based on their planned needs – and should provide school leaders and communities with the information that can help them to improve management decisions.

This priority programme focuses on how structures, processes and capacities can be improved to ensure that administrative units and individuals are equipped to make decisions that will improve student learning outcomes.6

The effective functioning of this system requires interventions on five components. These interventions concern, firstly, the structure of the educational administration and especially clarity about the roles and responsibilities of all actors in this system. The proper functioning of the administration demands that information is collected, analysed and used to inform decisions. This will help improve coordination between officers but other activities will be implemented to further strengthen such coordination. Finally, a productive administration needs competent staff and sufficient resources. The following serve therefore as the five components of this priority programme.

- A relevant structure with a clear distribution of mandates and responsibilities at all levels
- Regular gathering and processing of performance information to inform decision making (evidence-based planning and management)
- Good coordination and communication within and across levels
- An adequate supply of staff with the right mix of technical and leadership skills for each post/level.
- Necessary resources and motivating conditions of work

In some of these, significant progress was made under ESDP V; in others less so. The focus and coverage of each component takes this into account.

6 While the priority programme covers the federal to woreda levels as well as the information to be supplied by woreda offices to schools, it does not focus on the skills of school leaders. These are covered in the 'leaders' training and professional development' sub-component of the 'general education: quality' priority programme.

Component 1: a relevant structure, with a clear distribution of mandates and responsibilities at all levels

Objective: the structure of the MoE and Federal TVET Agency, of REBs, TVET agencies and universities will enable them to implement ESDPV, including programmes related to cross-cutting issues.	ESDP IV	Target
Recommendations for restructuring of education sector's organisational structure implemented	N.A.	Implemented by 2017
Monitoring information on implementation of programmes related to all cross-cutting issues is available for every year	N.A.	A yearly report and set of data

Sub-component 1: improving the education sector's organisational structure

The Business Process Re-engineering (BPR) that has taken place during the periods of ESDP III and ESDP IV has established a clear structure, where the respective set of mandates and responsibilities at different levels of the education system are clear. Links between federal, region, zone and woreda levels and to TVET agencies and higher education institutions are now established and understood.

While there is therefore little need to reform the overall organisation of the system, it may be useful to examine the internal structure of the MoE and its relationship to REBs and to universities; and the internal structure of the Federal TVET Agency and its links to TVET agencies. The lack of achievement of some key ESDP IV objectives is related to the structural relationships in the system. Under ESDP V therefore, examination of the stated federal and regional structures will motivate recommendations for improvements. These recommendations will be implemented over the five-year period.

Sub-component 2: managing the implementation of cross-cutting programmes

One major challenge during ESDP IV relates to the insufficient attention given to those cross-cutting issues which were present in the plan but for which little coordinated action took place. Therefore, it is the intention, during ESDP V, to establish coordination offices at the federal and regional levels, with budget and responsibility to support integration of cross-cutting issues. These units will support the implementation of all cross-cutting issues and will link to focal persons in each zone and woreda, TVET and higher education institution.

These units will not take responsibility for delivery of ESDP V targets in relation to cross-cutting issues; that is a shared responsibility that follows from the full integration of these issues in the plan's priority programmes. Rather, the cross-cutting units and focal persons will be responsible for coordinating activities, for sharing information, for supporting implementation exercises and technical experts to understand the full range of activities required and under implementation. Specialist offices, such as for gender, HIV/AIDS and SNE, will retain the technical lead, with support from cross-cutting coordination officers.

For example, in the case of Education in Emergencies, the lack of a well-established information management system affects the timeliness and effectiveness of response to a natural or man-made emergency situation. The existing EMIS data collection and reporting system is no match to an emergency context, so the cross-cutting issues focal persons and units at the different levels will be assigned to improve the systematic collection and coordination of information, with clear roles and responsibilities for sharing information from woreda to regional and federal levels, which can trigger a response.

This structure will improve the federal-regional-woreda/institution communication related to cross-cutting issues and this will have knock-on effects that will improve communications for directorates and for the coordination of activities more generally.

Strategies	Indicator (including baseline and target)	Source
Improvement of the education sector's structure for delivery	Report on the MoE and Federal TVET Agency internal structures completed	ESDP V annual report
	Recommendations for restructuring of education sector's organisational structure implemented	ESDP V annual report
Preparing report on structure of MoE and Federal TVET Agency		
Holding consultation and validation of report recommendations		
Drafting an implementation plan for report recommendations from federal to regional levels		
Implementing report recommendations at all levels		
Implementing and monitoring cross-cutting programmes	Coordination offices set up at federal level and in all regions	ESDP V annual report
	Monitoring information on implementation of programmes related to all cross-cutting issues is available for every year	ESDP V annual report
Defining appropriate structure, responsibilities, staff profile and budget for coordination offices for cross-cutting issues		
Setting up coordination offices (including nomination of relevant staff)		
Preparing yearly report on implementation of cross-cutting issues		
Improving the collection of data related specifically to education in emergencies from woreda to federal levels		

Component 2: regular gathering, processing and sharing of information to inform decision making

Objective: all administrative offices and schools will have useful information at their disposal to help them make relevant decisions	ESDP IV	Target
% of KPIs for which yearly information is presented and analysed in the yearly statistical abstract	N.A.	100%
% of a sample of federal, regional, TVET, university and woreda planners and managers who express satisfaction with the quality of the Education Statistical Annual Abstract	N.A.	80%
% of primary and secondary schools that receive yearly school report cards	0%	50%

Much information is available within the education system, on issues of educational performance (mainly through EMIS) as well as on finances and teachers. However, the consistency, reliability

and systematic analysis of this information, its distribution to relevant stakeholders and its use for evidence based decision-making and resource allocation needs to be improved. The following sub-components address these issues.

Sub-component 1: gathering and processing education performance data

Ethiopia's EMIS system has continued to grow in strength throughout its operation for the past two sector plans. EMIS offices now exist in all woredas and the annual survey of schools is completed effectively, albeit with some delays, with information aggregated at each level from institution to federal level. As the EMIS system has grown and improved, new functions have been added. During ESDP V, two important additions are expected:

School Management Information System (SMIS): will focus on school-level performance data, related to activities to be implemented by school leaders. This will initially be trialled in selected schools and regions before a larger roll-out, linked to the supply of ICT equipment. It will eventually replace paper-based record keeping and link automatically to the annual school survey.

Teacher Management Information System (TMIS): designed to collect more detailed information on teachers throughout their career. All regions now have a TMIS, with which regional, zone and woreda offices are beginning to track the distribution of teachers in schools across the country. TMIS data will become a module within the overall EMIS system, providing richer information on teacher qualifications, licensing status, career progression and years of experience, amongst others. Each teacher will have a record in the system, which can be linked to institutions to identify distribution. The system, now functional, remains weak in all regions. During ESDP V great investment is needed to ensure that (a) this system collects/records reliable data and (b) that these data are linked to the overarching EMIS system but do not negatively affect the annual school survey.

As well as improving the quality of data collected, EMIS data will be progressively linked to GIS. The geographical survey has been completed and in the first year of ESDP V, institutions will be associated with these geographical data. School code standardisation, also under progress, will link institution-specific education data for the past five to ten years.

While the EMIS system currently functions well for general education (excluding adult education), it is weaker for TVET, adult and higher education, with less reliable data collection and reporting. During ESDP V, specific strengthening exercises will be conducted to improve the quality, relevance and conciseness of questionnaires that target these groups. Ongoing capacity building at regional levels will improve the ability for the EMIS system to cover all sub-sectors of the education system. Where necessary, universities and TVET agencies will develop local data collection solutions, which can supply information to the EMIS directorate for annual reporting.

These multiple processes will require a clear structure for coordination and data management to minimise the burden on the many hundreds of woreda officials. To aid this process and ensure the application of current technologies, a nation-wide training programme – already underway – will be conducted for zone and woreda EMIS experts to capacitate them with skills and knowledge. These will allow the realisation of the proposed decentralised system. Software and hardware will be provided to woreda education offices to allow them to discharge their responsibilities effectively.

Sub-component 2: gathering and processing financial data

For the last year of ESDP IV, the MoE has been a pilot user of the Ministry of Finance and Economic Development (MoFED) led Integrated Financial Management Information System (IFMIS). This online system, replacing a paper-based approach, links the MoE's planning, budgeting and financing functions with MoFED. In the period of ESDP V, the IFMIS pilot will be rolled out to all regional offices and those woreda offices with adequate infrastructure (primarily a network connection).

Sub-component 3: sharing information to inform decision making

Education and financial performance data will be used to inform different types of management decisions at different levels. There is not a single target audience for information sharing – it must be ensured that the right information is available to the right audience(s). EMIS will remain the system's 'global' monitoring tool, used at higher levels for policy making. The mentioned additions – and expansion/strengthening of existing EMIS – will support central and decentralised levels (regional and woreda) to identify and to respond to performance gaps, in the following ways.

EMIS: reliable data will be compiled into a national statistical abstract which guides policy-making and adjustments to national strategies

for general education, TVET and higher education. REBs and regional TVET agencies can use EMIS data to understand their performance trends, disaggregated by woreda. With this information, they can selectively target resources to woredas, to overcome performance gaps. At the woreda level, EMIS data will be used to prepare 'school report cards' which will begin in the first year of ESDP V. Woreda EMIS offices will analyse local data and provide school leaders with up-to-date performance information from EMIS and inspection findings, relative to schools in their woreda and to national standards. This provides swift feedback to schools, in time to serve as a school planning input within the same academic year. By producing report cards, woreda officials will be better placed to identify strengths and weaknesses and to use this for targeted and timely responses.

SMIS: will be operated at the school-level (and when fully established, can replace the annual school survey by linking to EMIS). SMIS will support school leaders to collect, record and analyse school performance data. SMIS data can be used to analyse trends in school-performance and will be enhanced by 'school report card' feedback. SMIS data that are collected on a regular basis but are not centrally stored (such as attendance of staff and students) can, equally, enrich the information reported to the school community through a report card. These data can be used by school leaders and communities to improve evidence-based school planning and local resource allocation decisions, particularly related to progress against minimum school standards and key learning outcomes.

TMIS: will be used by woreda and regional officials to monitor teacher skills, location, languages and career development. It will inform regional teacher supply and demand studies and can be used by CTEs to prioritise training. Locally, it will guide woredas in their selection of teacher upgrading and Continuous Professional Development (CPD) interventions – as well as the allocation of planned incentives. At the federal level, particularly for secondary education, TMIS will guide university-level training. Efficient supply of secondary teachers, by subject and by region, can follow an improved understanding of demand and distribution.

GIS: will be linked to schools' EMIS data and used at all levels of administration. At a woreda office, this information can be used to analyse patterns of performance amongst schools (related to dropout, for example). Woreda officers can use these patterns – along with the improved picture of school placement in their local area – to target supervision activities. The cluster system can be made more effective as woreda officers reassign schools to clusters based on geographical limits. At this level, as well as for regional officers, geographical data can guide school expansion and distribution decisions. Regional officers will, similarly, be able to analyse patterns of performance and use these to inform resource allocations, to target support to woredas and to improve disaster relief planning. At the federal level, geographical information can guide the expansion of secondary institutions, to provide equitable access to higher levels.

IFMIS: will, initially, be used by federal and regional financial planners and managers. It increases the sharing of budget information between government bodies and within the MoE and speeds up budget applications, disbursement requests and expenditure evaluations, for more effective resource utilisation.

Strategies	Indicator (including baseline and target)	Source
Gathering and processing education performance data	% of schools which complete census through ICT, will increase to 15%	EMIS
	% of teachers that are covered by the TMIS will increase to 65%	TMIS
Piloting and roll-out of SMIS		
Expanding coverage of TMIS (numbers of teachers; teacher details)		
Reviewing all EMIS questionnaires with specific emphasis on higher education, TVET and ANFE		
Integrating GIS into EMIS		
Integrating TMIS and SMIS into EMIS		

Strategies	Indicator (including baseline and target)	Source
Gathering and processing financial data	Number of regional offices using IFMIS, increases from 0 to all	IFMIS
	Number of woreda offices using IFMIS, increases from 0 to all those with relevant infrastructure	IFMIS
Rolling-out IFMIS to all regional offices		
Rolling-out IFMIS to all woreda offices with necessary infrastructure		
Sharing information to inform decision making	% of KPIs for which yearly information is presented and analysed in the annual statistical abstract will reach 100%	Analysis of abstract
	% of primary and secondary schools that receive yearly school report cards, increased from 0% to 50%	GEQIP
	The share of federal, regional and woreda planners and managers who express satisfaction with the quality of information at their disposal, will be 80% at the end of ESDP V	Sample survey
Producing yearly, reliable statistical abstracts at national level		
Producing brief statistical abstracts at regional level and distributing to all regions		
Producing brief report cards at woreda level and distributing to all woredas		
Producing school report cards and distributing to schools		
Preparing guidelines on use of abstract and report cards for regions, woredas and schools		
Training of officers (involved in planning, management and statistics) in regional and woreda offices in analysis and use of information (including TIMS, GIS and IFMIS, as relevant)		
Training sessions for school principals on use of school report cards		

Component 3: good coordination and communication within and across levels

Objective: staff in the educational administration at all levels will have a clear and common understanding of their roles and quick access to official documentation, so that coordination within the administration improves	ESDP IV	Target
% of officers with digitised job specification	N.A.	100%
A comprehensive organisational and administrative procedures/operations manual in Amharic and English will be available to all staff at all levels.	N.A.	In use at all levels by end of 2016

At the end of ESDP IV, lack of communication persists within and across levels (e.g. difficulties in communication within offices and between levels reduces implementation effectiveness). These communication problems slow activities and reduce the level of information shared, so that officers are not appraised of relevant information when making decisions. They also render coordination within an office and between offices of the many programmes and activities undertaken, less effective. The strategies described under the preceding component,

especially under 'Sub-component 3: sharing information to inform decision-making' will help improve communication within the administration and with schools.

Efforts have already been made to improve coordination. The government uses the BSC approach to activity management7 – which transforms the strategic plan into the annual and monthly activities required to meet plan objectives. At the end of ESDP IV, BSC was implemented across all levels of educational administration, allowing officers to monitor organisational performance against strategic goals. In addition, it can be used to encourage collaboration and communication within and across levels.

Sub-component 1: job specifications and operational handbook

The next step is to ensure that each officer in the system knows what is expected of him or her. Job specifications exist in broad terms (a description for what is expected at director level, at expert level etc.) but are not yet targeted at individual roles, including some specialised roles, such as itinerant teachers for inclusive education. In ESDP V, job specifications will be prepared and digitised for each post. This step will provide greater autonomy to officers, allowing them to take more responsibility for proposing and delivering strategies and activities that link to their specification. In addition, job specifications will help officers to understand what is expected of their colleagues and peers, increasing transparency and accountability for delivery of tasks. As the system grows, the structure, mandates and assigned responsibilities will be reviewed, adjusted where necessary and reflected in updated job specifications.

Officers can also be supported in the performance of their work by clarifying and standardising the various steps in the tasks and operations for which they are responsible. Under ESDP V, an operations handbook will be produced for staff in the MoE and TVET agency, the REBs and TVET agencies and the woreda offices. The operations handbook will present in an easily understandable manner how to undertake the regular tasks of these officers and will make suggestions on how to solve regularly occurring problems.

Sub-component 2: improved use of existing documentation centres and sharing platforms

Several tools exist within the educational administration for the collection and exchange of documents. The most important of these are the library in the MoE and the iSite, which in principle is used by all staff to share reports and other official documents. The main problem at present is not with the lack of existing platform – virtual or physical – but with the limited use that is made of those that exist.

During ESDP V, efforts will be made to ensure that greater use is made of iSite. A specific strategy document will be produced in this regard, to make the initiative better known and more used. Probable strategies will include strengthening the staffing available for this purpose and brief training sessions on its use and usefulness. Technical support will be sought for the digitisation of relevant materials, including those of previous years and their inclusion in the same site.

7 The BSC is designed to facilitate more effective and efficient planning, monitoring and management of education sector development activities.

Strategies	Indicator (including baseline and target)	Source
Job specifications and operational handbook	% of officers with digitised job specification reaches 100% by end of ESDP V	Human resources
	% of officers with access to an operations handbook will reach 100%	Sample survey
Drafting and digitising of job specifications		
Informing officers of their job specifications		
Preparing operations handbook for federal, regional, zone and woreda levels		
Distributing operations handbook		

Strategies	Indicator (including baseline and target)	Source
Improved use of existing documentation centres and sharing platforms	Number of documents available on iSite	iSite
	Number of monthly users of iSite	iSite
Producing a strategy document for documentation sharing		
Digitising documents for inclusion in iSite		
Holding information campaign on the use of iSite		

Component 4: adequate supply of staff with the right mix of skills in each post/level

Objective: staff in the educational administration at all levels will have the necessary skills to perform their tasks in a competent manner	ESDP IV	Target
% of new staff in technical posts recruited on the basis of a recruitment profile	N.A.	100%
% of woreda officials to have benefitted from professional training, related to their area of work	N.A.	50%

The BPR approach has put in place a structure for implementation, identifying which staff, with which skills, are required in which posts/levels. To fill these positions with adequately skilled professionals, however, is a long process that was not going to be completed during ESDP IV.

Sub-component 1: profiles and recruitment

Institutional capacity will be strengthened through the development of a more coordinated structure for adult education provision in communities and the introduction of minimum standards and a quality assurance system.

The next step, to support the work done under BPR, is to ensure that there is concordance between posts and profiles. The job specifications produced under the preceding component will help clarify the expected profile of the occupants of these posts. This will be used to draft for all technical posts, appropriate recruitment criteria. During ESDP V, efforts will be undertaken to make recruitment procedures more transparent for all technical posts. This will start from a critical inventory of present recruitment procedures, with recommendations on what reforms may be needed. The systematic use of the new recruitment criteria and revised procedures will allow for more appropriate selection of new staff.

Sub-component 2: professional development: mentoring, training and on-the-job support

While the revised recruitment practices will help in recruiting staff with appropriate profiles, the need for professional development continues to exist, both for presently employed and newly recruited staff. At the federal and regional levels, officers lack comprehensive skills to develop strategic plans. Critical skill gaps reported include the following: skills in budget analysis, disaggregated by budget category, education sub-components and line items; skills in making reliable projections and formulation of strategic choices or alternatives to influence policy and secure adequate allocation of resources for the sector. Most staff will only develop these skills after their recruitment. Professional development in these areas will take different forms during ESDP V.

Formal training and workshops will continue to assist staff to develop the skills and competencies required in response to the gaps identified above. Several partners will continue to undertake training workshops, among the most important being those on EMIS supported by GEQIP.

Many of the complex skills needed, however, will have to be further strengthened, after the training (or when no training is undertaken) through 'on the job' support. Such support will prioritise officers at the woreda level. Attention will be paid to identifying information that is useful at the

local or regional level. Region, zone and woreda officers will then be provided with information on policies and plans, with guidelines which include practical advice and with support for the analysis of data on their own performance. This approach marks a change from the current preference for skills development at the higher levels and reinforces the objective to realise a decentralised system managed to assist woredas in the support that they provide to cluster supervisors and school communities to make effective decisions.

Professional development will increasingly include mentoring by immediate supervisors. Managers will be positioned to mentor their staff on a regular basis to ensure that the anticipated outcomes are delivered to a good standard in a timely way. This mentorship will link to intervention where required to ensure that appropriate outputs are delivered and that shortcomings are rectified immediately.

Finally, a professional development programme will be linked to each staff profile. Such a programme will replace one-off training sessions with a personally targeted set of workshops, courses and other training-related events, together with the provision of support and guidance materials.

A professional development programme will be linked to each staff profile. Such a programme will replace one-off training sessions with a personally targeted set of workshops, courses and other training-related events, together with the provision of support and guidance materials.

Strategies	Indicator (including baseline and target)	Source
Profiles and recruitment	Recruitment profiles will be used for the recruitment of all technical posts by the end of ESDP V	Human resources
	Recommendations of the review of recruitment procedures have been implemented by the end of ESDP V	Human resources
Drafting recruitment profiles for all technical posts		
Disseminating recruitment profiles among human resources' staff and ensuring their use for recruitment of all technical staff		
Undertaking critical inventory of present recruitment procedures for technical posts		
Validating, through relevant decrees, recommendations of the critical inventory		
Professional development: mentoring, training and on-the-job support	The share of woreda officials to have benefitted from professional training, related to their area of work increases to 50%	Woreda reports
	The share of woreda officials who express satisfaction with the availability and usefulness of guidance and support materials will reach 90% by the end of ESDP V	Sample surveys
	Professional development programmes will exist for each staff profile by the end of ESDP V	Human resources
Organising training workshops to respond to skills needs at different levels of the educational administration		
Preparing guidance and support materials for officials from woreda offices		

Strategies	Indicator (including baseline and target)	Source
Holding workshops for woreda officials on the use of the guidance and support materials		
Developing handbooks and guidelines on mentoring programme for officials with supervisory responsibilities		
Designing professional development programmes for each staff profile		

Component 5: resources and conditions of work

Objective: the regional and woreda offices will have the necessary material and financial resources to function effectively	ESDP IV	Target
% of regional (including TVET), zone and woreda offices with the minimum level of material and financial resources	N.A.	100%

For any organisation to be effective, it is not sufficient that it has an appropriate structure and staff with the right profile. It also needs a minimum level of material and financial resources, which also act as sources of motivation to staff through providing motivating working conditions.

Under ESDP V, standards on the minimum level of resources to be available to all organisations will be developed and information will be collected in this regard. This information will be used when distributing material and financial resources to ensure that gaps between offices become less important.

Strategies	Indicator (including baseline and target)	Source
Resources and conditions of work	Standards have been developed on the minimum level of resources to be available to region, zone and woreda offices	Regional reports
	100% of region (including TVET), zone and woreda offices have the minimum level of material and financial resources, according to the standards	Regional reports
Developing standards on the minimum level of resources to be available to all organisations		
Developing a system to track information on the availability of these resources		
Disseminating information on resource availability to region, zone and woreda offices who decide on resource distribution		

Priority programme: general education quality

The goal of this priority programme is:

"to improve the quality of general education in order to motivate children to complete primary and secondary school and provide them with the knowledge, skills and values to become productive and responsible citizens".

Introduction

In spite of great efforts under GEQIP, in the period of ESDP IV student attainment and learning outcomes have not improved in line with targets.8 The system has not been supporting the majority of students to acquire core foundation skills. This impacts on their progress through to grade twelve and with TVET and higher education outcomes. For ESDP V, therefore, the emphasis on education quality for all students will remain a priority. Some efforts will be revised and strengthened and new approaches implemented to affect improvements in every school.

ESDP V will focus on improving teaching and learning; the relevance of curriculum content and instructional methods including in the use of ICT; the supervisory skills of school leaders and their management of resources at their disposal; and the quality of the school environment in which staff must lead and teach and in which students must learn.

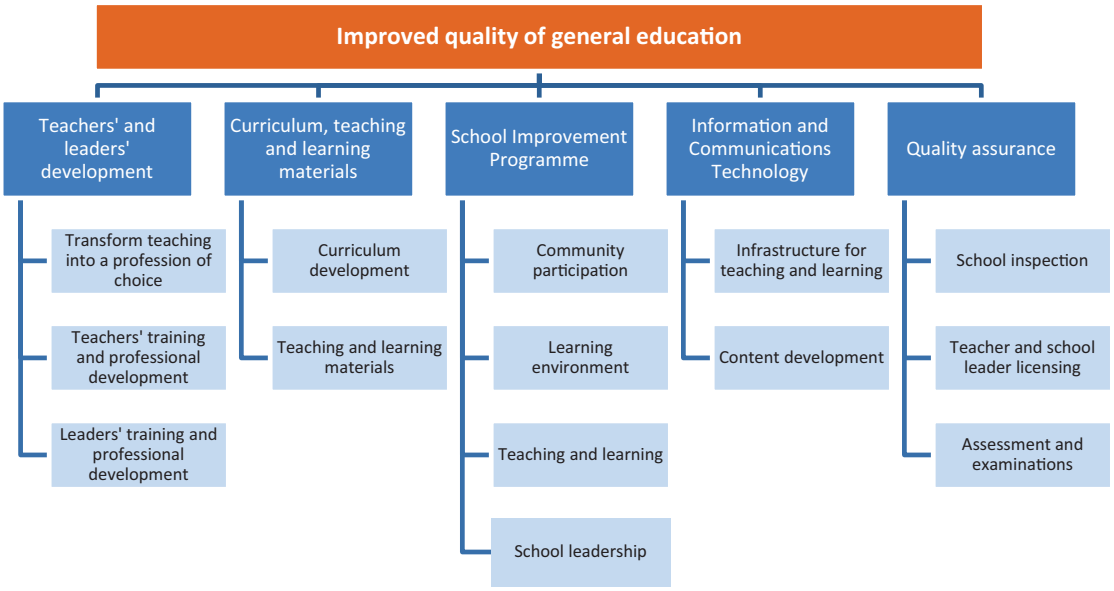
Particular attention will be paid to children with special educational needs and for early grade acquisition of foundation skills in mother-tongue languages. Emphasis will be given to science, mathematics and technology and to civic and ethical education and the link to peace building, tolerance and improved social cohesion as well as to maintaining the strong integration of environmental protection at all levels. Strategies will always address the needs of both males and females and will incorporate life skills to help all students to lead safe and healthy lives both within and outside the school environment.

Based on this, to improve the quality of education offered in all schools, the five components of this programme are essential. Combined, the strategies identified are aimed at producing meaningful improvements for educational quality at the pre-primary, primary and secondary levels. It is recognised, however, that some of these components will take years to have a direct impact on improving the teaching and learning of core foundation skills at the primary level, particularly within a system that must have the capacity to enrol more than twelve million new entrants to primary school in the next five years.

- **Teachers' and leaders' development** – turning teaching into a profession of choice and improving skills in teaching, school leadership, supervision and management.
- **Curriculum, teaching and learning materials** – revising the curriculum to allow differentiation and improved targeting and providing adequate teaching and learning materials with a focus on core foundation skills.
- **School Improvement Programme** – ensuring that schools achieve minimum standards which define the requirements to support effective teaching and learning in a healthy and safe environment; and supporting community-based school management and decision making.
- **Information and Communications Technology** –increasing the use of ICT in education by expanding and improving ICT infrastructure at all levels, producing and widely distributing digital education resources and building the ICT skills and capacity of teachers and leaders to support curriculum delivery.
- **Quality assurance** – providing oversight of teacher skills through licensing, of the school's teaching and learning environment through inspection and of overall system performance through regular assessment of student achievement.

8 Note, however, that the periodic nature of NLAs means that country-wide performance data were not produced in the final two years of ESDP IV for primary schools.

Figure 14: structure of components that contribute to improving the quality of general education



Component 1: teachers' and leaders' development

Objective: improved teaching and leadership skill in all institutions, matched with greater motivation and job satisfaction	ESDP IV T (F/M)	Target T (F/M)
Annual attrition rate of teaching staff	4%	2%
% of new intakes to teacher training institutions (including university graduates) who score greater than 2.60 in grade ten examination	N.A.	35%
% pre-primary teachers that are qualified with ECCE multi-year diploma	0% (0/0)	15% (15/15)*
% teachers who report satisfaction with their job	N.A.	90%
% appropriately qualified teachers in grades one to four	55% (63/48)	100% (100/100)
% of teachers that are licensed (primary and secondary)	0%	70% (70/70)
% school leaders (principals and supervisors) that are female	8%	20%
% primary schools with licensed school leaders/principals	0%	100%

* During ESDP V more than 100,000 additional pre-primary teachers will be employed

Sub-component 1: transform teaching into a profession of choice

All children must have teachers who are trained, motivated and enjoy teaching, who can identify and support strong and weaker learners alike. Good teachers close the gap between poor and good quality education by maximising the benefits of learning in every classroom, for every child.

Recognising this, during the ESDP IV period the government tried to enhance the capacity of teachers through in-service and pre-service training programmes. A 2014 study conducted by the MoE, however, suggested that 70%of teachers would, if given an equivalently paid option, leave the profession. The negative attitude to the profession was exacerbated by lack of

recognition/social status by their community and poor school administration and human resource management. This, in spite of efforts to improve teacher skills, implies that much more needs to be done to motivate and support the hundreds of thousands of teachers in all regions.

During ESDP V, a strategy to 'transform teaching into a profession of choice' will be implemented. This strategy will focus on the needs of teachers, with the ambition to re-establish the prestige of the teaching profession such that it attracts the most able and ensures that all teachers are valued and value their profession. Such a reorientation of a profession is not something that can be achieved in a five-year period but during ESDP V, the foundations will be established and implementation will begin. Through this process, teacher retention will rise, teacher attendance will increase and student achievement will be improved with rising teaching and learning standards in the classroom.

This will be a major endeavour, aimed at enriching the professional experiences of teachers. From the time of applying to join CTEs, individuals will have access to motivating career development opportunities, with teacher coaching linked to clear pathways for career progression to subject specialists, school principals, cluster supervisors, education specialists and experts. Progression will be based on competency and performance. There will be a stronger peer-led culture of excellence wherein teachers mentor one another, develop and share best practices and hold one another accountable for meeting professional standards. This mentorship will extend to teacher support and encouragement for students to enter the profession. Career counselling of this type will inform students at the lower secondary level of the possibilities and career prospects of choosing teaching. Centres of teaching excellence will be established in CTEs and in three universities and greater support will be provided through supervision clusters.

Implementation of the existing teacher development policy will be strengthened to improve teacher distribution, equity and balance of skills in all regions.

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Implementation of the existing teacher development policy will be strengthened to improve teacher distribution, equity and balance of skills in all regions. This policy includes provisions related to incentives and placements which will be used to attract teachers to hardship posts and support them in these more challenging conditions. By committing such extensive support to teachers, commitment will be repaid through higher standards of professionalism, competency and motivation. Amongst the public, the image of the teaching profession will be re-positioned. Awareness raising and community engagement exercises will be conducted to demonstrate the importance of education – and of educators – for social and economic development. A continuing national media campaign to raise the profile of the teaching profession could include success stories, political support, case studies, competitions, awards and scholarships for excellence.

Sub-component 2: teachers' training and professional development

Teachers are responsible for communicating effectively all curriculum content. Without high levels of competency, transmission of knowledge, skills and values will be weak. The recent curriculum revision, with a move towards a student-centred approach to teaching and learning, requires active teaching methods and effective classroom management to maximise time on task. The new approaches will benefit all students when effectively applied, strengthening their confidence, leadership and innovation skills.

It has been seen, however, that the largest barrier to effective implementation of the revised curriculum is lack of pedagogical skills amongst teachers. This is unsurprising given the transition from traditional to modern methods for teachers and teacher educators. The government will therefore provide support to better facilitate this transition by improving qualification processes and standards (pre-service training), enriching CPD and strengthening supervision processes (in-service training).

In the ESDP V period, all teachers will move to the required qualification standard: a three-year diploma for primary school teachers; a first or second degree, respectively, for first and second cycle secondary teachers; a one-year accelerated mixed-mode of training for ABE teachers; and a certificate or multi-year diploma for ECCE facilitators and teachers. For this to be achieved, teachers in the regions and areas with the lowest rates of qualification will be prioritised for upgrading.

Pre-service training

Candidate selection processes for CTEs will be improved and minimum entry requirements established. In particular, the current gender imbalance among teacher trainees will be addressed with the objective of achieving, as soon as possible, a 50% share of women teacher trainees in new annual intakes to CTEs; and in ensuring retention of all teacher trainees.

Currently, on completion of teacher training, there exists no standardised method or national guideline for evaluation of teacher competency.

Region-specific approaches are applied and this has an impact on the consistency of knowledge and skills among new teachers graduating from CTEs and universities. The existing evaluation procedures will be reviewed and best practice identified to produce national guidelines for all teacher training institutions. A strengthened evaluation process – and additional quality assurance – will inform improvements to teacher training in CTEs and universities supplying trained teachers.

Teaching skill and attitudes begin to develop in CTEs. The professional competencies of teacher educators are supported through the higher diploma programme yet this programme does not yet equip teacher educators will the skills required to provide training on modern teaching methods or other key pedagogical skills. The higher diploma programme will be evaluated with a view to preparing a revised CPD programme for teacher educators. Teacher educators will also have a greater supervisory role during trainees' practicum. This step is intended to improve the development of critical pedagogical skills and to provide skills for creating an effective teaching and learning environment in resource limited schools.

In addition, teachers trained specifically for pre-primary education will complete either a one-year certificate or a multi-year diploma. The new multi-year diploma for pre-primary teachers, with its first cohort due to graduate in the second year of ESDP V, will continue to be strengthened and will expand from the current seven to reach all CTEs. Given the limited availability of teacher educators with specific skills for ECCE instruction, in order that skilled educators exist in all CTEs, a training programme for ECCE educators will be provided centrally. Once training for ECCE teachers is offered in all CTES, the system will reach the capacity required to fill the existing gap and future expectations of ECCE staff.

Similarly, selected universities and CTEs have started teacher education programmes on SNE. These programmes will be further supported by the development of pre-service training modules.

The language of instruction has implications for the quality and equity of education offered across the regions. To support the acquisition of core foundation skills, the training of primary school teachers in mother-tongue instruction, which began during implementation of ESDP IV, will continue. During pre-service training, teachers will be prepared to teach in the language of instruction demanded by their expected deployment. Teachers of mother-tongue language subjects will be recruited from the local area to assure full mother-tongue proficiency. Other teachers working in the emerging regions – who often do not come from those regions – will receive the necessary pre-service language training to equip them to teach all other subjects.

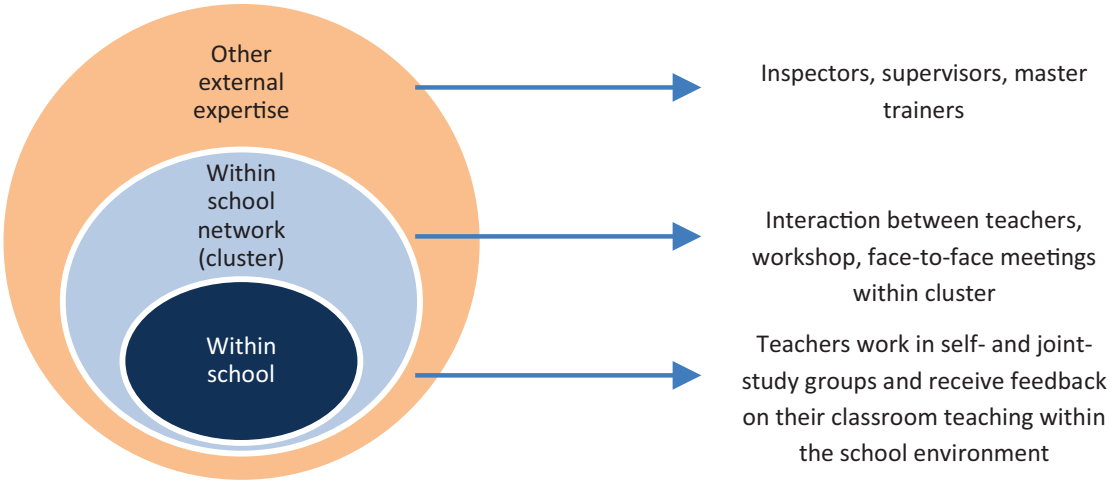
Language challenges continue into secondary education. Acknowledging the general weakness in English language skills amongst teachers – and the planned rapid growth in secondary enrolment – English Language Improvement Centres will be strengthened in all universities that provide teacher education so that new teachers can develop the skills to more effectively teach English. ICT will also be fully integrated in teachers' training courses and supported with practice so that teachers are better equipped to use technology and to teach and assist their students with technology.

In many instances, given the time taken to learn a new language of instruction, even this training might not be sufficient. Candidate selection processes, therefore, along with information emerging from the new TMIS will be used to recruit and assign teachers with prior knowledge of less-common languages. This approach can ensure that all students have a teacher who is capable to teach in the chosen language of instruction, increasing equity of education and supporting the acquisition of core foundation skills.

In-service training

In-service training for all teachers will be provided through a targeted programme of CPD. The approach to CPD is conceptualised as a school level, peer-led professional excellence strategy, consisting of reflective activity designed to improve an individual's values, knowledge and skills. It is designed to support teachers' individual needs and to improve professional practice. CPD will be delivered at three levels: external expertise, school networks and clusters and school-based training.

Figure 15: the three levels of CPD for teachers



This approach to CPD will remain but the current structure will be reviewed. The revised CPD structure will retain induction support for new teachers at all levels, delivered through the cluster supervision network. Thereafter, the three full ('proper') CPD courses will be reconfigured and extended to increase relevance and to offer sufficient content to cover full-career development. Courses will prioritise the following topics:

- Pedagogical skills, with special emphasis for gender-responsive instruction
- Core foundational language (emphasising mother tongue instruction), literacy and numeracy skills
- Monitoring student achievement through continuous assessment to support progress
- The sciences, mathematics and the use of information and communication technologies for instruction

In addition, as the curriculum continues to evolve (see 'curriculum development' component), teachers will be informed through updated and prioritised CPD modules. These will be complemented by direct support to improve the teaching methods required by any new curriculum material.

Context-relevant CPD modules will also be provided for the following, depending on teacher needs and location:

Mother tongue: to provide all students with a quality education, teacher skills in mother tongue instruction will be strengthened. As curriculum materials are developed in mother tongue languages, teachers will receive a short-term training course.

Inclusive education: special needs expert teachers will be trained in all clusters. By the end of ESDP V, each of 800 resource centres will be staffed by an itinerant teacher educated in SNE who will assist schools in the cluster. This will be supported by the development of teacher skills across the profession in relation to special needs, through in-service and pre-service training modules.

English: at the secondary level, students will learn all subjects in English, except for Amharic and Civics. Therefore, the development of English language skills among teachers currently in the work force will also be given high priority through the English Language Improvement Programme for teachers.

Science and mathematics: the focus on science and mathematics will remain at all levels, with an expansion of the pilot science and mathematics improvement programme expanded to all regions and the development of regional science and mathematics training units (often within CTEs) to supplement the existing federal training centre. This will be accompanied by the training of Regional Trainers and Key Teachers to support all relevant subject teachers in acquisition of skills to improve mathematics and science instruction.

Education in emergencies: teachers operating in areas that face regular emergency situations will be supported to develop the complex skills that are required to continue to teach when the learning environment is disrupted. In 2013 the 'Ethiopia: minimum standards for education and emergencies' were developed. This resource will be available in every region, zone and woreda education office and in every regional TVET agency. All teachers assigned to emergency-prone areas (typically flood or drought but

also areas of recurrent conflict) will receive this additional integrated training on school disaster management, disaster risk reduction, psychosocial support, peace education and gender based violence.

Sub-component 3: leaders' training and professional development

School principals and cluster supervisors lead, in consultation with a school's Parent, Student and Teacher Association (PSTA), the decision-making and management processes at the school level. As identified by a survey of teachers, the quality of school administration and human resource management is a critical motivating factor for effective teaching. Quality school management will produce large impacts for student learning performance through innovation, knowledge sharing and the identification and reproduction of best practice.

The problem that principals and supervisors face in improving school quality is knowing what inputs and actions will lead to the results that they seek. There is little understanding of how to convert additional resources into improved learning outcomes for students through the achievement of school minimum standards. In addition, neither group currently has the capacity to conduct informed classroom observation and provide appropriate, constructive feedback to improve teacher performance.

The Leadership and Management Programme supports school principals and cluster supervisors to improve their core leadership and management skills. It has already been provided for more than 25,000 school principals and supervisors and has been redesigned and modules launched in ESDP IV. The new training provides both theoretical understanding and practical skills in core areas of supervision, such as continuous assessment and classroom observation for on-the-job support to teachers. Programme modules will be continuously evaluated and revised where relevant so that the content remains up-to-date and incorporates the latest developments in leadership, school management and teaching support/supervision.

School principals and supervisors will be supported by a comprehensive and practical school leadership and management handbook and resource utilisation manual (see 'School Improvement Programme' component) which will aid the maintenance of improved standards across all schools in all regions and act as a framework for all CPD programmes.

School principals will use their training to establish structures and processes at the school level that support shared leadership in which everyone has collective responsibility for student learning and for the overall environment of their school. As such, principals are responsible for making sure that all teachers are aware of and that the school complies with the Code of Conduct to mitigate gender-based violence and harassment in schools.

In order to improve school leadership, any teacher aspiring to become a leader will receive support from the school and training from the local network of school supervisors. In order to increase the share of school leaders that are female – so as to increase equity within the profession and its effect on the school environment – a special support programme to encourage and support greater transition of females from teaching to leadership positions will be implemented.

Strategies	Indicator (including baseline and target)	Source
Raising awareness about the value of the teaching profession	# of community awareness campaigns or activities, led by the MoE, to recognise the value of teachers will reach 8 per year	Comm. Directorate reports
	% of parents who rank teaching as a high prestige profession will reach 60%	Sample survey
	% of new intakes to teacher training institutions (including university graduates) who score greater than 2.60 in grade ten examination will reach 35%	EMIS
Promoting the social status of teaching profession through community awareness, campaigns, recognition		
Developing and implementing competency and performance-based career progression and incentive mechanism		

Strategies	Indicator (including baseline and target)	Source
Developing and implementing revised selection guidelines that raise the standards for admission to teaching		
Ensuring a structured, high-quality CPD programme for career progress and to upgrade the qualifications of teachers.	% teachers satisfied with their CPD programme will reach 100%	Sample survey
	% teacher educators satisfied with CPD will reach 100%	Sample survey
	Annual attrition rate of staff will fall from 4% to 2%	EMIS (TMIS)
Upgrading the quality and relevance of CPD modules with greater emphasis on CPD priorities (pedagogy, science and mathematics, continuous assessment, core foundation skills)		
Evaluating and revising teacher educator CPD programme		
Capacitating teacher educators with CPD		
Increasing the share of teachers that reach the required qualification standard	% of diploma qualified teachers in pre-primary will reach 15% of all teachers	EMIS
	% of ABE facilitators without teaching qualification will be reduced to 20%	EMIS
	% of appropriately qualified teachers: G1-4 will increase from 55% to 100%.	EMIS
	% of appropriately qualified teachers: G5-8 will increase from 92% to 100%.	EMIS
	% of appropriately qualified teachers: G9-12 will increase from 93% to 100%	EMIS
	% of qualified teachers that are female will: Reach 50% for ECCE Increase from 44% to 50% for G1-4 Increase from 28% to 45% for G5-8 Increase from 16% to 35% for G9-12	EMIS
	% of teachers that are licensed: G1-12 will reach 70%	EMIS
	% of teachers that are licensed: school principals and supervisors will reach 70%	EMIS
Implementing revised curricula for teachers training at all levels		
Establishing centres of excellence for teaching in CTEs and universities		
Conducting teacher training activities in CTEs		
Improving teacher skills in the delivery of science and mathematics instruction	% maths and science teachers that are licensed will increase to 100%	Licensing
Implementing quality science and mathematics training modules		
Scaling up the results obtained from science and mathematics pilot project (three regions) to all regions		
Establishing science and mathematics training centres in all regions (preference for containment in CTEs)		
Capacitating maths and science Regional Trainers in all regions		
Capacitating maths and Science Key Teachers in all regions		

Strategies	Indicator (including baseline and target)	Source
Improving teacher skills in mother tongue and English language instruction	% of teachers trained in mother tongue proficiency skills increased to 100%	EMIS Licensing
	# of English language teachers having received English language quality improvement training will reach 70,000 and 50% of these will be women.	GEQIP
Providing school-based English mentoring training		
Improving English language centres		
Providing curriculum materials in regional languages		
Organising workshops to improve the skills of teachers on mother tongue instruction		
Improving teacher's professional development in the use of ICT across the curriculum	% secondary school teachers who use ICT facilities to enhance student learning increased from 69% to 100%	REB and CEICT reports
	% primary school teachers who use ICT facilities to enhance student learning increased from 63% to 100%	REB and CEICT reports
Training school leaders to use ICT		
Mainstreaming ICT across all courses of pre-service & in-service training programmes		
Training teachers on how to use ICT in classroom instruction		
Developing online/offline ICT skill training course for teachers		
Increasing the supply of teachers with specific knowledge of SNE and Education in Emergencies	% of schools with at least one teacher that has qualified with a diploma or degree in SNE will reach 24%	EMIS
	# of resource centres with a focal itinerant teacher that is qualified in SNE will reach 800	EMIS
	% of schools in emergency-prone woredas that have received integrated training on disaster risk reduction and response will reach 100%	REB reports
Providing SNE in both pre-service and in-service training for teachers		
Training teacher educators in SNE		
Developing a strategy for placement of teachers within the system (including at zone, woreda and cluster levels)		
Training and equipping school leaders in emergency-prone areas to respond effectively to crisis		
Training and equipping teachers in emergency-prone areas to respond effectively to crisis		
Printing and distributing copies of 'Ethiopia: minimum standards for education and emergencies' to all region, zone and woreda education offices and TVET agencies		
Increasing the share of school principals and supervisors that reach the required qualification standard	% of pre-primary schools with qualified leader (diploma) will reach 100%	EMIS
% of primary G1-4 schools with qualified leader (diploma) will reach 100%	EMIS	
% of primary G1-8 or G5-8 schools with qualified leader (degree) will reach 100%	EMIS	
% of secondary G9-10 or G11-12 or G9-12 schools with qualified leader (master's degree) will reach 100%	EMIS	

Strategies	Indicator (including baseline and target)	Source
Establishing pre-primary school leaders' education and training programme		
Establishing strategy for progression to school leader for appropriately qualified candidates		
Increasing the role of females in school leadership and supervision % of school supervisors that are female will increase from 4% to 20%	% of school principals that are female will increase from 9% to 20%	EMIS
	EMIS	
Developing a strategy for swift career progression of females to school leadership positions		
Conducting awareness raising and promotional campaign to encourage female ambition to reach leadership positions		
Ensure that school principals and supervisors receive a structured, quality, CPD programme for career progress	% of school leaders satisfied with their CPD programme will increase to 100%	Sample survey
Capacitating school leaders with CPD		
Increasing share of school directors who have completed the new Leadership and Management Programme		
Increasing share of school leaders trained in gender-responsive pedagogy		
Increasing share of school leaders trained in inclusive education		

Component 2: curriculum, teaching and learning materials

Objective: a curriculum fit for a lower middle income country is developed and sufficient teaching/learning materials are available to all staff and learners, irrespective of needs	ESDP IV	Target
Establish a new curriculum development institute by 2017	N.A.	Established
% of all subjects with revised curriculum relevant to a lower middle income economy	N.A.	100%
Student to textbook ratio (all institutions, all subjects, all grades)	1 : 1	1 : 1.2
% primary schools offering ≥ 20 varieties of supplementary literacy/ numeracy materials	N.A.	100%
% of CTEs with required new curricular resources	N.A.	100%

Sub-component 1: curriculum development

In the ESDP III period a full curriculum revision was conducted. This was implemented during ESDP IV in all primary and secondary schools. The new content has been well received and teachers are beginning to fully understand the additional skills required to deliver the complex topics.

The next step is to introduce some flexibility to the curriculum, to enable differentiation so that teachers can target curriculum content at learners and select a pace depending on their level, needs and preferences. This step will further improve the relevance of the curriculum for all students, including those with special educational needs – for whom core curricula have already been modified and manuals are being

prepared to enable needs-specific differentiation. There will also be a concerted effort to expand support to additional mother tongue languages to improve the acquisition of basic literacy skills of all children. Alongside curriculum development activities a review of the implementation of the language policy will be conducted to ensure that it supports equitable and quality education for all. For these activities to happen effectively, a curriculum development and research institute will be established.

Initially, a procedure will be put in place to rigorously assess the current curriculum. This will be used to identify the changes needed, taking into consideration the views of students, teachers, school leaders, communities and other education specialists. The potential for a curriculum change to disrupt teaching and learning is large and a light-touch will be applied where possible. Consistency will be sought and revisions of content will be matched by minimum learning competencies, teacher guides and guidance for continuous assessment. Curriculum-linked continuous assessment manuals will be prepared for all levels of general education. These will provide guidance to teachers in monitoring and supporting students to reach learning targets. Findings from continuous assessment within a cluster or woreda will also inform instructional decision making by teachers and teacher support systems.

The curriculum update will pay attention to the incorporation of modern technology and vocational topics and education for greater creativity and entrepreneurship. In line with the priorities of the second Growth and Transformation Plan, a large demand is expected for middle- and higher-level human resources. It is therefore important to emphasise science and technology in a curriculum revision so as to produce capable citizens who can contribute to increased productivity in the increasingly knowledge-based economy. The revision will address the needs of both males and females and will integrate life skills to increase awareness of issues such as HIV/AIDS, sexual education and DSA, to help all students to lead safe and healthy lives. The curriculum revision will also pay attention to co-curricular activities and structures, to improve linkages and efficiency in the delivery of life skills training through formal and informal channels.

Special emphasis will also be given to civic and ethical education and its link to peace building, tolerance and improved social cohesion as well as to maintaining the strong links to environmental protection at all levels. This enables the maintenance of integrity, peaceful cooperation and tolerance within a diverse population. The revision will ensure that, when Ethiopia reaches middle-income status, children and young people will be appropriately trained for a rapidly changing society and economy.

When teachers apply the new curriculum, they will be able to target their teaching towards students' varying background knowledge, readiness, preferences and interests. The approach is intended to facilitate teaching and learning for students of differing abilities in the same class. The new curriculum will enable teachers to maximise each student's growth and individual success.

The curriculum update will pay attention to the incorporation of modern technology and vocational topics and education for greater creativity and entrepreneurship. In line with the priorities of the second Growth and Transformation Plan, a large demand is expected for middle- and higher-level human resources.

Sub-component 2: teaching and learning materials

In all schools, an adequate supply of materials for teachers and for students is a pre-requisite of effective learning. This includes non-print learning support materials such as DVDs, radio and web content where appropriate. During the period of ESDP V the printing and distribution system for textbooks and teacher guides will be analysed and strengthened so that all students have access to the core resources required to learn.

Where necessary, teacher guides will be updated to better support teachers in the continuous assessment of students based on established minimum learning competencies and in applying the skills required for each part of the curriculum. New workbooks linked to the curriculum will be developed and trialled to gauge their effectiveness for enhancing students' classroom and independent learning.

All CTEs will be provided with a sufficient number of school-level teaching and learning materials to ensure that teacher trainees are, as soon as is possible, exposed to the resources that they will use in the classroom. It will be the Curriculum Development Institute's responsibility to specify and guide the CEICT in the production of digital learning materials for use by regions and to guide schools in providing adequate equipment in science laboratories.

Early-grade literacy and numeracy will become a particular focus for provision of mother tongue teaching and learning materials, as it is for teacher training. Schools will be provided with packages of early grade mother-tongue 'readers' to support students' progress in literacy. Teachers will be guided by packages of exercises to support the development of students' basic numeracy.

So that hazards cause the least possible loss of human life and disruption to learning, measures

are included to support the establishment of a safe and prepared school environment. Where schools operate in areas that face a risk of an emergency situation, including drought, flood and conflict, they will be equipped with a standard package of 'emergency' teaching and learning materials. This package, along with the training provided to teachers and school leaders, will support uninterrupted education for all. Supplies will include hygiene kits, WASH resources and teaching/management kit. This equipment will provide temporary relief, to be supported by regional and national responses.

All cluster resource centres will be equipped with supplementary materials for learners with special educational needs. Experts in the provision of education for children with special needs will staff these centres and schools will be able to use the shared materials and expertise, as required.

Strategies	Indicator (including baseline and target)	Source
Revise national curriculum for kindergarten to grade twelve to improve relevance and allow differentiation, paying due attention to life skills, technical& vocation-oriented entrepreneurship and cross-cutting issues	% of all subjects with revised curriculum relevant to a lower middle income economy will reach 100%	Biannual and annual reports; survey/study report
Strengthening current status of curriculum directorate and establishment of Curriculum Institute		
Designing a strategy for curriculum differentiation, including due attention to the needs of all children		
Revising curriculum across all subjects from pre-primary to secondary		
Developing history curriculum for G9-12, which supports the unity and diversity of the country through the history of its various nations and nationalities		
Mainstreaming ICT across core subjects of the curriculum		
Improving awareness and skills among teachers regarding curriculum revisions, the increased demand for active learning methods and differentiation options	% of teachers and ABE facilitators demonstrating active learning methods and approaches will reach 100%	Inspection reports; licensing
Providing pre-service training to teachers and ABE facilitators on how to implement the revised curriculum in the classrooms		
Implementing curriculum module in CPD programme to support continual skills upgrading		
All students have sufficient materials for effective learning	Student to textbook ratio (all institutions, all subjects, all grades) will increase from 1:1 to 1:1.2	EMIS
	Student to textbook-use ratio will increase from 1:0.4 to 1:0.7.	Sample survey
Developing, print and distribute textbooks in necessary languages		
Analysing and improve system for distribution of teaching and learning materials		
Equipping all schools with sufficient teaching and learning materials for instruction		
Equipping all 0-classes with a minimum package of learning materials		
Equipping resource centres/clusters with materials for continued education in an emergency situation		

Strategies	Indicator (including baseline and target)	Source
Equipping resource centres/clusters with curriculum materials for children with special educational needs		
All teachers have sufficient materials for effective teaching	Textbook to teachers' guide ratio will be 40:1.	EMIS
	Teacher to teachers' guide-use ratio will reach 1:1.	Inspection reports / sample survey
Distributing teacher guides that include minimum learning competencies for kindergarten to grade twelve		
Developing continuous assessment manual for all subjects and levels for kindergarten to grade twelve		
Increasing supply of targeted early grade literacy and numeracy materials	% of primary schools and ABE centres that offer at least twenty different types of approved supplementary reading materials will increase to 100%	Sample survey; school inspection
Distributing readers to primary first cycle schools		
Producing early grade literacy and numeracy materials in mother tongue languages		
All schools that are exposed to an emergency situation have the resources for continuing education	# of schools with standard package of 'emergency' teaching and learning materials	Sample survey
	% of schools that have a plan for implementation of the emergency packages, where needed	Sample survey
Developing standard package of 'emergency' teaching and learning materials, including WASH		
Distributing packages to all schools at risk of emergencies, including WASH		

Component 3: School Improvement Programme

Objective: all schools, with support from the community, offer the environment, management and leadership required to support quality learning outcomes	ESDP IV	Target
% schools with school report card displayed on their notice board	N.A.	50%
% schools using at least half of their school grant allocation for teaching/learning domain	N.A.	60%
% of schools developing and implementing a high quality school improvement plan	N.A.	100%
Teacher attendance rate	88%	96%
% of all schools that meet or are above the expected standard of school "inputs" as per inspection standards	N.A.	60%
% schools that meet or are above the expected standard of school "processes" as per inspection standards	N.A.	60%

Sub-component 1: community participation

SIP is now a well-established approach to improving school standards. The programme focuses on engaging the community in school planning and management, so that funds available to each school – namely the School Grant and Block Grant – are used effectively to reach and maintain school minimum standards

that support improvements in the learning outcomes and environment.

Under SIP, each school is required to develop a school improvement plan that sets out its plan for reaching specified minimum standards. During ESDP V the current approach to school improvement planning, led by self-assessment and community-based decision-making, will continue. Schools will be encouraged to strengthen their PSTAs and these community groups will be provided with more information through the 'school report card' to make evidence-based decisions for improvement.

To increase community participation in school management and decision making, two awareness-raising strategies are planned. Firstly, a media based campaign, using radio and television, as well as print media where necessary, will be run. This campaign will focus on promoting education, community engagement in leading schools and the values that education can help to establish within society. In addition to the campaign, as used in other sectors such as health, a 'Development Team' will be used to provide face-to-face information and encouragement to households and community members to engage with education. This team will be tasked to achieve greater community participation in school leadership and management. At first, options will be explored to provide additional training to existing development team members (such as in health, so that they can provide integrated information to households). If required, a specific education 'Development Team' will be established.

The 'school report card' will aggregate EMIS, inspection and school-level data in a user-friendly format and will be shared by schools with the wider community. The school report card process will be fully decentralised to the woreda level, encouraging schools to regularly engage with neighbouring communities to share good practices from other schools in their cluster and in their woreda.

Sub-component 2: school environment

SIP guides PSTAs to achieve school minimum standards. These define the environment required to support effective teaching and learning. By the end of ESDP V, all schools will have a package of minimum learning resources. These resources will include: a functional laboratory (for grades seven and eight at primary and for all secondary grades), with necessary equipment and materials; a pedagogical centre for shared teaching materials; and a school reading club, stocked with targeted mother-tongue 'readers' for literacy development.

In addition, school environments must be accessible, safe and healthy. This includes monitoring and enforcement of the Code of Conduct for schools, to reduce gender based violence and harassment, released in the last year of ESDP IV. The focus in ESDP V will be on ensuring that all schools have: a supply of potable drinking water; adequate, gender-specific, sanitation facilities; and a basic set of accessibility facilities for children with special educational needs. Schools will be encouraged to prepare and equip sports facilities based on their local contexts. The standards for school WASH facilities will be in line with the agreed OneWASH national strategy. The basic package of accessibility facilities for children with special educational needs will be agreed upon in the first year of ESDP V and implemented thereafter.

In each school, a set of 'student services', that support students' life skills development and promote a healthy and safe school environment, will be offered. Student services will pay special attention to HIV/AIDS, DSA, school and student health and nutrition. To increase the reach and relevance of 'student services', the education administration will work closely with other government bodies and NGOs – such as the Food, Medicine and Healthcare Administration and Control Authority – working in these areas. Targeted school feeding will be delivered in the most nutritionally insecure and disadvantaged areas. A multi-sectoral National School Feeding strategy is under preparation and will be implemented during ESDP V. This strategy will prioritise support to pre-primary and first cycle primary in food insecure areas and for children from low income households.

Other health interventions such as school-based deworming, will link to the 'student services' provided. Given its potential to improve health, cooperation, teamwork and attitudes, school sport provision will become another particular focus of school improvement. Rather than providing individual 'school clubs' for each issue, 'student services' will integrate life skills coaching with resources and co-curricular or sports clubs (developed by curriculum staff and cross-cutting issue specialists) to promote a healthy and safe school environment.

Sub-component 3: teaching and learning

All teachers are expected to spend a minimum of four full days a year in some form of internally-organised professional development. Under SIP,

school-community and school-cluster support networks encourage and promote teacher engagement with CPD. CPD can be either formal training courses, experience sharing meetings with other teachers/supervisors, action research, study groups, mentoring, or similar activities. Core CPD content is as described in the 'teachers' skills and professional development' sub-component.

Around the country it is possible to observe exceptional best practices in teaching and learning, school organisation and management, parent engagement and PSTA roles. Throughout ESDP V, SIP officials at federal and regional levels will continue to study best practices and disseminate to schools on an annual basis their recent findings. These study findings will supplement CPD exercises and will help leaders as well as teachers to improve practice in their schools. SIP guidance encourages schools to support active learning methods in the classroom; understand the curriculum and how supplementary materials can be used to enhance instruction.

In collaboration with the PSTA, each school will develop and implement a competency-based continuous assessment process with core foundation skills prioritised. This will be used to monitor student performance so that staff can support each student's progression towards expected learning standards. Assessment will be linked to minimum learning competencies and supported by an item pool to be used for continuous assessment. Clusters, woredas and regions will continuously monitor early years' core foundation skills standards so that action can be quickly taken where children's progress is falling behind.

With this set of priorities, SIP encourages schools to support teacher development to achieve school minimum 'process' standards, so that staff have the skills to deliver the curriculum effectively and can target extra support to underperforming students.

Sub-component 4: school leadership

The Leadership and Management Programme will be supplemented by simplified guidance for evidence-based planning and decision making for a school principal to use when engaging their PSTA. Leaders will also receive a comprehensive school management and resource utilisation manual which will include how to approach cross-cutting issues in school. An adapted version of SIP guidance for small schools and ABE centres is being prepared.

All guidance materials will inform the preparation of three-year strategic plans and annual operational plans at the school level – in line with the current SIP cycles. For ESDP V, schools will be encouraged to prioritise investment of funds in the teaching and learning domain of the SIP framework. Gradual devolution of school management functions will be based on schools achieving performance improvements in school classification standards and student learning outcomes.

Within each cluster, one school is expected to reach model status (level four in inspection classification), with supervisory and guidance responsibilities, including those for SNE. Cluster-level assessments will be prepared, to support and move towards standardisation of regular student assessment. With these, schools will be better able to identify their strengths and weaknesses and work with cluster members to use cluster-level leadership in improving management practices and student learning.

Strategies	Indicator (including baseline and target)	Source
Improving community participation.	% of schools with active PSTA will reach 90%	ESDP V annual reports
	% of parents satisfied with school management will reach 75%	Sample survey
	Teacher attendance rate will increase from 88% to 96%	Sample survey
	% of schools using at least half of their school grant allocation for the SIP teaching and learning domain will reach 60%.	GEQIP reports
Using 'Development Team' to promote community engagement and to increase awareness about the value of education		

Strategies	Indicator (including baseline and target)	Source
Enhancing the use of school report card		
Establishing PSTAs in all schools		
Developing comprehensive management and resource utilisation manual for schools		
Strengthening school- parent/community relationship		
Providing services and resources to schools to improve the physical facilities and foster a safe and healthy environment.	% of pre-primary schools met and well above the standards will reach 60%	Inspection
	% of primary schools met and well above the standards will increase from 25% to 70%.	Inspection
	% of secondary schools met and well above the standards will increase from 40% to 75%	Inspection
	% of ABE Centres met and well above the standards will reach 70%	Inspection
	% of schools with facilities for children with disabilities, based on standards (to be developed in first year): Kindergarten: 75%; Primary: 35%; Secondary: 55%	Inspection
	# of cluster resource centres equipped with resources for SNE will reach 800	Special Support and Inclusive Education
Equipping schools with minimum learning resources, including laboratories, reference materials and libraries and materials for children with special needs		
Establishing and strengthening extracurricular/co-curricular programmes/clubs in all schools		
Developing strategy for efficient implementation of 'student services', to cover HIV/AIDS, DSA and school health and nutrition		
Developing strategy for supplementary materials to be provided through 'student services', to increase efficiency of information sharing with students on topics such as DSA, health and nutrition, HIV/AIDS		
Providing peer education and life skills education for HIV/AIDS and DSA awareness, through 'student services'		
Providing WASH resources per OneWASH standards		
Establishing a structure for communication of sport-related activities, facility development guidance and notification of competitions within and amongst schools		
Constructing new classrooms according to standards, including access for children with disabilities		
Providing needed access improvements for children with disabilities at existing schools		
Equipping cluster resource centres with resources for SNE		

Strategies	Indicator (including baseline and target)	Source
Conducting deworming programmes for targeted schools/regions		
Enhancing implementation of Code of Conduct for schools to mitigate sexual and gender-based harassment and violence		
Establishing reading clubs at all schools		
Foster and strengthen school-community and school-cluster support networks to encourage peer support and networking as a means of CPD to improve teaching and learning practices.	% of primary schools using an examination developed by their school cluster will reach 100%	REB report
	% of secondary schools that use exams developed by cluster or woreda working groups will reach 100%	REB report
Enhancing primary and secondary schools into centre of excellence for community coordination and information sharing		
Establishing functional pedagogical centres at all primary and secondary schools		
Supporting schools to conduct self-evaluation.		
Disseminating best practice to pre-primary, primary and secondary schools		

Component 4: Information and Communications Technology

Objective: provide ICT infrastructure, facilities and resources to support teaching and learning and students development for work in an increasingly digital environment	ESDP IV	Target
% secondary schools with access to computer-assisted instruction	6%	50%
% secondary schools equipped with internet to access digital education resources	28%	50%
% secondary schools with access to television-assisted instruction	69%	100%
% primary schools accessing radio based learning resources	63%	100%
% digital learning resources with accessible version for students with special educational needs	N.A.	100%

Sub-component 1: ICT infrastructure for teaching and learning

The government is committed to the expansion of ICT use in education in order to improve the quality of teaching and learning. In the plan period of ESDP V integration of pedagogy, content and technology will take priority.

The draft policy for ICT in education will be approved and implemented through a strategy that will include provision of equipment, for access at the school level. Central to the strategy will be the 'SchoolNET Cloud-Computing' infrastructure, which will be the portal through which students and teachers have access to a range of centrally stored, digital content. For this, a fully functional and well-equipped data centre and network operation centre, supported by a learning content management system, will be established.

In addition, more schools will gain access to free or low-cost Internet connectivity and networked, inclusive computer laboratories (with e-Braille readers). In pastoral and rural secondary schools, in which there is no access to electricity, solar powered tablets and mobiles, with pre-loaded educational materials, will be provided. To overcome challenges of a reliable maintenance and repair scheme, ICT equipment maintenance workshops/centres will be established in all regions.

Sub-component 2: content development for ICT

The strategy will also cover the development of digital content, to be shared across the various platforms. ICT will be mainstreamed across core subjects at all levels. Good core foundation skills are essential for students to benefit from ICT based learning. Rather than a standalone ICT course, activities will exist for all core subjects that demand the use of ICT, including radio, television and digital technologies. As the curriculum is updated, digital content will be adapted for core elements.

So as to boost an e-learning culture among students and teachers and to improve the alignment of digital resources with the curriculum, digital content will be developed for all curriculum subjects. These will be supplemented by additional materials for cross-cutting issues, focusing on topics including: gender, environmental protection, WASH, HIV/AIDS and DSA.

Strategies	Indicator (including baseline and target)	Source
Strengthening the institutional capacity of ICT in education programme	An endorsed ICT policy for education	Policy document
Establishing national institution for ICT in education programme		
Addressing human capacity building through nationwide training		
Establishing 'SchoolNET' cloud computing solution with improved ICT infrastructure at all levels	% of schools equipped with internet to access educational resources for improved learning will reach 50%	System reports
	% of schools with access to computer-assisted instruction will increase from 6% to 50%	EMIS data
	% of secondary schools using television-assisted instruction will increase from 69% to 100%	EMIS data
	% of primary schools using radio-assisted instruction will increase from 63% to 100%	EMIS data
Establishing fully functional and well-equipped data centre and network operation centre service as a national digital educational resources repository supported with learning management system and learning content management system		
Improving secondary schools access to free or low cost internet connectivity		
Establishing networked inclusive (e-Braille readers) computer laboratories for selected primary schools, secondary schools and CTEs or universities that train teachers		
Establishing ICT equipment maintenance centres at all regions		
Equipping pastoral and rural secondary schools with solar powered tablets/mobiles		
Enhancing culture of digital contents utilisation	% of digital contents delivered to learners across multiple platforms (in all curricula) will reach 100%	CEICT reports
Developing broadcast-based and digital learning resources that are aligned to the curriculum		
Broadcasting local digital contents focusing particularly on cross cutting issues and related topics such as environmental protection		

Component 5: quality assurance

Objective: use quality assurance processes to monitor teacher, student and school performance against standards, to learn, share and use findings to improve practice	ESDP IV T (F/M)	Target T (F/M)
% institutions that have been externally inspected once	20%	100%
% of woredas that are conducting inspection activities	N.A.	100%
% of schools reaching a higher level upon re-inspection	N.A.	55%
% teachers who have undertaken licensing process	N.A.	90% (90/90)
% CTEs that are accredited	N.A.	100%
% questions in G4/G8/G10/G12 NLA and in national examinations at G10/G12 that come from item bank	N.A.	100%
% woredas with at least one copy of each examination or assessment report produced since 2015	N.A.	100%
% of G10 and G12 children with special needs who sit for the national examination (with adaptations if needed)	N.A.	100% (100/100)

For ESDP V an emerging system of quality assurance will expand, to provide all officials, school leaders and teachers with the additional information required to improve resource allocations and decisions to enhance performance and equity across schools.

Sub-component 1: school inspection

In 2012 the school inspection system was established to monitor school standards and report general findings to support system-wide changes. The school inspection process looks at inputs, processes and outputs in each school, ranking a school on a four-point scale from level one to level four. The inspection organisational structure will continue to expand and strengthen during the first years of ESDP V, reaching full capacity after another two to three years. Inspection standards for pre-primary education, special schools and ANFE will be prepared. During these early years of operation and expansion, inspection guidelines will be regularly revised and updated to ensure that they are measuring school performance in relation to the inputs, processes and outputs required for effective learning and child development.

During ESDP V the school inspection system will independently inspect all schools once and those schools that are not reaching the expected standards (level three) a second time, to monitor actions taken and to understand school responses to the process. Each inspection will include feedback to school leaders and the community regarding the steps it can take to reach the next level. In addition, school leaders and community groups, through the PSTA, will be supported to conduct self-inspections to identify strengths and weaknesses. This information is a core input to the school planning process.

In addition to school-level feedback, the inspection system will seek to understand system-wide strengths and weaknesses in school inputs, processes and outcomes. Key stakeholders from the woreda to federal level – including policy makers in each region – will be encouraged to use this information in their quality improvement efforts.

The school inspection system will independently inspect all schools once and those schools that are not reaching the expected standards (level three) a second time, to monitor actions taken and to understand school responses to the process.

Sub-component 2: teacher and school leader licensing

The general education sub-sector has over 450,000 teachers and school leaders, holding a mixture of qualifications from one-year certificates to Master's degrees. As identified in relation to 'teachers' training and professional development', current pedagogical skills of teachers are broadly insufficient for effective teaching. Similarly, subject-knowledge and classroom management skills are not consistent amongst qualified staff. The teacher and school-leader licensing process will provide an independently validated check that qualified professionals are demonstrating the

competencies required to teach, manage and lead effectively.

The licensing system is small but rapidly expanding. It provides assessments of the competency of primary and secondary school teachers through both written tests and on-the-job assessments. During ESDP V, a strategy for supervision and inspection of ECCE will also be prepared. This will link to professional competency standards for ECCE, integrated within assessment tools.

to assuring the quality of service delivery through licensing teachers, CTEs will be accredited to certify that the standards for teacher education are met.

The licensing system will ensure that the skills learned during pre-service training and during CPD are applied in the classroom. A cadre of licensing experts (assessors and master assessors) is being established, led by the licensing directorates and units at federal and regional levels. Teachers will be provided with guidance regarding the pedagogical standards expected and offered support to reach the licensing standards required.

In addition to assuring the quality of service delivery through licensing teachers, CTEs will be accredited to certify that the standards for teacher education are met. By strengthening the delivery of pre-service training, teacher skills will be increased and the need for on-the-job training to meet minimum standards reduced. This will open space for CPD to focus on enriching teacher skills and motivation for the profession.

For all assessments and examinations there is an urgent need during ESDP V to (a) harmonise assessments with the curriculum; (b) standardise assessment tools to allow fair comparison across years; and (c) ensure that all assessments and examinations are accessible for all students, irrespective of their needs.

Sub-component 3: assessment and examinations

As the ultimate test of system performance, the regular assessment of student performance can be used to guide resource allocations and changes to strategies for teacher training, curriculum development and the provision of facilities in schools. There is an established process for NLAs, conducted every four years for grades four, eight, ten and twelve. These assessments, linked to minimum learning competencies established within the curriculum, will continue on the same cycle for the period of ESDP V. They will provide assessments of learning in 2016 and 2020 for grades four and eight and in 2018 for grades ten and twelve. With these assessments, gaps in learning achievement, variation across groups by region or gender and variables influencing learning outcomes can be identified and adjustments made.

In the early grades, literacy/reading and mathematics assessments (EGRA, EGMA) will be carried out as the first tests of learning and as a tool to monitor the impacts of emphasis in teacher training for these basic skills and the supply of supplementary learning materials. By assessing students more regularly at school level through the provision of standardised formative assessment tools and training teachers in their use in grades two and three, it will be possible to understand better where improvements are being made, to follow-up with schools, woredas, zones and regions that are performing particularly well and to learn from those and use the information to replicate best-practices.

Formal regional assessments take place in grade eight, followed by national examinations in grades ten and twelve. At each of these levels, students will be assessed on an annual basis and performance will be used to guide transition to the next level of education.

For all assessments and examinations there is an urgent need during ESDP V to (a) harmonise assessments with the curriculum; (b) standardise assessment tools to allow fair comparison across years; and (c) ensure that all assessments and examinations are accessible for all students, irrespective of their needs. These three activities will be led by the development of an item bank, which will store psychometrically fit instruments that are aligned with the curriculum. The item bank will expand during the course of ESDP V, with an expectation that by the end of the planning period all questions for national examinations and learning assessments will be drawn from curriculum linked items that are banked in the system. To assure the quality and fairness of all assessments and examinations, the processes for development and administration of tests will be reviewed to reduce the risk of malpractice.

In addition to the range of national assessments and improvements to the assessment system, during ESDP V Ethiopia will prepare to enter regional and international assessments of educational performance. By entering such assessments, it will be possible to gather information about the performance of Ethiopian students in comparison with their peers around the world. This information can be used to target teacher training and make curriculum adjustments, to increase the international competitiveness of youth and adults. It will also increase the opportunities to share knowledge and to adopt best practices from consistently high-performing countries, or those exhibiting rapid progress in a short space of time.

Strategies	Indicator (including baseline and target)	Source
Providing regular, quality, inspections services for pre-primary, primary and secondary schools; ABE centres; adult education centres and CTEs	% of all institutions that have been inspected twice will reach 60%	Inspection
	% of woredas conducting inspection activities will reach 100%.	Inspection
Training school inspectors at all levels		
Updating inspection implementation documents		
Conducting impact studies on inspection implementation		
Inform schools, key stakeholders and policy makers on inspection findings to support their quality improvement efforts	% of school leaders who report that they have a copy of their school inspection report will reach 100%	Inspection
	% of school improvement plans that incorporate inspection findings to improve the quality of their schools will reach 50%	School grant audit reports
Disseminating annual school inspection reports		
Developing inspection website and database		
Ensuring accessibility of annual school inspection report to woredas participating in the process on time		
Increasing the share of teachers that complete licensing process	% of teachers that have completed the licensing process: G1-4 will reach 90% for both men and women.	Licensing / EMIS
	% of teachers that have completed the licensing process: G5-8 will reach 90% for both men and women.	Licensing / EMIS
	% of teachers that have completed the licensing process: G9-12 will reach 90% for both men and women.	Licensing / EMIS
Developing complete set of licensing instruments for school teachers and facilitators at all levels (pre-primary to grade twelve) and CTEs		
Developing licensing requirements for specialised teachers, such as itinerant teachers, Braille and sign language instructors, etc.		
Testing and assessing all teachers		
Training master assessors		
Training assessors		
Increasing the share of school principals and supervisors that are licensed	% of school principals that have completed the licensing process: G1-4 will reach 100%	Licensing / EMIS
	% of school principals that have completed the licensing process: G5-8 will reach 100%	Licensing / EMIS
	% of school principals that have completed the licensing process: G9-12 will reach 100%	Licensing / EMIS
	% supervisors that have completed the licensing process will reach 100%	Licensing / EMIS
Testing and assessing school principals		

Strategies	Indicator (including baseline and target)	Source
Testing and assessing supervisors		
Assessing and accrediting CTEs	% of accredited CTEs will reach 100% (36 CTEs at beginning of plan)	Licensing / EMIS
Providing guidance and support to CTEs to prepare accreditation files		
Developing and implementing high-quality assessment tools		
Strengthening licensing organisational structure	Independent national licensing institution established.	'Negarit Gazeta'
Establishing steering committees		
Establishing operational licensing information system		
Use findings from regular tests of learning outcomes to support teaching and learning improvements	% of woredas with at least one copy of each examination or assessment report produced since 2015/16 will reach 100%	NEAEA
	% of woredas implementing teacher training or supervision processes based on findings of assessment or examination reports	Sample survey
Preparing analytical reports for learning assessments: G4 & G8 NLA, G10 & G12 NLA, EGMA and EGRA		
Preparing reports for G10 &12 National Examinations		
Increasing the number of regions with an assessment unit		
Distributing reports to all woredas		
Posting reports on MoE website		
Standardise examination and assessment processes and improve alignment with national curriculum	% questions and instrument for G4 and 8, G10 and 12 NLA and G10/G12 exams that come from the item bank will reach 100%	NEAEA
Developing item bank for NLA		
Developing item bank for national examinations		
Aligning items developed with revised curricula		
Developing website for national examinations registration		
Develop and administer examinations and assessments so that they are accessible to all students	100% of enrolees that require adapted national examinations will be accommodated	EMIS
Developing a strategy to accommodate students with special needs in examinations and assessment		

Strategies	Indicator (including baseline and target)	Source
Participate in regional and international learning assessments	Ethiopia will participate in two learning assessment conducted in the region or internationally	NEAEA
Developing a national framework to participate in international learning assessments		
Aligning curriculum with regional curriculum in core subjects and items, as preparation for international assessments		
Aligning curriculum with international curriculum /guideline in core subjects and items		

Priority programme: general education access, equity, internal efficiency

The **goal** of this priority programme is:

"to provide all children with access to pre-primary education for school preparedness and access to nearby institutions in which they can complete the full eight years of primary and two years of general secondary education".

Introduction

The main access and equity objective during ESDP V is to continue to improve the participation of all children and young people in general education, with particular emphasis at three levels: ensuring all children can access pre-primary education as preparation for schooling; and improving access to **second cycle primary** and **first cycle secondary** education to enable sustained participation in general education.

This will require a continued focus on system expansion and quality development as well as rapid decreases in dropout and repetition rates to improve internal efficiency. Throughout, the needs of the most disadvantaged children will be prioritised. By doing so, inequities that exist in current provision of education, both in relation to gender, abilities (physical and mental), geographic location and family characteristics, will be reduced. In response to the access and equity challenges identified in the situation analysis, four components have been identified as priorities: pre-primary, primary, secondary and a special support programme for the four emerging regions.

Access and equity objective during ESDP V is to continue to improve the participation of all children and young people in general education, with particular emphasis at three levels: ensuring all children can access pre-primary education as preparation for schooling; and improving access to second cycle primary and first cycle secondary education to enable sustained participation in general education.

Component 1: pre-primary

Objective: ensure that all children receive a course of pre-primary education as preparation for schooling	ESDP IV T (F/M)	Target T (F/M)
GER for pre-primary (age 4-6 years on entry)	34% (33/35)	80% (80/80)
National strategy and guideline for two-month accelerated child readiness programme	Curriculum framework	Strategy implemented

ECCE has become one of the priorities for the general education sub-sector. Exposure to quality learning in a healthy environment with good nutrition can improve student learning in later grades, reduce dropout and repetition rates and therefore contribute to the improved efficiency and effectiveness of the system. Acknowledging this and following successes in the past three years, in addition to the private sector coordination and promotion functions, which it will sustain, the government will engage in full provision of pre-primary education, from teachers to classrooms to learning materials.

ECCE spans the full age range from zero through six years and can be delivered through numerous modalities. ECCE services are provided through inter-ministerial cooperation between the Ministry of Health, the Ministry of Women's, Children's and Youth Affairs and the MoE. Pre-primary education services delivered by the MoE focus on children of ages four to six.9 Pre-primary education will progressively establish a culture of learning from an early age and will offer a cost effective method of improving children's readiness for learning foundation skills – thereby reducing the investment needed to build middle- and higher-level skills in later years.

Quality, targeted, ECCE provision will be used as a tool to increase equity in the education system. Without continued government expansion of opportunities, especially for the most disadvantaged children, ECCE will favour those children from relatively wealthy backgrounds, in predominantly urban areas. By focusing ECCE expansion first in the areas with lower educational attainment (and on the children most at risk of exclusion, drop-out and underachievement within those areas), the government will seek to improve the performance of children who can benefit the most from the support in order to transition more successfully into grade one. This approach will improve equity at the point of entry to the education system. In addition, encouragement for increased private sector provision ECCE services to communities in which

9 The age of entry for children into pre-primary is 4-6 at the beginning of the school year, which is the reference point from here on.

low-fee options are realistic, will continue. To do this, the most effective incentives/requirements for the private sector will be considered, with particular attention to the factors that will help to ensure that disadvantaged children are well represented. These might include, for example, the provision of land or tax exemptions for learning materials.

A Strategic Operational Plan and Guidelines for ECCE was established during ESDP IV, which guides expansion of pre-primary provision. It explains the modalities that are favoured (kindergarten, O-classes, Child-to-Child and accelerated child readiness programmes) and a learning approach that champions participation, contribution and production. It was followed by a kindergarten curriculum for the three-year programme, the third year of which is used in O-Classes, before a child enters grade one. The ECCE teacher training curriculum is now finalised and links directly to the students' curriculum. By 2020, the education system is expected to achieve an average 80% GER in pre-primary education for both boys and girls. A mix of modalities will be used to reach this target. This mix has not been defined upfront. Instead, in the first years of ESDP V different approaches will be piloted and lessons learned will be used to inform expansion choices. Approaches will include: the three-year kindergarten programme for children of ages four to six; O-Class for children of age six who are approaching school entry age; and an interim accelerated child readiness programme for children with no prior exposure to early learning, shortly before they enter grade one.

Other non-institutional context specific options such as Child-to-Child and adapted accelerated child readiness programmes will be favoured for children of ages four to six, during their first steps towards education. In addition, other innovative community-based approaches to strengthening early learning will be encouraged, devised, evaluated and implemented with the goal of strengthening parents' capacities as well as children's school readiness. These will include children's play circles and an Educate Your Child programme – as variants of Child-to-Child and school readiness programmes – as well as collaboration with health extension workers, to support families to stimulate children's integrated development.

During these first years and before system capacity is established to produce competent facilitators and required infrastructure, Child-to-Child and accelerated readiness programmes are expected to predominate. These will be supported by primary teachers who complete an initial two-week orientation training on pre-primary education facilitation skills and knowledge, who will be deployed to provide age-appropriate learning and teaching within ECCE. In pastoralist and semi-pastoralist areas, special ABE facilitators will be appointed and provided with one month of summer training to upgrade their qualification for the skills expected to teach in ECCE. Thirty days of in-service training and professional support will also be provided.

Later, as capacity is reached in terms of infrastructure and teacher training, certified teachers will be available for O-class and kindergarten programmes. Independent kindergarten (not linked to a school site) and both independent and integrated (within an existing school site) O-classes will be delivered in rapidly constructed classrooms and equipped with the required materials. A first step in this process is to establish the standards for play and learning equipment and the resources required for each modality. These standards will also apply to the minimum teaching and learning materials for children with special educational needs.

It is expected that the non-government sector (private providers, NGOs, faith-based organisations and CSOs) will participate in delivery of ECCE, particularly kindergarten. The government will provide 50% of all kindergarten by the end of the ESDP V period and the non-government sector will provide the remainder. To control fee levels, cost-containment will be introduced and options to provide cash transfers, to encourage household engagement with education at an early age, will be explored.

The standards for government pre-primary will apply to all institutions irrespective of ownership. A license to permit a non-government provider to operate a pre-primary institution will depend on the attainment of these standards. The achievement of this objective will require the design of a special motivation strategy to stimulate non-government involvement.

Expansion of ECCE will be coupled with policy dissemination events and strong advocacy programmes launched every year to create awareness within communities to send their children to nearby schools offering pre-primary education or to kindergartens, as well as to mobilise resources for community based programmes, especially for the youngest children and their families. Further motivation will be provided through school feeding programmes set up in schools, where children might receive cow's milk, breakfast porridge and other foods, which are essential for ensuring they are ready to learn.

Strategies	Indicator (including baseline and target)	Source
Expand O-class and kindergarten provision so that all children have access to at least one year of classroom-based pre-primary education	GER for pre-primary (age 4-6 years) will rise from 34% to 80%	EMIS
	% students that receive at least one year of pre-primary education will reach 100%	EMIS
Establishing a country pre-primary expansion programme, linked to education performance, with targeting for priority to disadvantaged areas and amongst disadvantaged groups		
Constructing an O-Class in each primary school (supported by community development and resources), equipped with a minimum package of teaching and learning materials and accessible to children with special needs		
Providing basic WASH facilities in pre-primary settings		
Developing strategies for private sector motivation and support and government provision of up to 50% of kindergarten enrolment		
Strengthening all CTEs to train pre-primary teachers for certificate and diploma courses so that they can deploy adequate qualified teachers		
Developing a mechanism to promote inclusive pre-primary education and extend access to children with disabilities and other special educational needs		
Expanding parental education through exercising indigenous knowledge		
Establishing and strengthening an ECCE council at all levels		
Expand access to Child-to-Child and Accelerated Child Preparedness Programmes	GER for pre-primary (age 4-6 years) will rise from 34% to 80%	EMIS
	National strategy for non-formal Accelerated Child Readiness and Child-to-Child programmes exists	SIP
Conducting pilots for innovative strategies, including Accelerated Child Readiness Programmes and use findings to inform contextualised expansion strategies		
Preparing a national strategy for non-formal community based Child Preparedness and Child-to-Child programmes, including children's play circles and an Educate Your Child Programme		
Conducting needs assessment to target support to disadvantaged children, including those with special educational needs		
Training child to child facilitators and accelerated child readiness facilitators		
Motivating teachers/facilitators to teach in remote and ethnic minority areas through providing incentives		
Providing orientation and at least 30 days in service training annually to pre-primary teachers/facilitators to teach child readiness programme within O class, kindergarten or specific accelerated readiness programme.		
Establishing child health and nutrition programmes (predominantly feeding in food-insecure contexts and deworming) in collaboration with Ministry of Health and Ministry of Women's, Children's and Youth affairs		

Component 2: primary

Objective: increase access to and participation in grades one to eight so that three in every four males and females complete a full cycle of primary education	ESDP IV T (F/M)	Target T (F/M)
GER for primary grades one to eight	101% (105/98)	103% (103/103)
NER for primary grades one to eight	93% (90/95)	98% (98/98)
GPI for primary grades one to eight	0.93	1.0
Completion rate to grade eight	47% (47/47)	74% (74/74)

During the ESDP V period, the GER for primary education (grades one to eight) is expected to increase from 101% to 103% and the NER from 93% to 98%. These increases will be achieved with a focus on increasing enrolments in second cycle primary (grades five to eight) and on improving attainment of girls, such that the GPI in primary education will improve from 0.93 to 1.0.

MoE designed a strategy for SNE, the final goal of which is to ensure access and quality education for children and students with special educational needs.

To reach these targets efforts to improve retention rates in first cycle primary education and to increase access to schools for students to transition to second cycle, will be prioritised. Opportunities will be sought to extend the number of grades offered in primary schools and ABE centres. This approach, as opposed to constructing new institutions, is preferred as it allows for efficiencies of scale at the school level. There will be at least one full primary school (grades one to eight) in each kebele. Each kebele's full-primary school will serve as the cluster lead for children transitioning from first to second cycle primary education.

ABE centres will be upgraded. Where they currently offer two or three levels, they will be expanded to a full four levels. Selected ABE centres will then be extended to level six (which will be equivalent to grade six of formal education), while other ABE centres will be upgraded to formal primary schools. An ABE curriculum and materials for the additional two levels will be prioritised in the first year of ESDP V.

Dropout is a particular challenge that remains at the end of ESDP IV. Many of the quality-improvement strategies identified are intended to improve the quality of teaching and the school environment. This is expected to have an effect on dropout rates, particularly through improved learning environments in schools leading to proficiency in core foundation skills which communities recognise as important. Further, to combat high levels of dropout that are motivated by movement patterns and the need for labour, mobile schools and multi-grade schools will be established.

Depending on local conditions, strategies to attract out-of-school children into formal education will be introduced, tested and scaled up where successful. These strategies will be devised based on specific demand side studies that will help identify crucial factors leading to dropout and repetition. There is no single formula for reducing dropout in all regions. Emphasis on reducing dropout, through information provided to schools in report cards and similar, will also be used to encourage the development of local strategies.

To reduce the existing gap in enrolment and to actualise Education for All, during ESDP IV the MoE designed a strategy for SNE, the final goal of which is to ensure access and quality education for children and students with special educational needs. This strategy is being revised and a 'Master plan' will be implemented during the first year of ESDP V. With these efforts, ambitious targets have been set for the participation rate of children with special education needs in primary education. In 2013/14 the participation rate in primary education was 4% and this is set to reach 75% by the end of ESDP V. To monitor progress against these targets and use information to influence activities, a new assessment tool will be implemented from 2015. This improved tool will support enumerators and will improve the understanding about enrolment and retention of children with special educational needs. In addition, the MoE will seek to include suitable instruments to measure incidence of special educational needs through the Demographic and Health Survey and the National Census, each of which will be conducted during the ESDP V period.

Children will be further supported in schools with the aid of adult literacy programmes designed for their mothers. Support programmes for girls and children (e.g. hostels, stationery, uniforms) from particularly disadvantaged areas, to increase transition to second cycle primary and beyond, will be implemented. These interventions will be piloted to determine their effectiveness and inform future decision-making. Additional backing will be provided through the expansion of school feeding programmes under a National School Feeding strategy.

Strategies	Indicator (including baseline and target)	Source
Ensure that all students have access to a full cycle of primary education in their local area	Grade one gross intake rate will fall from 153% to 115%	EMIS
	Grade one NIR will fall from 106% to 100%	EMIS
	GER (grades one to eight) will rise from 101% to 103%	EMIS
	GER (grades five to eight) will rise from 67% to 95%	EMIS
	Completion rate to grade eight will rise from 47% to 74%	EMIS
Conducting school mapping, with EMIS integration, to improve targeting of school expansion		
Expanding at least one primary school in each kebele to offer full primary (grades one to eight)		
Providing basic WASH facilities in primary schools		
Developing ABE guideline to upgrade ABE to Formal Primary and ABE (Level 1-6)		
Consolidating ABE programme so that all centres offer minimum of four levels and up to six levels, where appropriate		
Special programme to extend full access to primary education for disadvantaged and excluded children	40% of ABECs will be upgraded into formal primary (those in settled pastoralist communities)	Special Support and Inclusive Education
	500 mobile schools will be established	Special Support and Inclusive Education
	Enrolment rate of children with special educational needs will increase from 4% to 75%	EMIS
Upgrading existing ABE centres in settled pastoralist communities so that they offer full primary		
Establishing mobile and multi-grade schools in pastoralist and scarcely populated areas		
Providing schools in emergency prone areas (particularly drought) with training and equipment to enable continuing education		
Establishing and strengthen boarding/hostels for hard to reach children in pastoralist and semi pastoralist areas (for up to 2% of second cycle primary enrolment)		
Providing scholarships to at risk, poor and disadvantaged children to support their progression to second cycle primary		
Finalising and implementing National School Feeding Strategy		
Investigating options to supply educational materials, school feeding and financial support for children from poor and low income family backgrounds		
Reduce the number of children who are aged 7-14 who are out-of-school by providing access and support	The number of out-of-school children aged 7-14 will fall from 1.2 million to 0.	EMIS

Strategies	Indicator (including baseline and target)	Source
Conducting research to identify out of school youth target groups and cause for non-enrolment		
Conducting impact assessment of ABE, Mobile schools, multi grade and Hostels services in hard to reach areas		
Establishing/strengthening an education development team at all level to mobilise community to participate in education sector		
Developing an 'education development team' manual for the education sector		
Conducting annual community mobilisation and awareness raising campaigns to bring children, especially girls, children with special education needs, orphans and pastoralist children, to school		

Component 3: secondary

Objective: rapidly expand access to secondary education as a pre-requisite to education and training of middle- and higher-level skilled manpower	ESDP IV T (F/M)	Target T (F/M)
GER for grades nine to ten	39% (38/40)	74% (74/74)
NER for grades nine to ten	20% (21/20)	47% (47/47)
GPI for grades nine to ten	0.94	1.00
GER for grades eleven to twelve	10% (9/11)	12% (12/12)
GPI for grades eleven to twelve	0.85	0.96
Number of schools offering grades 9-10	2,108	6,158

As more children complete primary school, the next step for the country is to sustain equitable access to quality secondary education services as the basis and bridge to the demand of the economy for middle- and higher-level human resources.

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The ambitious plan for ESDP V is to raise the GER in first cycle secondary to 74% from a base of 39% at the start of the plan period. After grade ten, education policy states that 20% of students will transition to preparatory schooling (grades eleven and twelve). These students are then expected to enter university two years later. This artificially reduces the GER in grades ten and twelve. Nonetheless, in the ESDP V period, the GER at the preparatory level will increase from 10% to 12%. In the same time, with a focus on improving access and attainment of female students, the GPI for secondary first and second cycles will rise from 0.94 to 1.00 and 0.85 to 0.96 (equivalent to a GER of 11.5% and 12.0%, for females and males), respectively. In addition to teacher, school environment and curriculum revision activities, these rates will be achieved through special support programmes to encourage girls to continue their education to secondary and tertiary levels.

In order to provide for the growing demand of primary-completers who want to continue their education at the secondary level, the number of dedicated secondary schools will continue to rise. In addition to this, in every five primary schools, at least one (the cluster resource centre) will become a joint primary and secondary school. Following the vision of expansion in primary schools, more than 3,825 primary schools will extend to cover grades one to ten. This approach benefits from shared resources and management, while providing better distribution of secondary options across the country and will be achieved through close collaboration between the MoE, REBs, zone and woreda education offices.

Among every five secondary schools (which serve on average 15 primary schools each), one should be a full secondary school that caters for grades nine through twelve. To aid the increase in access to secondary school, those secondary schools without standard classrooms will be upgraded to meet the standard infrastructure.

As more secondary school options are provided and access arrives in areas that previously had no supply, those students that have completed the first cycle of primary within a recent time period will be permitted re-entry to formal, evening or continuing education classes. Their re-entry will

be encouraged through community mobilisation and awareness raising campaigns, which will also focus on motivating grade eight completers to transition to grade nine.

During the first years of rapid expansion, to ensure access and before teachers in grades seven and eight reach full teaching load, their teaching commitments will extend to cover grades seven to ten in those schools that are expanded. These schools typically perform better (as they are cluster resource centres) and this will allow optimal class sizes despite the increase in students.

For hard to reach children particularly from pastoralist and semi-pastoralist areas, where secondary school provision remains low, boarding and hostel options will be provided. This will be supplemented by the provision of scholarships for educational materials and financial support for children at risk and from particularly low income backgrounds. Following the special educational needs 'Master Plan' – and with similar assessment tools to monitor progress as available in primary schools, in secondary education, enrolment amongst children with special educational needs is planned to increase from 7% to 45% by the end of ESDP V.

Strategies	Indicator (including baseline and target)	Source
Expansion of secondary education options for children in all regions	GER for grades nine to ten will rise from 39% to 74%	EMIS
	GER for grades eleven to twelve will rise from 10% to 12%	EMIS
Conducting school mapping, with EMIS integration, to improve school expansion targeting		
Expanding full cycle primary schools (one for each cluster) to offer grades one to ten		
Expanding first cycle secondary schools (grades nine to ten only) to offer grades nine to twelve		
Providing basic WASH facilities in secondary schools		
Special programme to extend full access to secondary education for disadvantaged and excluded children	25% of secondary schools will offer evening classes	EMIS
	Enrolment rate of children with special educational needs will increase from 7% to 45%	EMIS
Promoting of teacher recruitment from remote and ethnic minorities		
Establishing and strengthening boarding and hostels for hard to reach children pastoralist and semi pastoralist children		
Establishing of evening classes at targeted secondary schools		
Providing educational materials and financial support for children from poor and low income family background and children with disabilities		
Providing of scholarships to at risk, poor and disadvantaged children		
Promoting education in emergencies programme and support emergencies affected schools		

Component 4: special support programme for the four emerging regions

Objective: the four emerging regional states will have the skills, resources and capacity required to improve educational performance to reach national standards	ESDP IV T (F/M)	Target T (F/M)
GER for pre-primary in emerging regions (age 4-6 years on entry)	8% (7/8)	80% (80/80)
GER in Afar for primary grades one to eight	74% (72/76)	98% (98/98)
% of woredas in emerging regional states that benefit from special support programme	N.A.	100%

The four regional states: Afar, Somali, Gambella and Benishangul-Gumuz, are known as Emerging National Regional States because they have low levels of development relative to the national average. Recognising this, the federal government established a multi-sectoral special support programme, including inputs from the MoE.

Even if national progress towards universal primary education is promising, regional variations in enrolment – particularly among these emerging regional states – reveal disadvantage in relation to access and participation. Further, within regions, many indigenous groups, although small in number, are not engaged in the formal education system. These across- and within-region inequalities are closely linked to social and economic inequalities, rural-urban differences, ethnicity, livelihoods and language. Potential students in these regions face greater challenges due to absence of water, frequent drought and natural disaster, amongst others.

The special support programme for the four emerging regions considers three levels of capacity development (individual, organisational and the enabling environment) in a multi-sectoral approach. This approach is important because the causes for lower educational attainment in these emerging regional states cannot be solved from only the supply side.

Figure 16: the three capacity development components of the special support programme

Considering these three levels, the following strategies are included in the special support programme. These are informed by a 2014 Capacity Gap analysis and are in addition to strategies identified elsewhere in this priority programme, which favour disadvantaged groups and will predominate in the emerging regional states.

The special support programme for the four emerging regions considers three levels of capacity development (individual, organisational and the enabling environment) in a multi-sectoral approach.

- **Individual capacity**: providing short- and long-term training and development schemes focusing on leadership, planning, reporting and information exchange. Training programmes will be linked to the deployment of 30 technical assistants to the REBs and woreda education offices of the emerging regions. This approach is preferred for sustainability reasons and to minimise workforce flow from region to region.
- **Organisational capacity**: the pastoral education strategy will be revised and updated and other guidelines, manuals and directives will be localised in their context to assist the development of the education sector in the emerging regional states. These will include the development of guidelines for alternative education, which will cover the integration of traditional schools, the extension of ABE to level six and the conversion of ABE to formal primary schools. To encourage capable staff to take on posts in emerging regional state education offices, an updated reward and incentive scheme for officers will be investigated.
- **Enabling environment**: basic equipment and materials as well as financial resources needed for implementation in all education offices will be provided. Where appropriate, local radio and television broadcasts will be used to raise awareness and to sensitise communities on the importance of education. A National Council for Pastoralist Education will be established and this body will support research and communication efforts and take a role in coordinating NGO inputs to infrastructure, staffing, WASH and nutrition in pastoralist areas.

Strategies	Indicator (including baseline and target)	Source
Enhance the capacity of emerging regions to develop improve the implementation of the education sector development	GER (grades one to eight) of Afar primary will reach 98%	EMIS
	Number of technical assistants deployed to emerging regional states will increase from 24 to 30	Special Support and Inclusive Education
	100% of woredas in emerging regional states will benefit from special support programme	Special Support and Inclusive Education
Producing, validating and disseminating special support programme guidelines		
Strengthening Special support programme by deploying technical assistants for four emerging regional states to enhance the capacity for planning and management at regional, woreda and school level		
Conducting capacity building training for emerging regions education officials, experts and school principals at all level		
Conducting impact assessment of special support programme and use this to inform strategic adjustments		

Priority programme: adult and non-formal education

The **goal** of this priority programme is:

"to create a learning society by providing adult and non-formal education linked to lifelong learning opportunities that meets the diverse learning needs of all and which contributes to personal, societal and economic development".

Introduction

The high level of illiteracy in the adult and youth population is a barrier to achieving its development goals, particularly that of lower middle income economy status by 2025. Improving adult literacy rates will also support other development goals. Children with literate parents stay in school longer and each extra year of education for mothers is also associated with a significant decline in infant mortality and improved child health.

The National Adult Education Strategy implemented through the ESDP IV put a special policy focus on IFAE. The IFAE programme, a two year programme for 15-60 year olds, provides mother tongue reading, writing and arithmetic skills development integrated with practical knowledge and skills, for example in relation to family health, hygiene and sanitation. It is designed to make use of inputs from other development workers (agriculture, health, etc.) and builds on indigenous knowledge. It seeks to link numeracy and literacy skills to livelihoods and skills training in agriculture (including off farm activities), health, civic and cultural education, etc. and requires delivery by various governmental and non governmental service providers in multiple settings.

The initial ESDP IV target, based on assessments of literacy conducted prior to ESDP IV plan preparation, was to enrol 36.4 million 15-60 year olds in a two year IFAE programme. In 2012, however, the Central Statistical Agency Welfare Monitoring Survey Report estimated there were 20.4 million illiterate youth and adults. The ESDP IV target was accordingly adjusted with an ambition to reach 19.4 million adults and youth in the plan period. During the period, 10.2 million (53%) of the target group completed the first year of the IFAE programme (42% of whom were females). Of these, 4.7 million (24% of all illiterate 15-60 year olds) graduated from the two year IFAE programme (of which 38% were female).

No coherent model for planning and delivering a relevant continuing education and lifelong learning programme at the federal and regional level was developed during ESDP IV. The barriers to establishing an appropriate structure to organise and implement an effective adult continuing education programme included: a lack of policy and legislative framework; absence of appropriate adult education structures and unskilled human resources; poor understanding of the contribution of adult education to other development programmes; and inadequate financial and material resource for the implementation of the programme.

In spite of this, since the launch of the IFAE concept and programme, under the National Adult Education Strategy, many efforts have been made to build the technical capacity of IFAE staff at federal and regional levels. At federal level a number of guidelines and directives have been formulated under the National Adult Education Strategy, implemented since 2008. Materials have been developed and training has been conducted. Human resource capacity has been boosted with IFAE focal persons and other technical staff at federal, region and woreda levels. Huge numbers of community facilitators have been recruited and trained and budgets have been allocated to the programme – though both facilitator numbers and budget allocations remain short of requirements.

The main constraints and challenges identified during review of ESDP IV implementation include:

- The planned institutional system, including the National Adult Education Board, was not fully developed, which resulted in continued fragmentation of adult education provision and meant that efficient implementation, coordination, linkages between programmes and monitoring was difficult
- Not all regional adult education boards were operating effectively and lacked dedicated experts to lead the programme, so most learning centres did not receive technical support
- In most regions learning materials development was a challenge due to lack of budget, limited capacity among facilitators and facilitator trainers – and most did not have facilitators' guides or handbooks for learners due to budget constraints or ineffective resource allocation by regions

- Lack of a post-literacy strategy and curriculum framework may bring relapsing of illiteracy
- Adult participation in the emerging regions and amongst women, is relatively low
- Lack of monitoring and evaluation and reporting skills at all levels meant that the quality of the IFAE programmes and their relevance to the daily lives of many participants could not be assessed effectively
- Low transition rates of participants from the first to second years of the IFAE programme.

To address the challenges identified, five components have been identified for this priority programme. These focus on:

- Expanding IFAE and post-IFAE programmes in all regions
- Improving women's participation in IFAE and post-IFAE programmes
- Expanding continuing education programmes in emerging regions
- Improving the quality of ANFE
- Creating a strong and efficient institutional system for ANFE at all levels

Component 1: expanding IFAE and post-IFAE programmes in all regions

Objective: Increased adult literacy rate and options available to prevent relapse to illiteracy	ESDP IV T (F/M)	Target T (F/M)
% of formerly illiterate 15-60 year olds having completed first year of IFAE course	34% (22/52)	77% (77/77)
% of formerly illiterate 15-60 year olds having graduated from two-year IFAE course	24% (14/41)	55% (52/60)
% of IFAE completers participating in post-literacy activities through community learning programmes	N.A.	15% (15/15)
% adult literacy centres upgraded to Community Learning Centres (CLCs)	N.A.	50%

Sub-component 1: design and implement effective IFAE programmes

During ESDP V, the focus for ANFE will be on expanding the reach of the IFAE programme and on improving quality through the achievement of objectives set out in the National Adult Education Strategy.

The ANFE unit of the MoE will work with and support the National and Regional Adult Education Boards to plan and implement an expanded functional adult literacy programme. IFAE centres should be established and organised close to the community villages to enhance access for adult learners. They will ensure that learner-centred curricula, which are closely related to the adults' lives, their livelihoods and to the needs of their communities, are in place. Currently, IFAE programmes do not differentiate for learners with special educational needs. During the ESDP V period, a needs assessment will be conducted in all regions, to provide the background information for the adjustments to adult education curricula, materials and approaches necessary to support learners with special educational needs. These assessments will inform the development of IFAE-related materials, learning centres and facilitator training.

The MoE with the Boards will develop, using various media and community resources, a campaign approach to community mobilisation and awareness raising. Mother tongue functional learning materials will be available before participating adult learners are enrolled on their literacy programme. These will be developed in collaboration with stakeholders who signed the Adult Education Memorandum of Understanding.

Sub-component 2: design and implement post-literacy programmes with community participation

The creation of a literate environment denotes the sustainability of literacy not only for those having completed the two year IFAE programme but also for those adult learners that are currently attending the IFAE programme. Learners that have emerging literacy and numeracy skills

generally want to practice these skills in their everyday lives. In order to do that they need an environment that provides opportunities to practice literacy and numeracy.

Post-literacy programmes are aimed at recently literate or 'neo-literate' adults and communities (graduates of two year IFAE programmes, currently attending IFAE or any needy). Post-literacy education aims to solidify literacy education, provide resources and media aimed at the newly literate and also may create systems of non-formal education to serve these communities.

The adult learners' communities, with local government support, will be encouraged to establish CLCs which will become a focal point for IFAE programmes and other adult education, training and extension activities. Critical to ensuring that newly literate adults maintain and use their functional literacy and numeracy skills is the availability of post-literacy materials of immediate and direct relevance to learners. CLCs will be stocked with a wide range of accessible, informative and livelihood-related materials supplied by collaborating stakeholders. These centres will be easily accessible by community members as well as becoming resource centres for other government services and information. As a result, CLCs will play an important role in mobilising local people to participate in various kinds of education and technical training. CLCs can also serve as local organisation centres to carry out activities in developing the local knowledge in poverty alleviation so as to promote the local economic and social development and improve the living standard of the community. Potential CLC programmes cover education and literacy, training, coordination and networking.

In addition to continuing learning options through CLCs, ratification of a transfer directive, currently at the draft stage, will be sought. This directive will permit graduates of the two-year IFAE programme to enrol in TVET training or to return to formal education, based on equivalency of skills obtained.

Strategies	Indicator (including baseline and target)	Source
Design and implement effective IFAE programmes	% of formerly illiterate 15-60 year olds having completed first year of IFAE course will increase from 34% to 77%	EMIS
	% of formerly illiterate 15-60 year olds having graduated from two-year IFAE course will increase from 24% to 55%	EMIS
Establishing adult education centres in all regions		
Preparing context-specific curriculum-linked teaching and learning materials in relevant mother-tongues of each region		
Conducting awareness raising and community mobilisation campaigns to encourage participation in adult education programmes		
Engaging with additional stakeholders to increase the number of signatories to the Adult Education Memorandum of Understanding		
Training facilitators to deliver IFAE and post-IFAE programmes		
Design and implement post-literacy programmes with community participation	% of formerly illiterate 15-60 year olds participating in post-literacy activities through CLCs will reach 15%	ANFE unit
	% adult learning centres upgraded to CLCs will reach 50%	ANFE unit
Supporting communities to establish CLCs		
Developing post-literacy materials for display in a literate environment		
Developing guidelines for low-cost approaches to develop a literate environment		

Component 2: improving female participation in IFAE and post-IFAE programmes

Objective: increased female participation in adult education	ESDP IV	Target
% of first year IFAE programme completers that are female	42%	64%
% of two-year IFAE programme graduates that are female	38%	60%
% of IFAE and post-IFAE facilitators that are female	N.A.	40%

The country is on the right path to a population age structure that may enable a demographic dividend. The potential for women's literacy remains an untapped developmental resource. Government commitment to reducing infant and child mortality, improving reproductive health and family planning and the subsequent fertility decline will be accelerated by increasing female literacy levels.

The positive effects of female literacy on earnings, gender equality and enhanced status in the family are well recognised. In addition, educated women are less likely to enter into early marriage or early motherhood or contract HIV/AIDS and other communicable diseases. Mothers who are literate are better able to understand health education and child-developmental materials that directly impact the lives of their children.

The case for focusing ESDP V ANFE programme resources on increasing female participation and completion rates is clear. Of the 19.4 million illiterate 15-60 year olds targeted by the programme, 12.4 million (64%) are female. In the first years of implementation, however, males have been far better represented in IFAE programmes and this means that the difference in literacy levels is widening between males and females.

In ESDP V, strategies targeted at (a) improving the gender-responsiveness of curriculum materials; (b) increasing the share of facilitators for IFAE and post-IFAE programmes that are female; and (c) improving the learning conditions for female participation in IFAE and post-IFAE programmes, will be followed.

Strategies	Indicator (including baseline and target)	Source
Increasing female participation in IFAE and post-IFAE programmes	% of first year IFAE programme completers that are female will rise from 42% to 64%	EMIS
	% of two-year IFAE programme graduates that are female will rise from 38% to 60%	EMIS
	% of IFAE and post-IFAE facilitators that are female will reach 40%	ANFE unit
Reviewing curriculum content at federal and regional levels to improve relevance and gender-responsiveness, with a preference for female learners and attention to life skills topics		
Preparing selection criteria for IFAE and post-IFAE facilitators which favour the recruitment of females		
Providing community mobilisation and awareness raising campaigns to encourage female participation in adult education programmes		
Preparing additional curriculum topics which are based on topics/themes that are directly relevant to female learners		
Establishing IFAE centres close to potential participants' homes		

Component 3: introducing continuing education programmes in emerging regions

Objective: increased access to context-specific adult education programmes in emerging regions	ESDP IV	Target
% of emerging region adult students participating in adult continuing education programmes (apart from IFAE courses)	N.A.	15%
Number of ministries, NGOs and private organisations offering continuing education programmes to adult learners in the emerging regions	N.A.	5 per region

Access to formal education in the emerging regions has been lower than elsewhere for the past twenty years. As a result there is a requirement to prioritise support to young adults in these regions so that they can develop the basic skills required for productive work. Given this situation and the shortage of trained and experienced managers, coordinators and facilitators in the emerging regions, it is proposed that during ESDP V a pilot continuing education programme, in selected emerging regions will be designed and implemented in collaboration with stakeholder partners.

This pilot will be carefully monitored and evaluated and the results used as a basis for extending the programme in all emerging regions. IFAE programme participants will be consulted about their continuing education and life skills training needs e.g. parental education, vocational training (using local materials and targeting sales at local markets) and entrepreneurial training (developing a business plan, money management and marketing, for people who could set up local businesses). The outcome of this assessment will act as the basis for designing the pilot programmes that respond to the potential learners' and their wider communities' needs.

Strategies	Indicator (including baseline and target)	Source
Expanding access to continuing education and lifelong learning options to youth and adults in emerging regions	% of emerging region adult students participating in adult continuing education programmes (apart from IFAE courses) will reach 15%	ANFE unit
	In each emerging region, at least five ministries, NGOs and private organisations will offer continuing education programmes to adult learners	ANFE unit
Conducting consultation with youth and adults in emerging regions to determine the scope of a continuing education programme		
Piloting a continuing education programme in the emerging regions		
Developing learning materials for continuing education, based on the selected approaches		
Conducting assessments and evaluations of continuing education programmes to determine suitability for expansion		
Preparing a national policy and strategy for continuing and lifelong learning		

Component 4: improving the quality of ANFE

Objective: increased quality and relevance of adult education through minimum standards for learning process, facilities and facilitator training	ESDP IV	Target
Minimum standards for IFAE and all kinds of ANFE programmes developed and implemented	N.A.	For all programmes by 2016
EMIS and quality assurance systems supporting IFAE and other ANFE programmes developed and operational	N.A.	For all programmes by 2017
Minimum standards for CLCs developed	N.A.	By 2016
% of IFAE facilitators who undergone through the full cycle training of facilitators	N.A.	80%
% of programme managers and experts who have received training on ANFE related issues	N.A	50%

During ESDP IV the national IFAE curriculum framework was implemented across the regions and the National Adult Education Strategy and Implementation Guideline were revised. IFAE supervision and learning materials and manuals (in several languages) were developed and published and different training manuals (lead trainers' training manual, facilitators' training manual) were developed and integrated with adult participants' livelihoods. In most regions, however, no substantive quality assurance system was operating effectively for IFAE facilitator training and lack of a standards based approach to the design, delivery and assessment of IFAE programmes has resulted in uneven quality of provision and low relevance to adult learners' life situations. These issues have contributed to a low transition rate from the first to second years of the IFAE programme and to the lack of clear evidence about quality and relevance of the adult literacy programme.

During ESDP V a study to understand the implementation effectiveness of the IFAE programme will be conducted. This study will focus IFAE's implications for livelihood improvements and the nature of integration in the programme. The study will inform the development of minimum standards for IFAE. These standards will be used as guidelines for regions, zones and woredas to organise the delivery of locally based, quality assured, relevant training for adults and facilitators. Facilitators will be trained to use the EMIS monitoring instruments and to maintain records. Woreda EMIS staff will be responsible for collecting and analysing data on a quarterly basis and use this with colleagues to manage and quality assure IFAE programmes according to the agreed minimum standards. The pilot continuing education programme will be quality assured in a similar way. The Regional Adult Education Boards will receive regular monitoring reports and have responsibility for having oversight for the quality and relevance of the IFAE programmes in partnership with other organisations supporting adult literacy programmes.

Minimum standards for facilitator training are essential and will act of the basis for an overhaul of their training curricular and competency assessment. In line with this, minimum standard for integration, supervision, material development and for other related purposes will be developed; programme curricula will be reviewed for functional relevance with a particular emphasis on its suitability for female learners. Although it is the responsibility of each region to manage and deliver the IFAE programme in their mother tongue languages, a standardised approach with local adaptation where necessary could have a positive impact on the coordination of resources of the collaborating partners and in turn on the quality of provision.

Strategies	Indicator (including baseline and target)	Source
Improving quality of ANFE programmes	% of IFAE facilitators who undergone through the full cycle training of facilitators	ANFE unit
	% of programme managers and experts who have received training on ANFE related issues	ANFE unit
	Minimum standards for IFAE and all kinds of ANFE programmes developed and implemented	ANFE unit
	Minimum standards for CLCs adopted	ANFE unit
Improving EMIS and quality assurance systems supporting IFAE and other ANFE programmes		
Developing minimum standards for facilitator training and the development of learning materials		
Providing training to lead IFAE facilitators		
Developing standards for CLCs		
Conducting regional best-practice knowledge sharing and dissemination workshops		
Conducting formative reviews of CLCs to inform best-practices		
Delivering training to programme managers and experts on ANFE related issues		
Conducting awareness raising workshops amongst all stakeholders of the National Adult Education Strategy and Guidelines		
Developing a monitoring and evaluation plan for implementation in all regions		
Collecting ANFE participation and performance data on a quarterly basis		
Developing a strategy for mother-tongue adaptation to support effective and efficient regional contextualisation		
Developing the criteria for quality assurance of materials development for ANFE		

Component 5: creating a strong and efficient institutional system for ANFE at all levels

Objective: policy and legislative framework in place for effective management and implementation of ANFE	ESDP IV	Target
A policy and legislative framework for adult and lifelong learning developed and executed	N.A.	July 2016
Number of regional Adult Education Boards providing support to ANFE programmes	N.A.	11

The effectiveness of the ESDP IV ANFE programmes has been constrained by lack of a legislative framework, a clear policy framework at national and regional levels and an appropriate institutional structure. The National Adult Education Board has had limited impact on policy development and institutional strengthening. The newly established ANFE coordination office within the MoE – and its equivalents at the regional level – have not had a clear policy mandate with

which to work. Financial resources for IFAE, as estimated in the ESDP IV budget, have not been fully allocated by all REBs.

ESDP V will embed an efficient institutional system for ANFE and revise and roll out the Master Plan which will be used and implemented by all stakeholders. The National Adult Education Board and its technical committees will be fully operationalised and given full secretariat support by the ANFE coordination office of the MoE. Likewise the Regional Adult Education Boards will be fully operationalised and provided with professional secretariat support and advice by establishing a team of experts which can support the regions to establish a comprehensive and integrated lifelong learning system. A scoping study will be carried out to assess the viability of establishing an ANFE agency to improve institutional arrangements in the delivery of adult education. This study will focus on the legislative basis for such an agency and the related policy framework within which it might operate.

Strategies	Indicator (including baseline and target)	Source
Creating a strong and efficient institutional system for ANFE at all levels	A policy and legislative framework for adult and lifelong learning developed and executed	ANFE unit
	11 regional Adult Education Boards will provide support to ANFE programmes	ANFE Unit
Reviewing functionality of adult education board and make adjustments based on recommendations		
Coordinating stakeholder attendance at planning events		
Strengthening the coordination of activities through the National Adult Education Board		
Improving resource allocation at the regional level to ANFE strategies		
Providing the National Adult Education Board with a secretariat at federal and regional levels		
Conducting a scoping study to assess the viability of establishing an ANFE agency		

Regional Adult Education Boards will be fully operationalised and provided with professional secretariat support and advice by establishing a team of experts which can support the regions to establish a comprehensive and integrated lifelong learning system.

Priority programme: Technical and Vocational Education and Training

The **goal** of this priority programme is:

"to produce a lower- and middle-level, competent, motivated, adaptable and innovative workforce, which can contribute to poverty reduction and social and economic development through facilitating demand-driven, quality TVET training and transfer of demanded technology".

Introduction

The government has been working with eight priority sectors (agriculture, industry, economic infrastructure, health, hotel and tourism, trade, mining, labour and social affairs) for the last five years to develop an outcome-based TVET system. This system is designed to ensure the competitiveness of the sectors through the provision of a competent workforce and demanded technologies. Major achievements during ESDP IV include the development of OS and assessment tools, assessors and assessment centres through the participation of the industries as well as the delivery of all TVET training by competent trainers. The coverage of the cooperative training and the rate of competent training completers have increased. In addition, the establishment of industry extension services and the transfer of demanded technologies allow MSEs to raise capacity with a view toward substituting imported goods and to remain competent in the market.

The weakness observed in working collaboratively with priority sectors through joint action plans to provide the required labour force still weakens TVET's contributions to economic development. The development of OS and assessment system requires further strengthening and the coverage of quality cooperative training must increase. The better identification of demanded technologies through value chain analysis will allow TVET to target activities to market demand. A TVET management information system and improved data collection through EMIS will allow evidence-based planning, management and action.

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In response to the identified gaps, the remaining challenges are addressed through three components of this priority programme which focus on: OS development and assessment; trainees' development and institutional capacity building; and industry extension and technology transfer services.

Component 1: Occupational Standards development and assessment

Objective: assure industry ownership for OS development and assessment systems	ESDP IV T (F/M)	Target T (F/M)
Percentage of industry sectors using OS for their human resource development	10%	60%
% of TVET trainees (formal and non-formal) that are assessed on completion of training	N.A.*	100% (100/100)
% of industry workers that are competent	2%	35%

* 252,019 TVET completers were assessed in 2013/14

OS guide the delivery of TVET training. They determine what will be taught and specify the competencies required at each level of qualification that will be validated at the time of assessment. Two hundred new OS will be developed through collaboration between TVET and priority sectors. All training completers and existing lower- and middle-level workers in priority sectors will be assessed and assured based on updated OS.

Sub-component 1: improved ownership by sectors

TVET-industry linkages continue to strengthen. Presently, experts from the priority sectors work with TVET administration to develop OS based on

market requirements. During the ESDP V period, it is expected that industry will take a stronger leadership role in TVET, guiding revisions to OS, calling for adjustments and improvements when the sector needs change. The strength of this linkage will also serve to validate the value of TVET training in the eyes of potential trainees; as well as among potential employers. By the end of ESDP V, it is expected that 60% of industry sectors will adopt OS as their working document. This will allow each lower- and middle-level worker in these sectors to be qualified according to the TVET qualification framework.

To foster the transition to an industry-led TVET system, an awareness raising strategy will be implemented and targeted at priority sector organisations. This will include the sharing of information about how quality OS and qualification processes in TVET are critical for increased quality and productivity. Priority sectors will be encouraged to establish 'Chambers' to represent their interests; and to guide the development of OS, assessments and certification. Similarly, 'Chambers' will serve as a communication channel through which government TVET functions can provide information to sectors quickly and effectively.

Technical Advisory Panels and Technical Expert Panels will be established for the eight priority sectors. These expert panels will gather industry experts from the work place to develop OS and conduct regular monitoring of assessment-related activities to ensure adherence to the assessment directives and quality procedures. These panels will promote industry ownership and strengthen the links between OS, training provided, assessment conducted and evolving labour market needs.

Sub-component 2: improved recognition of competence through accessible and quality assessment and certification services

In line with the preparation of new OS, the update of existing OS and the changes in technologies used in the market, 293 new assessment tools will be developed and existing assessment tools will be regularly reviewed and revised. New assessment tools – and any revisions – will be prepared to allow assessments of candidates with special educational needs. The Technical Advisory Panels and Technical Expert Panels will work in collaboration with TVET agencies to ensure that assessment processes and results appropriately reflect the expectations of priority sectors to improve relevance, performance and approval by sector leads.

The number of assessors will rise to over 55,000 in line with assessors' accreditation requirements and the number of assessed candidates. These will be linked to assessment centres to ensure quality assessment in line with OS. In addition, all assessors, existing or new, will be assessed and reaccredited, to ensure compliance with OS. As part of this process, where an assessor demonstrates a skill gap, he or she will be updated or upgraded under the national assessors' capacity development programme, re-assessed and then re-accredited through continuous performance evaluation. From industry, female experts will be given priority and preferred for assessor positions.

Accreditation of CoCs will be conducted by the Ethiopian Accreditation Office. Five CoCs will be prepared for international accreditation under the framework of cooperation with countries benchmarked by the system. Accreditation to international standards is an additional guarantee that assessment procedures are supporting the development of a more productive workforce.

Through quality assessment, the competencies acquired in TVET training will be assured. The number of assessment centres will increase to over 27,000 by the end of ESDP V, ensuring access for trainees in all woredas, with an emphasis on fair distribution to disadvantaged areas. This will be supported by a rising number of CoCs, reaching sub-cities or zones in the same period. During the expansion process of assessment centres and CoCs, special facilities and adaptations required to provide access for all candidates with special educational needs will be incorporated. Throughout the assessment process, skills gaps among candidates will inform institutions directly – and in aggregated form will inform regional TVET agencies/commission/bureaus – regarding required adjustments to training and learning materials and training methodologies and techniques.

Strategies	Indicator (including baseline and target)	Source
Raise awareness among industry for the ownership of TVET and foster the transition from an institutional-based to and industry-based TVET system	Number of newly developed OS will increase from 650 to 850	Federal TVET Agency
Raising utilisation of OS and TVET qualification framework in industries		
Establishing Technical Advisory Panels and Technical Expert Panels in eight sectors		
Establishing skill councils in each priority sector		
Developing and revising OS continuously, with industry, in line with changing labour market requirements		
Identifying and responding to skill gaps through checklist/occupational assessment		
Establishing chambers of commerce, agriculture and crafts		
Expand the network of assessment centres from regions to zone/sub-city and woreda/ kebele levels	Number of newly accredited assessment centres will increase from 3,816 to 27,812	Federal TVET Agency
Expanding accessibility of assessment centres in the industry		
Developing and revising assessment tools with established Technical Advisory Panels and Technical Expert Panels		
Increasing the number of industry practitioners for assessment across all occupations		
Improving the quality of assessors and implement strategy to encourage greater female participation		
Obtaining international accreditation for the assessment and certification system		
Assuring the competency of industry practitioners, lower and middle level human power, by conducting assessment		
Adapting assessment centres and tools for candidates with special educational needs		
Conducting research on the utilisation of OS and assessment system		

Component 2: trainees' development and institutional capacity building

Objective: provide lower and middle level competent human power to enhance productivity and competitiveness of industry	ESDP IV T (F/M)	Target T (F/M)
Enrolment in formal TVET (levels one to five)	265,745 (135,530 / 130,215)	564,054 (282,027 / 282,027)
Number of trainees having completed short-term training	876,097	1,470,663
% of training completers assessed as competent	60%	75% (75/75)
Employment rate of formal TVET training completers	60%	90%
Number of internationally certified welders	38	4,000

Sub-component 1: capacitated industry and institution trainers, TVET system leaders and support staff

TVET training is delivered at five levels (levels one to five; increasing in duration of training from one to three years and level of skill on completion, with level five being the highest) by competent trainers at all levels (Level C, level B and Level A; increasing in level of skill). As the system expands, ongoing recruitment of trainers will be required to match enrolment increases. In addition, ESDP IV analysis showed that the current trainer distribution is not aligned with need. In particular, there exists a shortage of trainers at B-Level and of industry trainers at all levels.

Trainers will be recruited from industry and directly from TVET institutions. Higher-level TVET completers become eligible for trainer positions and this process will continue – helping to ensure that up to date skills are retained within the training system. C-level institution trainers will be recruited from level four and above training completers who are ethically and technically competent and interested in completing the upgrading to become a trainer. While hiring C-level trainers, female candidates will be preferred in order to increase the share of female trainers to 32%. Trainer updating and upgrading will also take place to promote C-Level to B-Level and B-Level to A-Level, as required to match training needs. This will take place in existing TVET trainer training institutes and additional satellite institutions will be opened in selected TVET colleges. In addition, direct recruitment from the market will be conducted for B- and A-level trainers if the upgrading strategy cannot meet the demand.

Industry trainers who provide co-operative training and can also serve as assessors will be developed from industry practitioners by assessing their competence in relation to the updated OS and by offering a course in assessment methodology through the CoCs. Where trainers are assessed, skills gaps identified will be provided to their respective employer or to TVET institution for remedial action.

Existing institution and industry trainers will be provided with a capacity development programme to upgrade their skills, particularly in relation to technology adaptation. To strengthen the role of the TVET system in becoming an agent in technology transfer, all existing TVET trainers will be trained and assessed as competent on 100% adaptation of technology by the end of ESDP V. The Federal TVET Agency will prepare a research strategy as the basis for improving the understanding of the links between the TVET system and the labour market. The research strategy will include emphasis for research on OS, assessment, curriculum development, quality management, cooperative training, graduate tracking and industry extension services. Such research will contribute to the improvement and further development of TVET in the country.

There will be a preference during ESDP V for TVET leaders to be appointed from a pool of eligible candidates (trainers) already in the system. This approach serves to improve continuity as the full reform and improvement agenda is implemented and will favour female candidates, who currently represent only 2% of all TVET leaders. The share of female leaders is expected to reach 12% by the end of the plan period. TVET management and administrative staff and experts of the Federal TVET agency, regional TVET bureaus/agencies/commissions, CoCs and TVET institutes will receive a package of in-service training on modern management techniques. This will combine short-term and long-term training exercises aimed at improving the general levels of human resource management and leadership in TVET institutions.

Sub-component 2: increased access to TVET through expansion of institutions to all woredas

Of the 1,348 TVET institutions, currently only 334 public and 282 private or NGO facilities are prepared to deliver training up to level five. The remaining 732 (325 public and 407 private) deliver short term training or formal training up to level two. By the end of ESDP V, public TVET training institutions that can provide courses up to level five will be established in 462 woredas that have no access so far. Expansion will combine upgrading and new construction and will follow a carefully prepared strategy aligned with the accreditation manual, based on identified development corridors, with preference for development in emerging regions. The training offered in each TVET centre will vary based on local needs. At the same time, a consistent 20% of enrolment is expected to be fulfilled by private institutions.

Each new or upgraded centre will provide a safe and healthy learning environment for trainers and trainees and will be designed based on the input and guidance from priority sectors to ensure quality. Standards for special educational needs' training, including adaptations to facilities and additional resources, including resource centres to share specific materials efficiently, will be prepared and implemented/provided

in each institution. These will be supported by procedural modifications to accommodate trainees with special needs. Where possible, the design and construction of TVET institutes will support environmental protection by using low-carbon materials and energy efficient techniques and equipment.

A supply of potable drinking water, gender-specific sanitation facilities and separate spaces to deliver 'student services', which include student health, HIV/AIDS awareness and DSA, will be provided in all institutions. A cross-cutting issues coordination unit will be established at federal and regional TVET agencies, linked to a focal person in each institution. Addressing cross-cutting issues is a joint responsibility but this structure will help to ensure full implementation of activities, sharing of information and effective communication across levels.

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Accreditation of all TVET institutions and industry workplace training venues will be conducted. Initially, national accreditation for quality standards will be sought and following recent accreditation to ISO standards by four institutions, all polytechnic TVET institutions will be prepared for accreditation to appropriate international standards. The establishment of a national technology institute will be explored as a mechanism to reduce duplication of technologies and to provide 'centre of excellence' level guidance to institutions in technology research, development and fabrication.

Sub-component 3: provide competent TVET graduates

The core business of the TVET institutions is the development and delivery of sufficient well-trained and competent workers to satisfy the demands of industry. During ESDP V, the system reform initiated under the TVET strategy will continue, with a refreshed emphasis on the enhancement of quality. An outcome-based training system, which meets the demand of the priority sectors of the second Growth and Transformation Plan, will be realised.

Trainees will join TVET institutions to receive market-driven training. There are two types of training provision: formal training and non-formal training. At the end of either training type, assessment will be conducted to check the acquisition of competencies in line with OS.

Formal training targets those who have completed grade ten of general education. Formal programmes are provided at five levels, with student enrolment depending on performance in their general education completion examination results. By the end of ESDP V, the TVET system will have 564,054 trainees enrolled in this form of training.

Training modules combine basic training in TVET institutions and workplace training with firms. This combination of institution- and industry-based training is expected to improve the quality and relevance of acquired skills. Following this approach, at the end of ESDP V, the rate of competency amongst training completers will reach 75% and the employment rate of graduates will rise from 60% to 90%. In all dimension of training (including participation in market-driven occupations, assessment results and employability) the share of females will be 50%. In order to ensure equitable uptake of TVET, given that it comes at a small cost and generally requires travel, a special support strategy for students from disadvantaged areas and backgrounds will be developed. This can include provisions for material subsidies, hostel accommodation and similar.

Non-formal, short term trainings are normally designed after identifying the target groups. Beneficiaries may have completed any number of years of education but they will all seek new skills to obtain jobs. For this group, short term training will be provided, with an ESDP V target of reaching 1,470,663 trainees over the five-year period. In-company trainings are also classified as non-formal and will be delivered for industry workers to increase their competency to increase the productivity and competitiveness of industry and the quality of products and services. The training will be targeted at one or more units of competencies or qualification levels required.

Sub-component 4: welding capacity building for increased productivity and quality in manufacturing

A centre of excellence for engineering exists and is the foundation for training in advanced engineering skills in the TVET sub-sector. During ESDP V, the existing centre of excellence will be expanded and fully equipped and additional welding centres will be established in five TVET institutes. These centres will focus on providing trainers with welding skills, to international standards. This will be used as a basis for training competent welders that meet the needs of the expanding manufacturing industries in the country.

By the end of ESDP V, it is expected that these centres will have produced 105 internationally certified welding masters (welding trainers), 4,000 internationally certified welders and four

internationally certified welding engineers. This focus on welding will improve the productivity of industries that rely on metalwork joinery. The centre of excellence will facilitate capacity building in design, foundry and prototype development and testing – with an emphasis on the local production of tractors. In addition, MSEs will be supported by expert trainers to improve their productivity and the overall capacity for adapting and fabricating high technology prototypes will rise.

Strategies	Indicator (including baseline and target)	Source
Provide capacitated industry and institution trainers, TVET system leaders and support staff.	Number of capacitated existing A, B and C level trainers at 100% technology adaptation will be 17,382	EMIS
	Percentage of female trainers will increase from17% to 32%	EMIS
	Number of A-Level, B-Level and C-Level trainers will reach 4,637; 16,271; and 55,666, respectively	EMIS
	Number of industry workplaces accredited for cooperative training will increase from 55,778 to 108,668	Federal TVET Agency
Developing A, B and C level institution and industry trainers in public and private		
Creating leaders stock from established system and capacitating TVET leaders		
Providing special support for emerging regions		
Increasing the percentage of female leaders in Federal TVET Agency, region and zone TVET bureaus TVET institutes and CoCs		
Providing training methodology and TVET strategy for selected competent experts		
Preparing research strategy to examine links between TVET and labour market		
Increase access to TVET by expanding network of TVET institutions to provide quality training in all woredas	Number of institutions expanded up to level four will increase from 334 to796	Federal TVET Agency
	Total institutions will increase from 1,023 to 1,485	EMIS
Expanding, establishing and equipping TVET institutions at all woredas based on developmental corridors		
Equipping institutions to serve as international welding centres, from zero to five based on international standards		
Encouraging private sector and NGO engagement in the expansion of TVET institutions in all regions		
Preparing standards required for special educational needs' training, such as adaptations to facilities and additional resources, including resource centres to share specific materials efficiently		
Accrediting MSEs, medium and large industries for cooperative training		
Upgrading TVET polytechnic colleges (TI satellites) for trainer training		
Accrediting all TVET institutions nationally		
Providing awareness raising events for the prevention of HIV/AIDS and DSA		
Providing and establishing conducive training environment for education in emergencies		

Strategies	Indicator (including baseline and target)	Source
Provide competent TVET graduates from formal and short-term training courses to meet market demand	Number enrolled in formal training will increase from 265,745 to 564,054 (50% of which will be female)	EMIS
	Number having received short term training (over the five-year period) will increase from 876,097 to 1,470,663	EMIS
	Number of trainees enrolled that have special educational needs will increase from 1,003 to 3,060	EMIS
	Percentage of competent training completers will increase from 60% to 75%	EMIS
	Employment rate of training completers will increase from 60% to 90%	Federal TVET Agency
Increasing accessibility of quality cooperative training		
Establishing organisational structure for cross cutting issues at each level (agencies/bureaus/institutions)		
Providing special support for emerging regions		
Preparing guidelines on procedural modifications to accommodate trainees with special needs		
Increasing the share of female enrolment in all occupations		
Expand skills development in welding, for high-technology fabrication	Number of internationally certified welder increase from 38 to 4,000	Federal TVET Agency
	Number of Internationally certified welding trainers (master welders) will increase from 5 to 105	Federal TVET Agency
Establishing welding centres in TVET institutions		
Expanding and internationally accrediting the centre of excellence for engineering		
Providing training on welding skills to TVET trainers		
Capacitating trainers to welding trainer (Master Welder) level		

Component 3: industry extension and technology transfer services

Objective: improve product or service quality and productivity of MSEs through industry extension services	ESDP IV	Target
Number of MSEs supported by industry extension service	463,573	567,115
Number of MSE operators, having received extension services, who are assessed and competent	1,432,724	1,950,514
Number of demanded technologies identified through value chain analysis and transferred to MSEs	3,388	7,379

At the end of ESDP V, 567,115 MSEs, which consist of more than 1.9 million operators, will have received support through industry extension services. The quality and accessibility of industry extension services will be improved, primarily through improving the skill of trainers that deliver the services.

In addition, 1,560 value-chain analyses for priority sectors will be conducted to identify the technologies that are demanded to enhance

competitiveness. Once the required technologies are identified and acquired, the design (with full documentation) will be prepared for fabrication of prototype. Then testing of the prototype will be conducted to ensure the readiness of the technology for transfer. Once approved through testing, 89,583 MSEs will be trained on how to fabricate in mass and use transferred technologies to produce other products. To achieve these, TVET institutions will establish linkages with universities, research institutions and industries through a memorandum of understanding.

Technical and entrepreneurial skills of MSE operators will be increased through capacity building that is designed based on skill-gap analyses conducted by TVET trainers. MSE operators will then benefit from short term training to refine skills and bridge gaps identified. At the end of any skill gap training, operators will be assessed to ensure their competency. Kaizen, which helps to improve the quality and productivity of the product by streamlining production processes, is one of the supporting packages that will be delivered to MSEs to reduce wastage and increase cost-effectiveness. All TVET trainers that offer industry extension services will receive training on Kaizen principles and techniques and will use these to capacitate MSE operators.

At the end of ESDP V, 44% of MSEs will be led by master crafts people (competent at TVET level four or above). This is intended as a first step towards export-quality manufactures, with a target that 6% of manufacturing MSEs will be able to produce export standard products. This will be supported by establishing partnerships between MSEs and medium or large industries and with universities.

Strategies	Indicator (including baseline and target)	Source
Provide industry extension services to all new and existing MSEs to improve productivity, relevance and competitiveness	Existing MSEs supported through industry extension services will increase to 398,559	Federal TVET Agency
	New MSEs supported through industry extension services will increase from 21,260 to 65,610	Federal TVET Agency
Providing full package of industry extension services based on the OS in all sectors		
Providing special support for emerging regions on industry extension services provided to MSEs		
Transferring technologies to MSEs (based on value chain analysis)		
Supporting revenue-generation in MSEs by targeted industry extension services		
Support MSEs to produce export-standard manufactures and higher-level technologies	Percentage of MSEs led by Master Crafts-people will increase from 0%to 44%	Federal TVET Agency
	Percentage of manufacturing MSEs enhanced to produce export standard products will increase from 0% to 6%	Federal TVET Agency
Revising and developing value chains in all sectors		
Conducting regular market research to identify relevant technologies for MSEs		
Providing comprehensive documentation for all identified technologies		
Developing, fabricating and testing prototypes in collaboration with higher education institutions		
Capacitating MSEs for technology multiplication		
Researching the impact of industry extension service for MSEs and on transferred technologies		

Priority programme: higher education

The **goal** of this priority programme is:

"to produce competent graduates who have appropriate knowledge, skills and attitudes in diverse fields of study; to produce research which promotes knowledge and technology transfer based on national development and community needs; and to ensure that education and research promote the principles of freedom in exchange of views and opinions based on reason, democratic and multicultural values".

Introduction

Contemporary societies are marked by new economic, political, cultural, technological and environmental shifts that are part of a rapid and uneven wave of local and global forces. Such changes and challenges call for a generation of competent individuals. Higher education serves as a research and development laboratory and a mechanism through which the nation builds its human capital to enable it to actively participate in the national, regional and global economy.

The major responsibilities of higher education institutions are: teaching and learning (transmission of knowledge); research and discovery (advancement of knowledge); and community service and engagement (application of knowledge). Higher education institutions are not only trainers of highly qualified scientists and researchers; they are also attractors of talent from elsewhere to the local community. They generate new knowledge through primary research and provide technical support and specialised expertise and facilities for on-going firm-based research and development activities.

University activities are not confined to the process of knowledge transfer on a local basis but also act as a conduit of new knowledge through 'global pipelines' of international academic research networks. In addition, higher education institutions facilitate local linkages and networks and create anchors that underpin talent attraction and retention in Ethiopia.

There are now 36 functional public universities (although only 33 receive students from grade twelve of general education), established in three 'generations', distributed equitably across the country (with one further, Kotebe University College, expected to upgrade to full university status in the near future). There are also four private universities (Unity, St. Mary, Admas and Rift Valley) and a further 94 private university colleges and colleges engaged in higher-level human development endeavours across the country.

Access to higher education is growing rapidly and is expected to continue. In order to ensure a quality, equitable and relevant service to students and to society, the following five components are identified for ESDP V: university expansion and consolidation; equity enhancement; relevance and quality enhancement; research, technology transfer and community engagement; institutional collaboration, leadership and governance.

University activities are not confined to the process of knowledge transfer on a local basis but also act as a conduit of new knowledge through 'global pipelines' of international academic research networks. In addition, higher education institutions facilitate local linkages and networks and create anchors that underpin talent attraction and retention in Ethiopia.

Component 1: university expansion and consolidation

Objective: increase national enrolment capacity to increase access to higher education institutions	ESDP IV T (F/M)	Target T (F/M)
GER in higher education	9.4% (6/13)	15% (14/17)
Public university second degree (Masters') enrolment capacity	28,140	56,000

In order to support national development towards lower middle income status – and to provide the right mix of skills expected by an economy at that stage – continued expansion of access to higher education is required.

To provide greater access, 11 new universities will be established. The placement of new institutions will be guided by local demand as well as a preference for equitable access across all regions.

In addition to this, in order to maximise the intake capacity of the existing universities, they will be strengthened or consolidated. The 36 public universities that already exist will be encouraged to expand their enrolments to meet student demand in priority areas. Private universities will be supported to provide staff development and leadership capacity building opportunities to ensure equal quality of higher education

irrespective of service provider. This combination of actions will increase the enrolment capacity of higher institutions at undergraduate and postgraduate levels to over 600,000. This step, in the next five years will move Ethiopia halfway towards a lower middle income average GER for higher education, which currently stands at 22%.

Strategies	Indicator (including baseline and target)	Source
Increase intake and enrolment capacity in public higher education institutions for undergraduate and postgraduate students	11 new universities will be established to raise the number of public universities that enrol students from grade twelve from 33 to 44	EMIS
	The undergraduate GER will increase from 9.4% to 15%	EMIS
	Regular public second degree enrolment will increase from 28,140 to 56,000	EMIS
	Regular public third (Doctorate) degree enrolment will increase from 3,169 to 6,500	EMIS
Constructing, equipping and making operational new universities		
Developing an academic programme master plan, with emphasis on both undergraduate and postgraduate programmes		
Preparing an institutional development strategy and assigning adequate staff to its implementation		
Strengthening the infrastructure and human resource capacity of the exiting universities for higher education enrolment		
Planning and implementing staff and infrastructure development to meet the desired enrolment master plan		
Strengthen private universities	Undergraduate intake capacity of private higher education universities will increase from 28,821 to 50,000	Education Strategy Centre
	Proportion of regular graduate students enrolled in private universities will be 15%	EMIS
Strengthening the capacity of private higher education institutions		
Developing a framework that enables public and private institutions to establish mutual partnership		
Supporting private higher education institutions to develop staff and leadership capacity		

Component 2: equity enhancement

Objective: reduce disparities in participation between disadvantaged groups and others	ESDP IV T (F/M)	Target T (F/M)
Share of female enrolment in undergraduate programmes	32%	45%
Share of female enrolment in undergraduate science and technology programmes	28%	45%
% of female teaching staff	12%	25%
Number of students with special educational needs	1,000	3,000
GER of students from emerging regions	2.5% (2012/13)	5%

While expansion of the higher education system and the number of enrolees is vital for the progress of the country, growth must take place equitably. Increased participation in and success of female students and female staff in teaching, research, leadership and management positions is an important policy objective. Affirmative action programmes such as the special admissions policy are making an impact on female enrolment. New programmes, such as working

with school science, technology, maths and English teachers to improve students' success in general and gender-sensitive teaching for females at that level will be initiated. Resource sharing and utilisation (e.g. sharing university laboratories with secondary school groups) will be introduced. The implementation of a new female staff recruitment and development policy will contribute to achieving targets for gender parity amongst teachers, researchers and leaders.

There should be improved access and achievement in higher education for students with special education needs. All universities will implement the national policy on facilities and infrastructure for groups with disabilities by adapting their campuses to provide full access to all students. Three universities will receive additional support to establish facilitates to provide higher education services to students with the most severe needs. Later, these universities will guide improvements across the higher education sub-sector in terms of the facilities and teaching skills/ adaptations required to support effectively all students with special educational needs.

To improve enrolment and achievement of students from emerging regions, the affirmative action admissions policy will continue to be applied uniformly in all universities. Rates of access and enrolment by region will be monitored and admission/ support policies adjusted accordingly.

All universities will implement the national policy on facilities and infrastructure for groups with disabilities by adapting their campuses to provide full access to all students.

Strategies	Indicator (including baseline and target)	Source
Increase participation and success of female students in higher education	Share of female enrolment in undergraduate programmes will increase from 32% to 45%	EMIS
	Share of female enrolment in undergraduate science and technology programmes will increase from 28% to 45%	EMIS
	Share of female enrolment in second degree programmes will increase from22% to 35%	EMIS
	Share of females enrolment in third degree programmes will increase from 12% to 20%	EMIS
Providing special support to female students to qualify for and succeed in higher education at all levels		
Developing summer and weekend outreach programmes to provide academic support to female students in secondary schools		
Providing institutionalised and sustained academic, economic and psychosocial supports to enrolled female students		
Implementing female scholarship schemes for postgraduate and Doctorate programmes		
Enhance access to and success in higher education of students with special needs and those from emerging regions	Graduation rate of students with special needs will be 95%	University reports
	Gross entry rate of students from emerging regions will increase from 2.5% to 5%	University reports
	Graduation/retention rate of students from emerging regions will be 95%	University reports
	Number of students with special educational needs will increase from 1,000 to 3,000	EMIS
Providing special support to students with special needs and those from emerging regions to qualify for and succeed in higher education at all levels		
Equipping universities with the facilities, teaching and learning materials required for students with special educational needs		
Selecting and preparing/equipping three universities to serve as leaders in providing higher education services to students with special educational needs		

Strategies	Indicator (including baseline and target)	Source
Revising the special admissions policy for students with special educational needs		
Providing institutionalised and sustained special academic, economic and psychosocial support to students with special educational needs and those from emerging regions at all levels		
Increase participation and success of females in teaching, research and leadership positions	Share of female teachers will increase from 12% to 25%	EMIS
	Female researchers' share of papers published in reputable journals will reach 15%	University reports
	Share of females on university boards will reach 25%	University reports
	Minimum number of females in a top leadership position, per institution, will be 1	University reports
	Minimum participation of females in middle and lower management positions, per institution, will rise from 5% to 30%	University reports
Developing and implementing guidelines on composition of university boards and top leadership for greater representation of females		
Designing and implementing a female talent cultivation centre for inspiring and assisting females to participate and succeed in leadership and management at all levels		

Component 3: relevance and quality enhancement

Objective: produce demand driven and competent graduates via relevant academic programmes, sufficient and qualified staff and proper educational resources or facilities	ESDP IV T (F/M)	Target T (F/M)
Share of graduates with degree-relevant employment within 12 months after graduation	NA	80%
Teachers' qualifications mix (first, second and third degrees)	27 : 58 : 15	0 : 70 : 30
Completion rate of first year undergraduate[1]	N.A.	95% (95/95)
Undergraduate students' graduation rate[2]	N.A.	70% (70/70)
Number of annual community services implemented based on research conducted	N.A.	50
Share of females enrolled in science and technology stream	28%	45%

Higher education enrolments have expanded rapidly for the past five years and will continue to do so for the period of ESDP V. In a rapidly expanding system, quality and relevance will fall unless effective strategies are implemented to maintain standards. These standards are essential to a reputable higher education system.

For this reason, the relevance and quality of development, delivery and assessment of academic programmes in higher education institutions will be enhanced. Analysis of development paths through manufacturing and other industrial sectors supports a skills mix in favour of sciences and technologies. As a result, as in ESDP IV, the programme mix of 70:30 for science and technology versus social sciences and humanities will be maintained.

Quality assurance within institutions will be strengthened by the establishment or strengthening of internal academic curriculum committees. The current peer review process is considered inadequate and a new independent,

neutral, body will be established to replace it. The programme of external evaluation and review (external institutional quality audits), coordinated by the Higher Education Relevance and Quality Agency, will be strengthened, with additional powers being considered for the agency. External review will be supported by the new National Qualifications Framework which will be implemented from the first year of ESDP V. This framework is designed to increase consistency and to assure that qualifications from different institutions meet national and international standards. To join the framework, each institution will be required to submit degree programmes for accreditation led by the Higher Education Relevance and Quality Agency. Thereafter, students that complete an accredited course will receive a nationally recognised certificate of qualification.

Graduates with the appropriate skills and technical knowledge will be essential to the success of this ambition. High quality degree programmes should equip graduates with relevant industry knowledge, up to date specialised skills and competencies and work-ready attitudes to succeed in the world of work, industry and research. To improve the quality, relevance and structure of degree programmes, a modularisation process has been completed. This allows universities to specify programmes from a set of approved modules. Following this first step, however, redundancy remains, with repetition across modules and unclear linkages in places. As a next step, during ESDP V, all universities, in collaboration with the Education Strategy Centre, will review each programme to minimise duplication, will update curriculum content based on this review and will reflect each course in terms of learning outcomes or competencies delivered rather than simply by topic. On completion, universities will be equipped to specify degree programmes consisting of modules that provide students with a clear, non-repetitive learning trajectory through to graduation.

Any such revision will incorporate guidance from industry stakeholders. The strengthening of university-industry partnerships will provide bilateral benefits. Universities will consult industry stakeholders for support and guidance during curriculum development and revision. Industry experts will be invited to teach and advise and students will be encouraged, through the internship programme, to develop industry experience in neighbouring industries, TVET colleges and MSEs during their studies. This approach will equip students with the relevant skills, psychological readiness and attitudinal changes required to succeed on graduation. The relevance of degree and specialist study courses will be improved by using detailed labour market skills forecasts developed in the context of national ambitions to establish a science and technology driven economy. In order to have information on the labour market, close links with the government's economic planning and forecasting units, such as those under trial in the Ministry of Industry and Ministry of Science and Technology, will be established.

The supply and CPD of lecturers and teachers will be a continuing focus for improvement in ESDP V. The target teacher qualification ratio of 0:70:30 for first, second and third degree holders, respectively, will be maintained until it is reached. In particular, staff will be supported to enrol in second degree programmes to transition from bachelor level, as was common in ESDP IV. Affirmative action for female staff enrolment in second and third degree programmes will remain and the new staff recruitment and development policy will favour female entry to research and leadership positions.

Of external evaluation and review (external institutional quality audits), coordinated by the Higher Education Relevance and Quality Agency, will be strengthened, with additional powers being considered for the agency. External review will be supported by the new National Qualifications Framework which will be implemented.

Strategies	Indicator (including baseline and target)	Source
Enhance relevance and quality of development, delivery and assessment of academic programmes with emphasis on science and technology	Share of graduates employed within 12 months after graduation reaches 80%	Tracer studies
	Graduation rate of postgraduate (2nd and 3rd degree) students will reach 95%	University reports
	Share of graduates qualified through an exit examination (where applicable) will be 100%	University reports
Developing human resource requirement projection for core sectors		
Implementing qualification framework and accrediting all programmes against these standards		

Strategies	Indicator (including baseline and target)	Source
Designing and implementing national qualifying (exit) examination system in priority fields		
Implementing national internship programme		
Establishing national and institutional higher education alumni tracking information system and conducting tracer studies		
Retaining programme mix of 70:30 ratio of science and technology programmes to social and human sciences programmes		
Increasing the number of institutes of technology and upgrading science and technology universities to international centre of excellence standards		
Increasing specialism of each university by identifying at least three thematic areas of excellence for each university		
Identifying gaps in relevance and capacity of existing postgraduate programmes		
Enhance the supply of teachers that meet quality standards and that engage in CPD.	Teachers' qualifications mix (first, second and third degrees) will be improved from 27:58:15 mix to 0:70:30	EMIS
	Teacher student ratio will reduce from 1:23 to 1:19	EMIS
	Share of professionally certified teachers meeting CPD standards will be 60%	University reports
Expanding the sources of supply of teachers to higher education , especially for science and technology		
Expanding domestic enrolment capacities and international scholarship opportunities in postgraduate programmes		
Developing centre of excellence in teachers' education in selected universities		
Establishing and operating comprehensive CPD centres		
Recruiting teachers in line with demand provided by enrolment growth		
Enhance educational resources and facilities	Books (core references) to students ratio will be 1:5	University reports
	Percent of students accessing digital libraries will be 100%	University reports
	Percent of smart (ICT supported) classrooms will reach 25%	University reports
	% of universities that provide laboratory or workshop facilities for all courses that require such capacity will reach 100%	University reports
Developing and implementing national educational resources requirement standards especially for science and technology		
Preparing and implementing educational resource development plan		

Strategies	Indicator (including baseline and target)	Source
Designing and implementing a human resource development strategy for academic support staff to enhance educational resources facility management, particularly in science and technology		
Providing ICT and internet connections to all universities and all relevant classrooms		

Component 4: research, technology transfer and community engagement

Objective: enhance scale, quality and relevance of technology transfer focused research and community engagement	ESDP IV T (F/M)	Target T (F/M)
Share of research funds secured from industry and international sources	N.A.	50%
% of public universities that have 'adopted' a secondary school for shared learning	0%	100%
% of research projects jointly run by universities and industries	N.A.	50%
Number of technologies successfully applied through collaboration with TVET sub-sector	N.A.	500

Universities' research capacity is constrained by low available finances and by a small supply of capable researchers. During ESDP V, the higher education sub-sector will seek whole-government approval for an improved budget allocation model for universities. This will provide greater autonomy to each institution, allowing a more responsive research agenda and increasing the share of funds allocated to research to be in line with international standards. Research staff capacity in universities will be strengthened through an increase in postgraduate study opportunities (especially Doctorate studies) and through collaboration between staff in Ethiopian universities and staff in universities abroad. Consideration will be given to the introduction of a performance-based research system that links the delivery of quality research to the delivery of funding. Research activities will be further supported through public-private partnerships with industry and other stakeholders. This engagement in research and community services will also improve the quality and relevance of research.

In line with the strategies for strengthening university-industry partnerships in teaching and learning, universities will work more closely with industry stakeholders to set the research agenda, improve research processes and cultivate stronger links between knowledge and practice. The emergence of more effective partnerships between businesses and education institutions, such as establishing a science park with incubation units, will improve technology transfer and may be a source of generating additional revenue for universities. In order to improve the product quality and productivity of MSEs, the design, development, fabrication and testing of new technologies will be conducted in collaboration with TVET institutions.

Similarly, relationships between schools and universities are required to improve the relevance and quality of instruction and the preparedness of students as they transition to higher education. Each public higher education institution will 'adopt' a secondary school, many of which will be established on the university campus for teaching and learning research. This approach will improve teacher trainee access to practicum activities, will allow schools to use relevant university facilities and will improve the preparedness of secondary students for higher levels of education.

Even with the large expansion of the higher education system, many people will not benefit directly from the sub-sector because they are not students in the institutions. Nevertheless, there should be a clear impact on communities through engagement and research which meet national and institutional priorities, linked to the national development plan. This approach will require the quality of management and administrative capacity of staff to be enhanced so that effective

consultation with communities about their needs occurs and so that well-grounded research proposals can be written and submitted to appropriate agencies in order to solicit research funding.

Strategies	Indicator (including baseline and target)	Source
Develop national and institutional agenda for research, university-in-dustry partnerships, community engagement and research funding	A national research and community engage-ment framework document will be devel-oped	Education Strategy Centre
	Share of research funds from annual recur-rent total budgets of institutions will be 5%	MoFED
Establishing national multi-sectoral stakeholder panel to produce national research and community engagement framework		
Establishing regional stakeholder panels to produce institutional research and community engagement strategies		
Developing resource mobilisation and utilisation system for research and community services		
Developing guideline for institutional fund generation and utilisation for research and community en-gagement		
Establishing and operating a research funding body based on the principles of competition, relevance and positive action		
Establishing international research partnership to increase the minimum share of overseas research fund		
Engaging with all universities to develop a research and community engagement strategy based on the national direction (agenda), with strategies to capture half of their research budget from industry and international sources		
Develop staff (researcher) and organisational capacity including management and administrative capacity for facilitating research and community services	40% of staff will participate in research activities	University reports
	Number of research universities (whose share of postgraduate students is 20% and that of doctorate holder teachers is 50%) will be 3	Education Strategy Centre
	Percent of research completed whose re-sults (technologies/innovations) are trans-ferred/disseminated will be 80%	University reports
	One secondary school will be established/ nurtured by each university in its vicinity for bilateral training/support	University reports
Setting up and operating research capacity building units for young researchers, with coaching and mentorship system		
Establishing research centres that are jointly owned by universities and industries, for common use		
Setting up and equipping universities with proper staff and research facilities for their selected research thematic/priority areas		
Preparing and implementing criteria and road map for research university development		
Developing national management and incentive system to enhance productivity of staff in research and community services		
Creating a data base of best experiences of university industry linkages through systematic documenta-tion for scaling up		

Strategies	Indicator (including baseline and target)	Source
Developing a national monitoring and performance evaluation system for research and community engagement		
Strengthen the institutionalisation of stakeholder engagement in research and community services	Number of councils of stakeholders engagement at different levels will be 54	Education Strategy Centre
	Percent of universities initiated business enterprises through business incubation centres will be 100%	University reports
	Percent of research projects jointly run by universities and industries will be 50%	University reports
Establishing research and development councils at national levels and in each region		
Designing and implementing joint research and community development projects between universities and industries		
Supporting selected secondary schools to develop excellence		
Increasing linkages between universities and industry/business to increase Foreign Direct Investments or Contractual projects		

Component 5: institutional collaboration, leadership and governance

Objective: universities will use their resources effectively, through collaboration with national and international partners	ESDP IV	Target
% of universities with clean performance audit	0%	100%
% of institutions that implement national leadership and management appointment guideline	N.A.	100%
% of student cost sharing	15%	20%

Sub-component 1: institutional collaboration

Institutional collaboration will happen at regional, national and international levels. Universities that are physically close to one another will be encouraged to strengthen their working relationships, to share physical resources such as laboratories, workshops and libraries and to transfer the experiences, knowledge and technologies of staff in each institution.

The development of connections and collaborations between Ethiopian and international institutions will be extended so that international dialogue and exchange can advance the breadth and quality of academic programmes and research in institutions and enhance the effectiveness of teaching and learning. Collaboration with international institutions is mainly aimed at importing and exporting international and local experiences, knowledge, technologies, social and cultural experiences. Staff and students' exchanges and joint academic and research programmes will be enhanced via various partnerships and programmes to attract regional students. A national unit or body for marketing, monitoring and evaluating internationalisation of higher education will be established and will lead the hosting of international conferences to share ideas. Moreover, an international collaboration strategy will be designed and implemented at institution level and each university will establish an international liaison office.

The development of connections and collaborations between Ethiopian and international institutions will be extended so that international dialogue and exchange can advance the breadth and quality of academic programmes and research in institutions and enhance the effectiveness of teaching and learning.

Sub-component 2: leadership and governance

To further improve the higher education system, institutional leadership will be strengthened at all levels through induction and in-service executive training. National and institutional governance systems such as university boards will be reviewed with a view to enhancing institutional autonomy and promoting greater accountability. The capacity of board members, with particular emphasis for new board members, will also be strengthened through a national capacity building programme in order to share the basic principles of university leadership.

National and institutional governance systems in higher education will be enhanced. Accordingly, revising legislation to formally decentralise the roles and responsibilities to universities, developing a national standard to strengthen the institutional quality assurance system of universities, revising the organisational structure of the higher education sub-sector and improving the campus environment for staff and students' welfare will be given due attention. Such decentralisation will also require university leadership staff to devote a larger share of their time to strategic rather than administrative duties.

To confirm that the management systems and procedures of higher education institutions are reaching the expected levels of economy, efficiency and effectiveness in the employment of available financial resources, performance audit guidelines will be prepared and distributed to all institutions. All universities will be audited in the plan period and where they are underperforming, they will be supported with further guidance and follow-up to improve practice. In order to enhance the financial efficiency of universities, a national guideline on generation and utilisation of internal revenues will be developed and implemented, to encourage universities to diversity revenue sources.

To empower institutions in managing and administering their budgets, the designed funding formula based on a block grant allocation system will be finalised and tested with a view to implementation. Furthermore, a national strategy for non-academic student services, contextualised from international best practice, will be prepared. This will include guidance on alternative approaches to the provision of non-academic services – for example for privatisation of student food services.

A year of higher education in Ethiopia comes at more than twenty times the cost of the equivalent year of general education.10 Recognising this – and the high private returns to higher education – a cost-sharing policy is in place, which requires students to pay 15% of a defined set of costs through a graduate tax. Revenues generated through the graduate tax are currently very low, albeit this is a poor indication of its capability for cost recovery (students are expected to pay back over many years and have a grace period prior to repayment which means that revenues are outdated and are hard to link to future expectations). Nevertheless, during ESDP V, the approach to cost-sharing will be revised, with an expectation that students will contribute an average of 20% of this defined set of costs through the graduate tax. In addition, a revised policy will be differentiated where necessary by providing allowances for students from disadvantaged backgrounds and providing scholarships on a larger scale.

10 Based on the annual per-student recurrent costs of each option, excluding capital investments

Strategies	Indicator (including baseline and target)	Source
Strengthen institutional leadership capacity at all levels	Percent of top leaders that participate in executive training will be 100%	University reports
	Percent of all new staff that receive induction training will reach 100%	University reports
Establishing national presidents', vice presidents' and new board members' leadership development centre		
Developing induction and skill training materials at national level for all levels of training centres		

Strategies	Indicator (including baseline and target)	Source
Enhance national and institutional governance system in higher education	Percent of institutions that implemented revised legislation on internal governance will be 100%	University reports
	% universities with clean performance audit will be 100%	Office of general auditor
	% students satisfied with non-academic university services will be 95%	Sample survey
Working with universities to implement a national guideline of university boards and leadership/ management appointment guideline		
Revising legislation to formally decentralise the roles and responsibilities at all levels of universities		
Developing national standards to strengthen institutional quality assurance system of universities		
Developing minimum national standards for campus environment(staff catering, campus landscaping, recreation centres)		
Developing and implementing national regulations for friendly teaching/learning off campus		
Improve higher education financing	Share of institution's contribution to annual recurrent budget reach 10%	University reports
	Share of student cost sharing will increase from 15% to 20%	University reports
Developing student loan and repayment strategy		
Designing, testing and implementing funding formula based block grant system (guideline)		
Promote alternative mechanisms for non-academic students services	A national alternative strategy for students' catering, accommodation and health services will be implemented	Education Strategy Centre
	A national guideline to address HIV/ AIDS and DSA on campus and its vicinity will be implemented	Education Strategy Centre
Designing a national strategy for non-academic student services based on national context and international best experiences		
Building institutional capacity to implement alternative approaches to non-academic student services		
Develop international collaboration/ internationalisation	Share of joint academic programmes with international partners will be 10%	Education Strategy Centre
	Percent of foreign staff will increase from 8% to 10%	EMIS
	Share of joint research programmes undertaken in collaboration with non-Ethiopian universities will be 20%	Education Strategy Centre
Preparing and receiving approval for a national policy and strategy on higher education internationalisation		
Establishing national unit or body for marketing, monitoring and evaluating internationalisation of higher education		

Strategies	Indicator (including baseline and target)	Source
Developing and implementing strategy for attracting foreign students including through border universities and branch campuses		
Supporting teaching staff to undertake overseas exposure visits and students to engage with international exchange programmes		

Summary of cross-cutting issues in the priority programmes

Cross-cutting issues are fully integrated within sub-sectoral priority programmes, wherever action is needed, in ESDP V. It is clear that the risk of such mainstreaming is that these crucial issues lose visibility. Therefore, a chapter that summarises the integration of cross-cutting issues is presented here.

This chapter will: help ensure that these issues are comprehensively addressed throughout the plan, by summarising the main programmes for each issue; and it will allow readers to see quickly how each issue has been addressed and where further details of strategies for each cross-cutting issue can be found in the plan matrices and narrative.

In the capacity development for improved management priority programme it is explained how the cross-cutting issues' strategies will be implemented across the sector. At the federal and regional levels a 'unit' for effective communication and monitoring of implementation will be established within the relevant planning process. In each zone (where relevant), woreda, TVET and higher education institution, where such a role does not already exists, a focal person will be identified to monitor progress for all issues in their area.

This structure will not duplicate the roles of the already established responsible bodies for HIV/AIDS, gender and special educational needs but will instead play a supporting role to ensure that all officers at all levels are taking full responsibility to deliver their part in respect of joint targets.

For each cross-cutting issue, specific strategies can be found in the following priority programmes of ESDP V:

Gender

Strategies focusing on gender disparities appear everywhere, such that they are not identified here. In addition, all indicators, where relevant, are gender disaggregated.

Special needs and inclusive education

Strategies focusing on improving education for students with special educational needs appear everywhere, such that they are not identified here.

HIV/AIDS

Quality of general education

Component 3: school improvement programme

Developing strategy for efficient implementation of 'student services', to cover HIV/AIDS, DSA and school health and nutrition

Developing strategy for supplementary materials to be provided through 'student services', to increase efficiency of information sharing with students on topics such as DSA, health and nutrition, HIV/AIDS

Providing peer education and life skills education for HIV/AIDS and DSA awareness, through 'student services'

Component 4: Information and Communications Technology (ICT)

Broadcasting local digital contents focusing particularly on cross cutting issues and related topics such as environmental protection

Adult

Component 2: improving female participation in IFAE and post-IFAE programmes

Reviewing curriculum content at federal and regional levels to improve relevance and gender-responsiveness, with a preference for female learners and attention to life skills topics

TVET

Component 2: trainees' development and institutional capacity building

Providing awareness raising events for the prevention of HIV/AIDS and DSA

Higher Education

Component 5: institutional collaboration, leadership and governance

A national guideline to address HIV/AIDS and DSA on campus and its vicinity will be implemented

Education in emergencies

Quality of general education

Component 1: teachers' and leaders' development

Training and equipping school leaders in emergency-prone areas to respond effectively to crisis

Training and equipping teachers in emergency-prone areas to respond effectively to crisis

Printing and distributing copies of 'Ethiopia: minimum standards for education and emergencies' to all region, zone and woreda education offices and TVET agencies

Component 2: curriculum, teaching and learning materials

Equipping resource centres/clusters with materials for continued education in an emergency situation

Developing standard package of 'emergency' teaching and learning materials, including WASH

Distributing packages to all schools at risk of emergencies, including WASH

Access to general education

Component 2: primary

Providing schools in emergency prone areas (particularly drought) with training and equipment to enable continuing education

Component 3: secondary

Promoting education in emergencies programme and support emergencies affected schools

TVET

Component 2: trainees' development and institutional capacity building

Providing and establishing conducive training environment for education in emergencies

School health and nutrition

Quality of general education

Component 3: school improvement programme

Providing services and resources to schools to improve the physical facilities and foster a safe and healthy environment.

Developing strategy for efficient implementation of 'student services', to cover HIV/AIDS, DSA and school health and nutrition

Developing strategy for supplementary materials to be provided through 'student services', to increase efficiency of information sharing with students on topics such as DSA, health and nutrition, HIV/AIDS

Component 4: Information and Communications Technology (ICT)

Broadcasting local digital contents focusing particularly on cross cutting issues and related topics such as environmental protection

Access to general education

Component 1: pre-primary

Establish child health and nutrition programmes (predominantly feeding in food-insecure contexts and deworming) in collaboration with Ministry of Health and Ministry of Women's, Children's and Youth affairs

Component 2: primary

Finalising and implementing National School Feeding Strategy

Investigating options to supply educational materials, school feeding and financial support for children from poor and low income family backgrounds

Adult

Component 2: improving female participation in IFAE and post-IFAE programmes

Reviewing curriculum content at federal and regional levels to improve relevance and gender-responsiveness, with a preference for female learners and attention to life skills topics

TVET

Component 5: institutional collaboration, leadership and governance

Designing a national strategy for non-academic student services based on national context and international best experiences

Building institutional capacity to implement alternative approaches to non-academic student services

Higher Education

Component 5: institutional collaboration, leadership and governance

Designing a national strategy for non-academic student services based on national context and international best experiences

Building institutional capacity to implement alternative approaches to non-academic student services

Drug and substance abuse prevention

Quality of general education

Component 3: school improvement programme

Developing strategy for efficient implementation of 'student services', to cover HIV/AIDS, DSA and school health and nutrition

Developing strategy for supplementary materials to be provided through 'student services', to increase efficiency of information sharing with students on topics such as DSA, health and nutrition, HIV/AIDS

Providing peer education and life skills education for HIV/AIDS and DSA awareness, through 'student services'

Component 4: Information and Communications Technology (ICT)

Broadcasting local digital contents focusing particularly on cross cutting issues and related topics such as environmental protection

TVET

Component 2: trainees' development and institutional capacity building

Providing awareness raising events for the prevention of HIV/AIDS and DSA

Higher Education

Component 5: institutional collaboration, leadership and governance

Designing a national strategy for non-academic student services based on national context and international best experiences

Building institutional capacity to implement alternative approaches to non-academic student services

Water, sanitation and hygiene

Quality of general education

Component 2: curriculum, teaching and learning materials

Developing standard package of 'emergency' teaching and learning materials, including WASH

Distributing packages to all schools at risk of emergencies, including WASH

Component 3: school improvement programme

Providing WASH resources per OneWASH standards

Component 4: Information and Communications Technology (ICT)

Broadcasting local digital contents focusing particularly on cross cutting issues and related topics such as environmental protection

Access to general education

Component 1: pre-primary

Providing basic WASH facilities in pre-primary settings

Component 2: primary

Providing basic WASH facilities in primary schools

Component 3: secondary

Providing basic WASH facilities in secondary schools

Section 4

Implementing and financing ESDP V

Implementation, monitoring and evaluation

Financial framework

Implementation, monitoring and evaluation

Framework overview

The implementation, monitoring and evaluation framework for ESDP V specifies what will be the responsibilities of different actors in implementing ESDP V and how – through which tools and by whom – ESDP V will be monitored and evaluated.

The framework covers a number of agencies, including the MoE, the REBs and woreda education offices. Each office has both accountability and improvement functions. The framework is designed to support all agencies to make choices to adjust where necessary the activities and strategies pursued. At a higher level these exercises can inform adjustments to the strategic direction of the education system. Monitoring is specifically required on a regular basis against the objectives, outputs and activities in ESDP V. This framework is based on clear expectations of performance and a set of linked implementation, monitoring and evaluation exercises. KPIs have been identified in ESDP V to monitor progress of priority outcomes at the system level. These indicators focus on participation, equity, quality and learning outcomes, in line with the priorities of the education and training system in Ethiopia, which are to:

- Provide equal opportunities and participation for all, with special attention to disadvantaged groups
- Deliver quality education that meets the diverse learning needs of all children, youth and adults
- Develop competent citizens who contribute to social, economic, political and cultural development through creation and transfer of knowledge and technology
- Promote effective leadership, management and governance at all levels in order to achieve educational goals by mobilising and using resources efficiently
- Assist children, youth and adults to share common values and experiences and to embrace diversity

A major premise of the framework is accountability for using performance information (evaluative information) to adjust policies and programmes to improve progress towards outcomes. This framework will support education agencies to use more evidence of attainment and achievement to improve levels of performance.

Implementation structures and processes

The MoE, REBs, zone and woreda education offices each have important roles to play in planning, monitoring and evaluation, in order to ensure a balanced and equitable development of the education sector. The latest decentralisation reform, which started over a decade ago, has transferred important responsibilities for general education to woreda offices. These offices now exercise their responsibilities, with support from regional offices, within an overall framework developed at the federal level.

The effectiveness of this decentralisation has been strengthened through the organisational reform conducted under the BPR paradigm. Efforts under BPR have made clearer what is expected of staff at all levels, have strengthened the links between operational units and have helped to increase efficiency by identifying the human resource requirements for each organisation and post.

Federal steering groups

Within this system, there is a need for a central steering function, regular consultation with a variety of sector stakeholders and technical monitoring of progress against plan objectives. The following four federal-led bodies will be responsible for discharging these responsibilities.

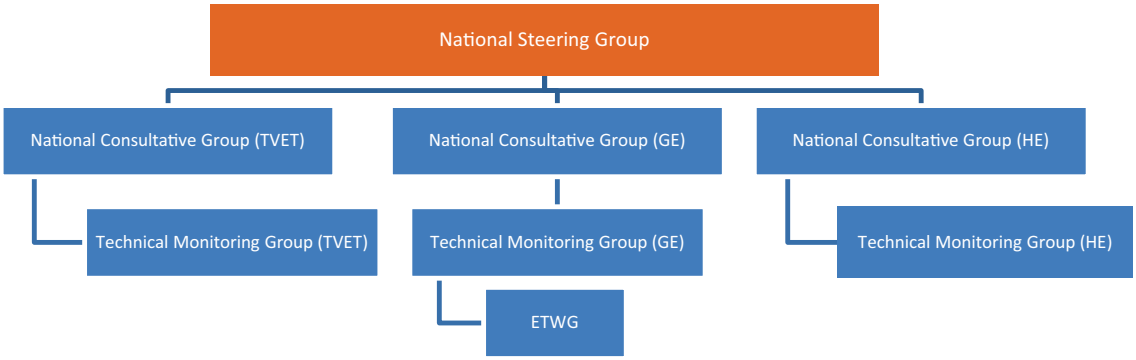
1. A **National Steering Group**, chaired by the Minister of Education, will meet twice annually. This body represents all education sub-sectors and serves as the highest-level decision making body, responsible for deciding any major strategy and implementation adjustments. The National Steering Group will bring together all state ministers, REB heads, university deans, TVET Agency heads and directors from regional and federal offices. These will be joined by key stakeholders from the public wing (including professional associations and representation bodies) and donor partners. One meeting of the National Steering Group per year will double as the Annual Review Meeting of the education sector.
2. Sub-sector **National Consultative Groups**, chaired by the respective state minister for each sub-sector, will meet four times annually. These bodies will make sub-sector strategic adjustments to improve implementation. National Consultative Groups will bring together regional heads and directors (apart from higher education) for the respective sub-sector. These will

be joined by stakeholders from the public wing (specific to the sub-sector) and donor partners. For higher education, the National Consultative Group will compose federal-level directors, representatives of the Higher Education Relevance and Quality Agency and the Education Strategy Centre and university deans and vice-deans in place of regional representatives. For TVET, once annually, the meeting of the National Consultative Group will also incorporate the deans from all TVET institutions.

3. Sub-sector **Technical Monitoring Groups**, chaired by the head of the federal Planning and Resource Mobilisation Directorate for general education; the federal Planning heads for TVET and for higher education; will meet four times annually. These bodies serve to monitor progress against the plan in each region, TVET agency and university – and will make basic implementation decisions. The Technical Monitoring Group for general education will bring together regional planning heads; for TVET will bring together the planning head of each TVET agency and the dean and vice-dean of each TVET institution; and for higher education, all federal planning staff and representatives of the board of each university.
4. An **Education Technical Working Group** (ETWG), co-chaired by the head of the federal Planning and Resource Mobilisation Directorate and by an elected donor partner representative, will meet monthly. The ETWG will bring together all donor partners active in the education sector and will be responsible for ad-hoc monitoring of ESDP V implementation progress and for coordinating resource mobilisation decisions across all sectors in response to performance against the plan.

Each Technical Monitoring Group will be supported by a Secretariat, in the office of the chair for each sub-sector. These secretariats will be responsible for coordinating meetings of the National Consultative Groups and the National Steering Group. Where an implementation decision can be made, it will be taken at the lowest level. Where a higher-level decision is required, information will be shared upwards for decision making. Decisions will be shared upwards and downwards within the steering structure.

Figure 17: structures for implementation oversight



Regional steering groups

There is also a need for a clear implementation structure in each of the regions. Regions will not follow a single model but the implementation bodies should be capable of fulfilling the following three functions: steering, consultation and technical monitoring (including a secretariat). This applies for both general education and TVET – but at the regional level there is no need for a higher education structure (as this sub-sector is led by the MoE).

As much as possible, current structures will be used for implementation. Information gathered by regional groups will also serve as inputs for the federal-level monitoring, consultative and steering groups.

The secretariat for the Technical Monitoring Group established within the MoE's Planning and Resource Mobilisation Directorate will take responsibility for supporting all regions and the federal government to discharge its implementation responsibilities in the forums described.

Strategic directorate plans, annual operational plans and the BSC

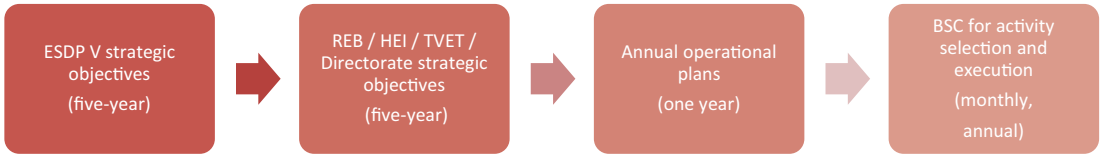
Coherent implementation of ESDP V will depend on the existence of strategic plans for each directorate and annual operational plans, linked to ESDP V's strategic objectives. These annual operational plans will identify responsibilities, budget implications and financing sources. The same structure will be followed at the federal, region, zone and woreda levels.

Directorates will establish five-year strategic plans which translate the broad objectives identified in ESDP V (the five-year national strategy document). These plans will inform annual operational plans which will cascade strategic objectives down to lower levels and will guide a set of annual activities at each administrative level. When all activities are combined, they will produce the outputs and outcomes expected for rapid learning improvements.

The BSC approach to activity management is now implemented across all levels of educational administration. The BSC will be the tool used to transform the strategic plan into the annual and monthly activities required at all levels, from federal to woreda. It helps planners identify what should be done and measured and allows officers to monitor organisation performance against strategic objectives. Careful consideration of the activities planned in BSC is critical, to ensure alignment with agreed strategic objectives. For each activity, the BSC system will include:

- The specific targets (expected outputs) to be reached during the year and the indicators used to monitor progress
- The precise activities that will be taken in order to reach the expected outputs
- The timing of each activity
- The sub-unit or individual responsible

Figure 18: Cascading ESDP V through to monthly officer work plans



Monitoring, review and evaluation procedure

In line with the results-based approach adopted under ESDP IV it is intended to move to an outcome based monitoring, review and evaluation procedure and to strengthen evaluation in addition to monitoring and review processes. This outcome-based approach will focus on the achievement of strategic education outcomes as reflected in KPIs. The programme components elsewhere in ESDP V also include objectives and indicators, which are effectively intermediate outcomes. These objectives, indicators and intermediate outcomes will also be considered in monitoring the annual operational plans. The monitoring, review and evaluation procedure will be an interrelated and sequential chain of continuous monitoring, annual reviews, short-term and system-wide evaluations. The monitoring, review and evaluation procedure will apply to all levels and sub-sectors.

Sources of data for monitoring plan performance (particularly EMIS and GEQIP)

For all indicators in ESDP V, the source of monitoring data has been identified. This includes those indicators for which no data are as yet collected or reported.

EMIS will be the primary source for monitoring data for each sub-sector during ESDP V. EMIS has continued to be strengthened during the period of ESDP IV such that an annual census is conducted in all schools, TVET and higher education institutions. There is an EMIS office in each woreda and data are aggregated to produce nation-wide statistics on a range of education indicators. Further strengthening exercises will pay special attention to data collection from/with ANFE institutions and CLCs.

EMIS will expand during ESDP V to integrate SMIS and TMIS for general education. For TVET and higher education, the range and quality of data collected does not link well to plan objectives and does not reach the level of reliability for EMIS' general education data. In the first year of ESDP V, EMIS questionnaires will be harmonised to minimise the burden on enumerators and to ensure that data relevant to the monitoring of ESDP V strategic objectives are collected and

recorded. Where it would be more efficient, a separate module might be established – but this will always be linked to the core EMIS system.

In addition to EMIS data, other data are collected, aggregated and reported centrally as part of the GEQIP monitoring and evaluation system. If an indicator in this plan is not captured by EMIS, where possible for general education, indicators that are monitored under this GEQIP system have been specified. For example, number of schools inspected is reported through the inspection system and up to GEQIP; share of teachers licensed is reported by the licensing processes and captured by GEQIP results. GEQIP also supplies a host of qualitative information. For example, the teacher development programme and SIP directorates submit regular directorate reports, offering insight into how schools are running. Regular field visits are carried out and these provide a further source of qualitative information.

In many places, EMIS and GEQIP will not serve as suitable systems for monitoring data. For TVET and higher education in particular – with a smaller network of institutions – reporting to central levels outside of the EMIS system is commonplace. These reports will serve as an additional source of monitoring information for ESDP V.

Additional surveys, studies and evaluations, such as the World Bank's Service Delivery Indicators, will be supported or commissioned where necessary. It is common for partners to conduct or finance periodic studies and evaluations of progress. These include, for example, the NLAs. Reports of these studies and periodic reviews will serve as a fifth source of monitoring data.

Where there is no existing data captured for an indicator, the MoE will explore how suitable data might be gathered. If an appropriate methodology can be developed, to coordinate short-term surveys or reports, the necessary information will be collected as soon after plan implementation as possible and a baseline established. Consultation with woredas and REBs will be undertaken to check on the feasibility of gathering and using data to measure those particular indicators. Targets for subsequent years of the plan will be set based on the baseline established. If appropriate information to measure progress cannot be collected, the indicator will either be re-designed or dropped.

Routine monitoring at national and decentralised levels

Plan implementation will be monitored on a routine basis through monthly meetings, based on the targets and indicators contained in ESDP V and in the Annual Operational Plans. Regular quarterly monitoring reports will be produced by the MoE and regional bodies (including TVET agencies) against the KPIs set out in this chapter of ESDP V. They will include consolidated information from short, standardised, written performance reports that will be produced by the implementing units at quarterly intervals using the guidelines and tools provided to them by the Secretariat of each Technical Monitoring Group, as relevant.

Reports will include the specific performance based on data from universities, TVET institutions and woredas, respectively, against each cascaded KPI target and commentary on status in relation to achieving the target, with explanations for any variance. These quarterly monitoring reports will focus on: progress in the production of planned outputs and outcomes; implementation of activities; utilisation of inputs; budget implementation; and implementation of recommendations issued at each review.

The reports will then be submitted to the Secretariat of each Technical Monitoring Group, as a basis for reviewing progress, examining problems and constraints and recommending corrective action to be taken. Following review each quarter by Technical Monitoring Groups, the sub-sector reports will be submitted to respective National Consultative Groups as an input to their performance assessment – and for any higher-decision making requirements. Finally, after National Consultative Groups have reviewed, a single consolidated performance report, listing achievements against all KPIs, with full commentary explaining any variance, will be prepared by the Secretariat of the General Education Technical Working Group and submitted to the National Steering Group.

There are five critical steps in the chain which must be followed in a regular pattern each quarter for effective implementation oversight. These are:

- **(A)** MoE and regional monitoring reports produced, listing performance against cascaded KPIs
- **(B)** Technical Monitoring Groups meet to review sub-sector performance
- **(C)** Consolidated sub-sector monitoring reports, listing performance against national KPIs and with recommendations to National Consultative Groups, submitted
- **(D)** National Consultative Groups meet to review sub-sector performance

– **(E)** Consolidated sector monitoring report, listing performance against national KPIs and with recommendations to National Steering Group, submitted

Then, every six months, the National Steering Group will meet (F). The following chart shows that these oversight activities (labelled A-F, as above) produce a continual chain of two activities each month, the strength of which remains only if all activities for each quarter are fulfilled in sequence. Completion of such a tight schedule will require dedication from Secretariats from each Technical Monitoring Group and strong coordination across levels.

Figure 19: strict schedule for ESDP V monitoring and implementation oversight

Month	Activity to take place in first half of month	Activity to take place in second half of month
1	(A) Quarter 1	(B) Quarter 1
2	(C) Quarter 1	(D) Quarter 1
3	(E) Quarter 1	(A) Quarter 2
4	(B) Quarter 2	(C) Quarter 2
5	(D) Quarter 2	(E) Quarter 2
6	(F) Half 1	
7	(A) Quarter 3	(B) Quarter 3
8	(C) Quarter 3	(D) Quarter 3
9	(E) Quarter 3	(A) Quarter 4
10	(B) Quarter 4	(C) Quarter 4
11	(D) Quarter 4	(E) Quarter 4
12	(F) Half 2	

Joint Review Missions and Annual Review Meetings with stakeholders

A Joint Review Mission between government and donor partners will be conducted each year. It will concentrate on a selected issue for review, as decided by the ETWG. It may also be informed by studies and research to assess the progress in outcomes as stipulated under ESDP V.

The Annual Review Meeting will offer the opportunity for government and other stakeholders to assess achievements and shortcomings of plan implementation across the nation and to agree on improvements in order to reach the strategic objectives elaborated in ESDP V. Each Annual Review Meeting will be timed in such a way that it can serve as a basis for preparing the Annual Operational Plans and budgets for the following year. The meeting will be timed to coincide with one of the half-yearly meetings of the National Steering Group.

The Secretariat of the federal Technical Monitoring Group for general education will have responsibility for coordinating and preparing all inputs for the Annual Review Meeting. These will include a consolidated annual performance report based on the half-yearly reports prepared for the National Steering Group, as well as other document (such as reports from the Joint Review Mission, evaluative studies and financial reports). These will serve as the main reference documents for the Annual Review Meeting.

Mid-term and final evaluation

There was regular monitoring but limited evaluation of progress against all targets during ESDP IV. In spite of plans, neither a mid-term nor a final evaluation was conducted, to inform onward planning and target setting. The focus on monitoring only high-level indicators and a lack of awareness regarding ESDP IV's role in relation to national development objectives are two reasons for this, which will be corrected during ESDP V.

ESDP V will be implemented from 2015/16 to 2019/20. The second year's Joint Review Mission and Annual Review Meeting will have an evaluative component – this will serve as the mid-term evaluation, taking place in the first half of 2017. A final evaluation will then be conducted in the second half of 2019. Reports from each evaluation will be disseminated to all levels to inform necessary adjustments during implementation and for the next sector-wide plan, in the case of the mid-term and final evaluations respectively.

The Joint Review Mission and Annual Review Meeting evaluative study in 2017 will examine, as a minimum, each of the KPIs listed below. Guidance for the terms of reference for this evaluation and the relevant areas for emphasis will be drawn from the regular performance reports submitted to the National Consultative Groups (as explained above). The purpose of this exercise will be to evaluate performance in respect of ESDP V objectives and targets – with consideration of the impact on learning outcomes, relevance, cost-effectiveness and sustainability of activities conducted – to provide clear recommendations for corrective action and plan adjustment during the final three years of implementation.

The final evaluation, to be conducted in the second half of 2019, will be externally contracted. Similarly, this evaluation will examine, as a minimum, each of the KPIs of ESDP V. Guidance for the terms of reference for this evaluation and the relevant areas for emphasis will be drawn from the regular performance reports submitted to the National Consultative Groups and outputs from meetings of the National Steering Group; as well as from the findings and recommendations suggested during the mid-term evaluation. The purpose of this exercise will be to draw comprehensive lessons from the implementation of ESDP V and to provide guidance and recommendations to inform the planning process for ESDP VI. Again, impact on learning outcomes, cost-effectiveness, relevance and sustainability of activities conducted will be major considerations of this evaluation.

In addition to the internally produced performance reports, the Planning and Resource Mobilisation Directorate of the MoE will develop a strategy to coordinate and mobilise short-term formative and evaluation studies of interest. These will be used to inform planning and will serve as inputs to policy-level meetings of the National Consultative Groups and National Steering Group. Evaluative studies will be conducted both with donor support and without. These short-term studies are needed (a) to assess more systematically the programmes with innovative components, with a view of deriving lessons from these studies for further planning and programme development; (b) to assess performance against the many indicators in this plan that require sample surveys or similar, which aren't routinely monitored in EMIS or another annual system; and (c) given the size and growth rate of the education system, to confirm the accuracy of EMIS findings and measurement.

Key Performance Indicators

The collection, use and reporting of performance information against KPIs is an essential aspect of the framework for monitoring and evaluation. A set of KPIs will be used to monitor performance against the main outcomes expected under ESDP V. The design of the KPIs relates directly to the agreed strategic education outcomes. These indicators are taken from the targets included in priority programme matrices and include indicators previously identified under ESDP IV (to allow for a continued monitoring) and others of particular relevance to ESDP V.KPIs have been agreed upon by the stakeholders of ESDP V, the community and the development partners.

The KPIs are relatively few in number (to assist in ease of administration and in recognition that the capacity of the monitoring and evaluation system is still being built); are based on reliable data and data collection methods or tools (to ensure the accuracy and credibility of the reporting and simplicity of data collection); and reflect the range of different goals of ESDP V (such as improved access, equity, relevance, quality and management), so that comprehensive system progress is being monitored. The KPI table includes targets for each year of ESDP V, disaggregated by gender where appropriate.

Figure 20: KPIs for ESDP V (all targets stated as female / male where relevant)

KPIs (All targets stated as female / male where relevant)	**Baseline** (2013/14 unless stated)	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
Finance and management						
Government public expenditure on education and training (%)	23.3 (2012/13)	25.0	25.0	25.0	25.0	25.0
Annual operational plans (all implementing bodies) that adequately address all relevant cross-cutting issues	N.A.	100	100	100	100	100

KPIs (All targets stated as female / male where relevant)	Baseline (2013/14 unless stated)	2015/16	2016/17	2017/18	2018/19	2019/20
Schools receiving school report cards as an input to planning and management	0	10	20	30	40	50
ESDP V implementing 'units' (federal directorates and TVET agency, REBs and TVET agencies, universities) with multi-year strategic plan	N.A.	100	100	100	100	100
Access						
Pre-primary GER (%)	33/35	48/50	56/58	64/65	72/73	80/80
Grade one NIR (%)	102/109	102/107	101/105	100/103	99/100	98/98
Grade one to four, including ABE, GER (%)	131/143	122/132	120/129	118/124	116/120	115/115
Grade one to four, including ABE, NER (%)	104/112	104/110	103/107	102/105	101/103	100/100
Grade five to eight, GER (%)	63/65	67/70	74/75	82/83	90/90	95/95
Grade five to eight, NER (%)	50/49	53/52	56/55	59/59	62/62	65/65
Grade nine to ten, GER (%)	37/40	41/44	48/50	55/55	62/62	74/74
Grade nine to ten, NER (%)	21/20	24/24	28/28	34/34	41/41	47/47
Number of students enrolled in TVET formal training	265,745	280,006	304,775	365,154	447,248	564,054
Undergraduate GER (%)	6/13	7/13	8/14	10/15	12/16	14/17
Formerly illiterate 15-60 year olds that have graduated from two-year IFAE course (%)	14/41	20/45	27/49	35/53	43/56	52/60
Efficiency						
Grade one dropout rate (%)	23/21	20/19	17/15	13/12	9/8	5/5
Grade one to eight dropout rate (%)	11/11	10/10	9/9	7/7	4/4	2/2
Grade one to eight repetition rate	8/9	7/7	6/6	4/5	3/3	2/2
Survival rate to grade five	57/54	59/57	62/61	64/63	68/68	70/70
Completion rate to grade eight	47/47	50/50	55/55	61/61	67/67	74/74
Total MSEs supported through industry extension services	428,529	429,608	430,864	437,337	448,008	464,169
Year one undergraduate completion rate	N.A	95/95	95/95	95/95	95/95	95/95

KPIs (All targets stated as female / male where relevant)	Baseline (2013/14 unless stated)	2015/16	2016/17	2017/18	2018/19	2019/20
Quality						
Share of pre-primary teachers holding the ECCE diploma	0/0	0/0	2/2	5/5	9/9	15/15
Share of grade one to four teachers appropriately qualified (%)	63/48	70/58	77/68	84/79	92/89	100/100
Share of teachers in grades one to twelve that are licensed (%)	0/0	10/10	21/21	38/38	55/55	70/70
Primary schools at level three or above classification (%)	21	29	37	44	52	60
Secondary schools at level three or above classification (%)	30	36	42	48	54	60
Schools (grade one to twelve) access to broadcast and digital technologies assisted instruction (%) [all varieties]	46	53	63	73	79	83
Adult learning centres that are up-graded to CLCs (%)	0	10	20	30	40	50
TVET training completers that are assessed as competent (%)	60	63/63	66/66	69/69	72/72	75/75
TVET OS approved in all priority sec-tors	650	701	738	775	812	850
Academic staff mix in universities (Bachelor : Masters' : Doctorate)	27 : 58 : 15	22 : 60 : 18	16 : 63 : 21	11 : 65 : 24	5 : 68 : 27	0 : 70 : 30
Equity						
GPI in pre-primary	0.95	0.96	0.97	0.98	0.99	1.00
GPI in grades one to eight	0.93	0.94	0.95	0.96	0.98	1.00
GPI in grades nine to twelve	0.91	0.92	0.94	0.96	0.98	1.00
Females as a share of students in formal TVET system (%)	51	50	50	50	50	50
Females as a share of undergraduate enrolment (%)	32	34	36	38	41	45
Females as a share of IFAE (2-year) programme graduates	38	39	41	45	52	60
Enrolment rate of children with SNE, grades one to eight (%)	4	18	32	47	61	75
Enrolment rate of children with SNE, grades nine to twelve (%)	7	15	22	30	37	45
Females as a share of school leaders [principals and supervisors] (%)	8	9	10	13	16	20
Outcomes						

KPIs (All targets stated as female / male where relevant)	Baseline (2013/14 unless stated)	2015/16	2016/17	2017/18	2018/19	2019/20
% of grade two students reaching 'Below Basic' or above proficiency in reading and comprehension, by language	*See Figure 7*		60/60			95/95
% of grade two students reaching 'Basic' or above proficiency in reading and comprehension, by language	*See Figure 7*		40/40			70/70
% of students assessed reaching basic or above proficiency in the Early Grade Mathematics Assessment (EGMA)	None				70/70	
% of grade four students who achieve 50% and above (composite score) in NLA	25 (2012)	35/35				50/50
% of grade eight students who achieve 50% and above (composite score) in NLA	8 (2012)	30/30				50/50
% of grade ten students who score 50% or above (average score) in NLA	23			50/50		
% of grade twelve students who score 50% or above (average score) in NLA	34			70/70		
% of grade ten students that score 2.0 or above (pass mark) in Ethiopian General Secondary Education Certificate	45/61	50/63	55/65	60/66	65/68	70/70
% of grade twelve students that score 350 or above (pass mark) in Ethiopian Higher Education Entrance Certificate	19/36	25/39	31/42	37/45	44/47	50/50
Number of demanded technologies identified through value chain analysis and transferred to MSEs	2,627	3,252	3,623	4,066	4,635	5,442
Share of university graduates (first degree) with degree-relevant employment within 12 months after graduation (%)	N.A.	80	80	80	80	80

Financial framework

The cost of the implementation of ESDP V depends on several factors, which can be grouped as follows:

- Policy objectives, as translated into targets for admission and internal efficiency
- Assumptions about the use of resources (such as pupil/section ratios or pupil/textbook ratios)
- Assumptions about the cost of specific items and their evolution over the five-year period (such as salaries)

The description of the priority programmes has mentioned the various targets. Taking these targets as a basis, a full cost estimate has been made for ESDP V, by sub-sector and by category of spending.

Subsequently, an estimate is made of available financing. This estimate is also based on a number of assumptions. This allows for an estimate of the financing gap to be filled. Much of the financing for general education is a regional responsibility so it is dependent on the commitment of regions and woredas to the sub-sector.

One indicator of future financing is how education financing has progressed over the life of ESDP IV. The forthcoming Education Public Expenditure Review (2015) provides some indications of recent financing trends in education.

Review of education financing

Public spending on education in Ethiopia has increased by 70 percent in real terms between 2003 and 2012. This increase is largely a result of the expansion of the system, with school enrolment (up to grade twelve) rising from 10 million to 19 million. Recurrent spending, largely composed of teacher salaries, doubled during this period. There was a massive increase in capital spending in 2009/10, which was sustained until 2011/12 as construction of the third generation of universities got under way. In every year from 1996-2004, education accounted for roughly 20% of total government spending. These figures are comparable with other African countries: figures for Rwanda, Kenya and Tanzania are all between 17-18% and the Sub-Saharan Africa (SSA) average is 19%.

This masks, however, a divergence in the composition of this spending, with education now accounting for 33% of total recurrent spending but just 13% of total capital spending, having both started the period at roughly 20%. This reflects to some extent the pattern in absolute spending, with recurrent spending increasing with expansion of the education system; the decline in education share of capital spending reflects even bigger increases in other sectors such as transport and other infrastructure.

The increase in education's share of public recurrent spending is reflected in an increase in education's share of total woreda spending (which is around 60% salary spending as a whole, rising to 79% in education). As a percentage of total regional spending (including woredas), education's share decreased slightly over the period. As a percentage of total federal expenditure, education expenditure has increased, largely as a result of expansion of the higher education sub-sector.

Despite special attention to education at all levels of government, the sector is likely to face financial constraints in the coming period due to the visibly rising households demand for education and increasing unit cost of service provision including teaching materials and supplies and need to keep teachers in the education system with good incentives in the face of widening economic opportunities elsewhere.

The trends in public expenditures by sub-sectors showed that primary education remained stable, secondary education increased. Higher education has been the biggest sub-sector by spending since 1999 when construction of the second generation of universities started. It now accounts for 42% of education spending, the same as primary and secondary combined (with 32% and 10% shares, respectively). The per student recurrent spending in higher education is 26 times that of primary education and 10 times that of secondary education.

TVET's share has decreased over the period from 11% to 6%. Very small amounts continue to be assigned to non-typical education, which includes special, adult and alternative education. However, it is likely that some of this spending appears as primary. As a share of recurrent spending on education, primary is by far the largest sub-sector, accounting for 45% of the budget, compared to 25% for higher, 12% for secondary and 5% for TVET.

Within recurrent expenditures, salary accounted for more than 90 percent in primary education, more than 80 percent in secondary education, 60 percent in TVET and only less than 40 percent in higher education. In fact for higher education, more than 50 percent of recurrent spending was not directly academically related as they covered

food and housing subsidies as well as other administrative costs. This dominance of the recurrent budget in primary is waning, however, as recurrent commitments in secondary and higher increase.

Criteria used for cost calculations

Targets for admission and internal efficiency

The cost of ESDP V depends firstly on its major policy objectives which are translated into specific targets for admission and internal efficiency. Within the government's overall vision to become a lower middle-income country by 2025, several key objectives for ESDP V have been defined: the achievement of universal primary education by the end of the ESDP V period; expansion of secondary education, with a view to achieving universal secondary education by 2025; and the expansion of TVET and undergraduate options to train middle- and higher-level skilled manpower for a middle income economy, are among the key objectives.

The enrolment patterns in upper primary, secondary, TVET and higher education depend to a large extent on the evolution of enrolment in the early grades. They also depend on policy choices made with regard to these higher levels, such as the transition rate between grades eight and nine and the distribution of students between TVET and preparatory education after grade ten. The description of the priority programmes has mentioned all specific targets. The most important ones are briefly recalled here. They are all to be achieved by 2019/20 except if otherwise indicated:

- The GER of pre-primary will reach 80%
- The Gross Intake Rate to grade one will reach 112%
- The GER of grades one to four will reach 115%
- The GER of grades five to eight will reach 95%
- The GER of grades nine to ten will reach 74%
- Dropout rates in grade one will reach 5%
- Dropout rates in all other grades will reach 2%
- The repetition rates in all grades of general education will reach 2%
- After grade ten, 20% of students will enter preparatory education, the remainder will be eligible for teacher education and TVET
- The share of illiterate adults that enrol in a two year course of functional adult literacy will reach 85%
- 90% of grade twelve students will enter university

Assumptions on norms and standards for use of resources

The cost of the further expansion and improvement of the education system under ESDP V depends strongly on the norms and standards related to the use and the cost of human and material resources. The most important ones are recalled here.

Figure 21: most important norms and standards for plan costing

Level	Norm or standard
Pre-primary education	
Students per section	50
% of qualified teachers by 2019/20	100%
% of enrolment non-government kindergarten	50%
Primary education	
% of enrolment in non-government schools	4%

Students per section	50
ABE students per facilitator	30
Sections in double shift	35%
% low cost classroom construction	70%
% of qualified teachers by 2019/20	100%
Secondary education	
% of enrolment in non-government schools	6%
Students per section	40
% students receiving hostel or boarding	4%
Adult and non-formal education	
% trained facilitators	80%
% adult learning centres upgraded to CLCs	50%
TVET	
Student distribution across levels 1/2, 3/4 and 5	18 : 3 : 1
% of enrolment in non-government institutions	20%
Trainer to student ratio (formal training)	25
Higher education	
Enrolment in non-government institutions	30%
Student to teacher ratio	1:19

Assumptions for cost

All costs are shown in Ethiopian birr. At the time of publication one United States' dollar is equivalent to 20 Ethiopian birr. All costs are indicated at 2015/16 prices. Unit costs calculated from available statistics have been updated to 2015/16 prices using recorded inflation rates. As a significant component in total cost, teacher salaries are based on latest data from the 2015 Education Public Expenditure Review. Regarding salary costs (teaching and non- teaching staff), the plan foresees that salaries will rise in line with inflation.

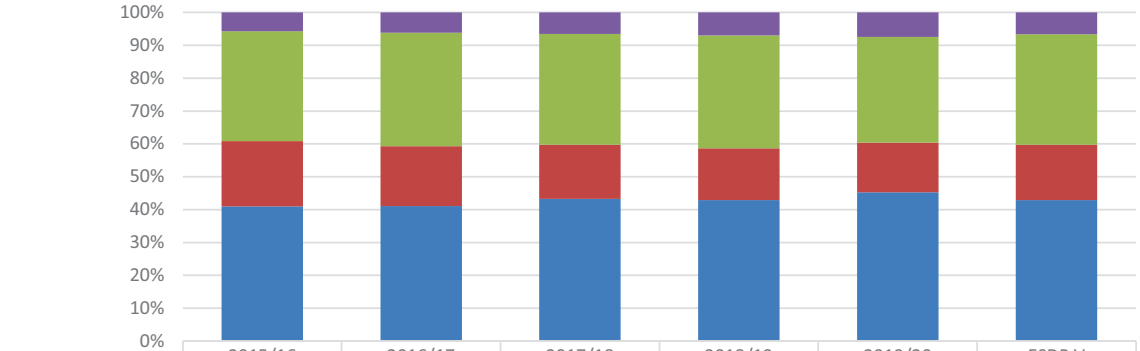
Total cost for ESDP V

The following table presents the total projected cost of ESDP V, then broken down by sub-sector. The total cost for the five-year plan is estimated at 454 billion birr (constant 2015/16 prices). The cost increases steadily from 2015/16 to 2019/20. The increasing trend is mainly due to increasing recurrent costs as the system expands – in particular expansion in higher education and secondary education.

Figure 22: total cost for ESDP V (million birr)

	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Total cost	73,635	81,350	91,831	98,781	108,225	453,822

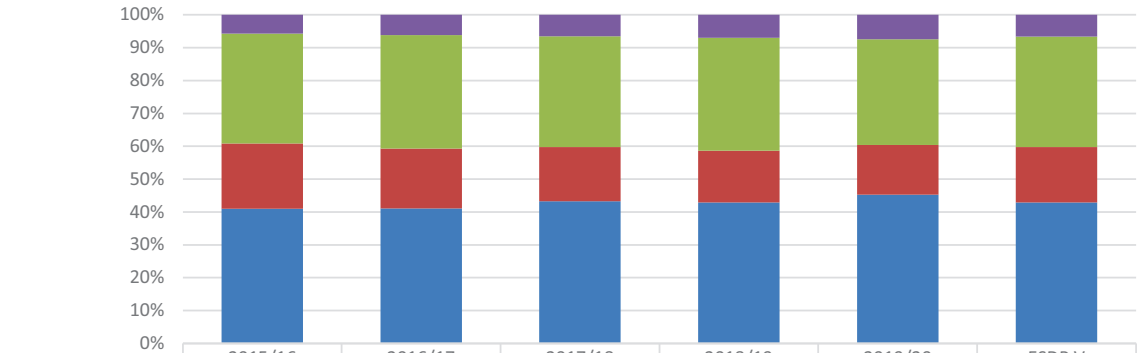
Figure 23: total cost for ESDP V by sub-sector, by year and for ESDP V period (millions birr)



	2015/16	2016/17	2017/18	2018/19	2019/20	ESDP V
Admin (% sector)	6%	6%	7%	7%	7%	7%
Higher (% sector)	33%	35%	34%	34%	32%	34%
TVET (% sector)	20%	18%	17%	16%	15%	17%
General (% sector)	41%	41%	43%	43%	45%	43%

The total costs by sub-sector also grow steadily from 2015/16 to 2019/20, representing continued capital investment and rising recurrent costs as enrolments rise at all levels. The administration budget will almost double across the plan period, reflecting far greater investment in auxiliary activities such as school inspection, teacher licensing and management/leadership improvements at all levels. It is in the general education sub-sector (combining pre-primary, primary, secondary, adult and CTEs) that the total budget requirement is expected to increase by the largest margin – from 30 billion birr to almost 50 billion birr. This represents a move towards students' completion of primary education, along with rapid expansion, towards universalisation, of pre-primary and general secondary education.

Figure 24: share by sub-sector in total spending by year and for the ESDP V period



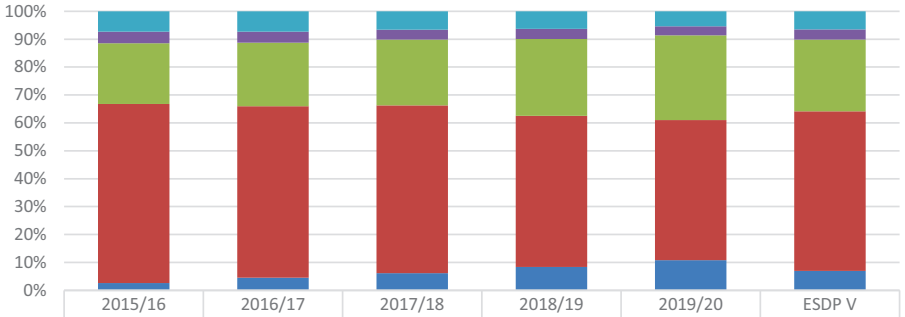
	2015/16	2016/17	2017/18	2018/19	2019/20	ESDP V
Admin (% sector)	6%	6%	7%	7%	7%	7%
Higher (% sector)	33%	35%	34%	34%	32%	34%
TVET (% sector)	20%	18%	17%	16%	15%	17%
General (% sector)	41%	41%	43%	43%	45%	43%

The variable changes in total budget requirements have small but meaningful effects on budget shares to each sub-sector. Through, general education takes the largest share of the budget and this share will increase through to 2019/20, representing a 43% of the total ESDP V budget. The budget shares to TVET and higher education will fall slightly over the period 2015/16 to

2019/20 – although this does not reflect shrinking budgets. In fact, the absolute budget allocations to TVET and higher education will rise each year – a falling share reflects only the rising demand from general education for resources to fund the relatively faster expansion in that sub-sector.

Although falling slightly, the share of the budget to higher education still stands at 34% for the ESDP V period. This is compared to 17% for TVET and 43% for general education. Developing a strategic policy response to this trend of very large shares to higher education – which has been observed through ESDP III, ESDP IV and is now expected in ESDP V – will be a major issue for the education sector.

Figure 25: share within general education by year and for the ESDP V period

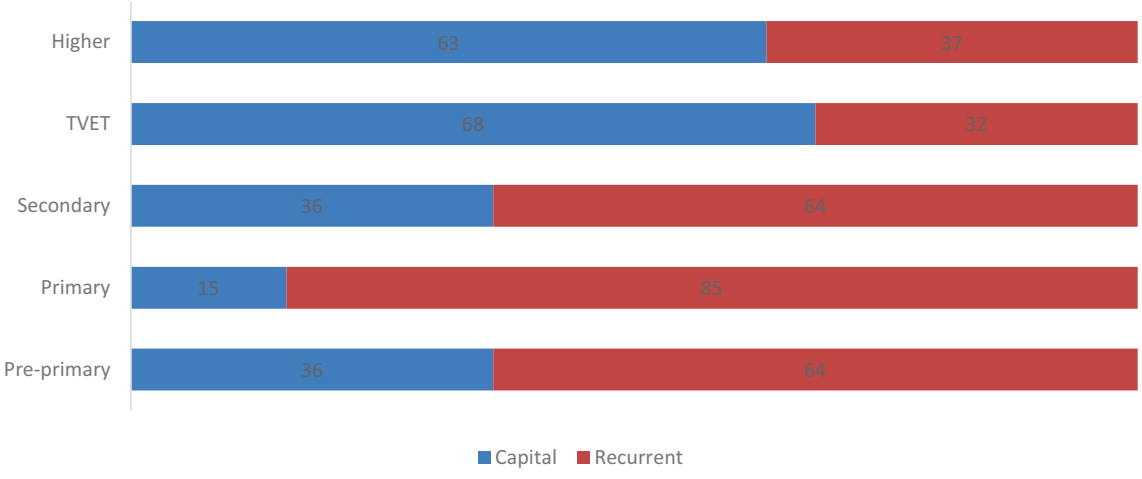


	2015/16	2016/17	2017/18	2018/19	2019/20	ESDP V
Adult (% sub-sector)	7%	7%	7%	6%	5%	6%
CTE (% sub-sector)	4%	4%	4%	4%	3%	4%
Secondary (% sub-sector)	22%	23%	24%	28%	30%	26%
Primary (% sub-sector)	64%	62%	60%	54%	50%	57%
Pre-primary (% sub-sector)	3%	4%	6%	8%	11%	7%

Within the general education sub-sector, the pre-primary and secondary levels demonstrate the largest increases in shares, from 3% and 22% to 11% and 30%, respectively. As these levels grow in importance, shares to other levels – although not absolute allocations – will decline. The budget for CTEs, which will supply tens of thousands of teachers, will increase each year but its share in general education will decline slightly, from 4% to 3%. Similarly, over the plan period, the share to primary education will fall from 64% to 57% and to adult education from 7% to 5%, in spite of rising resources available at these levels.

Budget requirements, when separated into capital and recurrent by level, show the dominance of capital investments for construction at the higher levels. Both TVET and higher education require around two-thirds of the budget allocation to fund system expansion: eleven new universities and TVET institutions in all woredas. In general education, the balance of spending favours recurrent, predominantly salary, spending. Also within general education, the massive expansion of pre-primary and secondary facilities – along with other capital investments for water and sanitation and the like – demands close to one third of these levels' budget, over the plan period.

Figure 26: share to capital and recurrent over plan period, by level (%)



Financing ESDP V

Government budget and financing gap

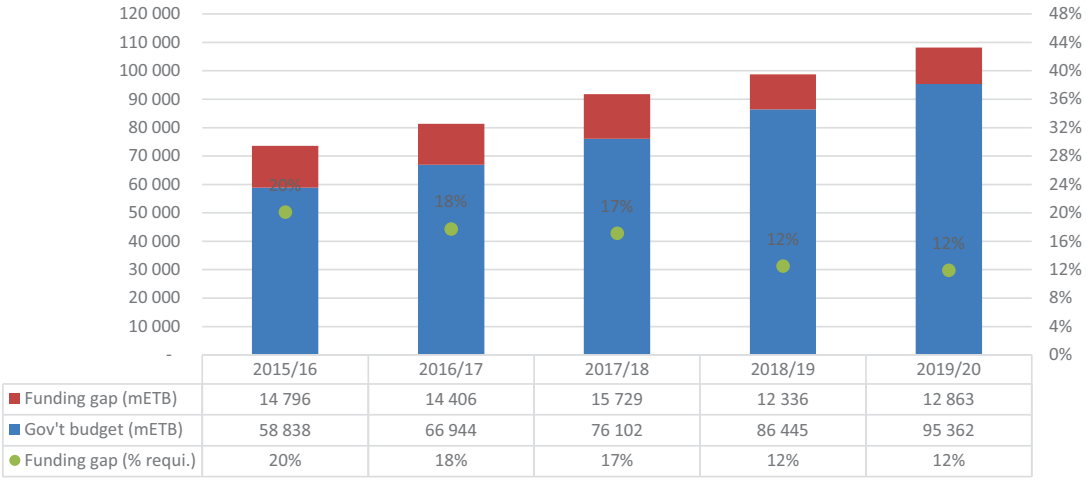
Projected costs for ESDP V are estimated to increase significantly, from an annual 74 billion birr in 2015/16 to 108 billion birr in 2019/20. The costs will be covered by domestic and external financing sources. Government, through Federal and Regional budgets is expected to be the main source of funding. Projecting government budgets forward (with an assumed 10% real Gross Domestic Product (GDP) growth rate for the five-year period, constant shares of government budget in GDP and 24-25% of public expenditure to the education sector), the government education budget is around 59 billion birr in 2015/16, climbing to nearly 95 billion birr by 2019/20. The difference with the projected costs leads to a financing gap, presented here.

Figure 27: estimated financing gap for each year of ESDP V (million birr)

	2015/16	2016/17	2017/18	2018/19	2019/20	Total
(a) Total cost	73,635	81,350	91,831	98,781	108,225	453,822
(b) Gov't budget	58,838	66,944	76,102	86,445	95,362	383,691
Gap (a-b)	14,796	14,406	15,729	12,336	12,863	70,131

The total financing gap of 70 billion birr breaks down into annual shortfalls that are similar in absolute terms. The annual gap rises from 14.8 billion birr to 15.7 billion birr in 2017/18 before falling to 12.9 billion birr in the final year of ESDP V.

Figure 28: financing gap for ESDP V (million birr; gap as % of total planned budget)



In percentage terms, an average gap of 15% exists for the total plan, beginning at 20% in the first year and falling progressively to 12% in the final two years of the plan. This trend is driven on one side by strong capital investments earlier in the plan period – particularly the construction of a new generation of universities – and on the other side by consistent, strong growth in the government budget each year.

Although the level of ambition in the plan is high, the plan can be financed based on carefully prepared cost and financing scenarios that consider the three main sources of finance for the plan: (a) government [which influences the size of a gap]; (b) donor partners and NGOs [which influences the capability to fill a gap]; (c) community contributions [which also influences the capability to fill a gap].

Government

Education is a government priority sector, has been a priority sector since the establishment of the Education and Training Policy in 1994 and will remain a priority sector as Ethiopia moves towards middle income status. The government budget to education is dictated by (i) GDP; (ii) government revenues as a share of GDP; and

(iii) share of government budget to the education sector.

- **GDP:** considering the first of these, Ethiopia has demonstrated strong and consistent real growth for the past ten years; GDP growth rates are assumed to continue at 10% throughout the plan period and this is in line with MoFED, World Bank and International Monetary Fund projections over the term.
- **Government revenues as a share of GDP**: Ethiopia's capacity to collect tax revenues is low, yet the very recent trend is upwards, with improved collection as a share of GDP. This follows extensive central and regional government efforts to improve the effectiveness of the tax administration and the breadth of the tax base. A careful scenario is proposed, which includes a slow increase of 0.5 percentage points and 1.0 percentage points, respectively in capital share in GDP and recurrent share in GDP, respectively. This careful scenario is informed by recent changes as well as an important programme in strengthening government tax collection capabilities, with many times more ambitious targets.
- **Share of government budget to education sector**: shares to education have been around 20-25% for the past ten years. Recent additional commitments to the education sector move this to 25% and strengthening political links between the federal and regional governments support mobilisation for high education shares at all levels. Education is a service demanded locally and both federal and regional governments have shown a response to this. Commitments to providing 25% to the education sector have been made for the first years of the plan and the scenario modelled estimates between 24-25% for the five year period, with variable shares in recurrent and capital at the federal and regional levels, based on historic trends. In addition to the core education budget, the federal government has operated a 'Millennium Development Goals Fund' through to 2015, which will continue as the Sustainable Development Goals' period begins. This fund has provided additional financing for education – for example the construction of hundreds of secondary schools – and is expected to remain an additional source to the general education sub-sector as development targets are approached.

Donor partners and NGOs

Donor contributions, wherever aligned with ESDP V objectives and coordinated with government activities, will reduce the financing gap. The government has been successful in leveraging substantial resources to education. Core donor financing (based on donor contributions to major projects and coordinated through the ETWG) to education is high and consistent, at around $400 million per year (roughly 8 billion birr in 2015/16 constant prices) and with no discernible trend for the past five years. This is equivalent to 50%-65% of the annual funding gaps presented in this plan. Major projects are ongoing and while there is some uncertainty about the emergence of a follow-on project of the same form, a low-level expectation is that core donor support will remain at current levels throughout the period of ESDP V.

Legislation related to the country's federal structure permits NGOs to work in one region without the need to obtain permissions from central government. This is linked closely to the autonomy and freedom exercised by regional states. It means, however, that there are limited data available centrally regarding the scale of activities conducted by the > 1,000 NGOs working in the education sector across the country. Government efforts to engage with civil society and national and international NGOs are emerging and are intended to improve coordination of this group and to encourage alignment with ESDP V plan objectives in the coming years. With such coordination, the alignment of this great share of financing with plan priorities is expected to improve, thereby taking a share of the projected funding gap.

Community contributions

It would be incorrect to expect major community contributions to fund education services given national and international commitments to a free education for all. In Ethiopia a tradition of significant community support to education exists – in terms of providing in-kind support to classroom construction; in terms of school management and decision making and the like. The Education Public Expenditure Review revealed that although thousands of additional classrooms and schools were constructed during the ESDP IV period, these were not financed by government capital expenditure. Instead, the vast majority of expansion to local areas was led by communities with support from woreda and REB officers. For

Under ESDP V, community involvement will go beyond financial, material and labour contributions; communities will be expected to exercise leadership, participate in school management in such a manner that it reflects their ownership of the school.

ESDP V, all capital and recurrent costs have been accounted for in the projections that inform the funding gap; community support of a form similar to ESDP IV is expected to continue into ESDP V and some of these expected costs will be reduced by community contributions of labour, materials and other in-kind support.

The 2015 Education Public Education Expenditure Review also suggests, based on household survey data, that at an aggregate level families spent 0.7% of their total expenditures on education. Education expenditures comprise of 1.6 percent for households from the formal wage earning sector, 0.7 percent for the informal sector and 0.2 percent from the agriculture sector. These contributions comprise almost 2 billion birr annually – between 13% and 16% of the funding gap presented in this plan (before in-kind support to construction and similar is fully considered).

Under ESDP V, community involvement will go beyond financial, material and labour contributions; communities will be expected to exercise leadership, participate in school management in such a manner that it reflects their ownership of the school. In this context, the communities will continue to contribute to financing education, in particular through support to low-cost classroom construction through provision of local materials and labour. The community may also, based on its ability and development level, help out with non-salary recurrent expenditure. Students and parents also participate in the financing of education through fees in TVET and tertiary education. An increase in these contributions can contribute to filling the financing gap. For example, in higher education a cost recovery mechanism is in place, the graduate tax but the functioning of this mechanism to cover the high per-student recurrent costs for an undergraduate degree could be improved.