

Strengthening Education Management Information Systems (EMIS) and Data for Increased Resilience to Crisis

COUNTRY CASE STUDY: ETHIOPIA

Background document

The ‘Strengthening Education Management and Information Systems (EMIS) and Data for Increased Resilience to Crises’ initiative responds to the need for accurate and relevant education data and evidence in crisis contexts. UNESCO, in partnership with NORCAP and supported by Education Cannot Wait and SIDA, has conducted country case studies in Chad, Ethiopia, Uganda, Palestine, South Sudan and Syria to analyse recurring data challenges in crisis situations in the framework of the initiative.

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Table of Contents

Acronyms	3
Background	5
Methodology	6
I. Context	7
A. Country context	7
B. Education context	8
<i>SECTOR PLANNING</i>	9
<i>HUMANITARIAN RESPONSE</i>	14
<i>REFUGEE POLICY</i>	17
<i>REFUGEE RESPONSE</i>	19
<i>OPPORTUNITIES AND RISKS</i>	20
II. Data map	22
A. Education Monitoring Information System (EMIS)	22
B. Refugee data	26
C. Humanitarian data	29
III. Conclusion and summary recommendations	31
Bibliography	35

Acronyms

ABE	Alternative Basic Education
ANFE	Adult and Non-Formal Education
ARRA	Agency for Refugee and Returnee Affairs
BSRP	Building Self-Reliance of Refugee and Vulnerable Host Communities Project
CRRF	Comprehensive Refugee Response Framework
CSA	Central Statistical Agency
DFID	Department for International Development
DRT	Education Data Solutions Roundtable
DTM	Displacement Tracking Matrix
ECE	Early Childhood Education
ECW	Education Cannot Wait
EiE	Education in Emergencies
EMIS	Education Management Information System
ESAA	Education Statistics Annual Abstract
ESDP	Education Sector Development Programme
GEQIP	General Education Quality Improvement Programme
GER	Gross Enrolment Rate
GIS	Geographic Information System
GIZ	German Agency for International Cooperation
GPE	Global Partnership for Education
GTP	Growth and Transformation Plan
HRP	Humanitarian Response Plan
ID	Identifier
IDP	Internally Displaced Person
IFC	International Finance Corporation
IGAD	Inter-Governmental Authority on Development
IIEP	International Institute for Educational Planning
ILO	International Labour Organization
IMS	Information Management Specialist
INEE	Inter-agency Network for Education in Emergencies

IOM	International Organization for Migration
IT	Information Technology
KPI	Key Performance Indicator
L	Level
MoE	Ministry of Education
MYRP	Multi-Year Resilience Programme
M&E	Monitoring and Evaluation
NCRRS	National Comprehensive Refugee Response Strategy
NER	Net Enrolment Rate
NGO	Non-Governmental Organization
NLA	National Learning Assessment
ODI	Overseas Development Institute
ODK	Open Data Kit
OECD	Organization for Economic Co-operation and Development
REB	Regional Education Bureau
RRP	Refugee Response Plan
SDG	Sustainable Development Goal
SMIS	School Management Information System
SWG	Sector Working Group
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UNDAF	United Nations Development Assistance Framework
WASH	Water, Sanitation and Hygiene
WHS	World Humanitarian Summit

Background

The World Humanitarian Summit (WHS) and its Grand Bargain commitments identified scarcity of reliable data as a principal impediment to providing quality education for crisis-affected children and young people. The present project aims to reduce this gap through development of global guidance on EMIS and data for resilience and system strengthening at country level, based on situation analysis from selected target countries of Education Cannot Wait (ECW).

This case study of Ethiopia maps the data-for-resilience landscape through consideration of its components – production, processing and use of data, as well as their facilitative environment. The aim is to identify strengths and challenges and begin to propose recommendations, considering risks and opportunities, towards a harmonized, relevant and quality architecture for effective preparedness and response. Firstly, the country and education contexts are presented to illustrate data availability and requirements; secondly, existing data approaches are reviewed against policies and plans, as well as best practices of research, monitoring and reporting, including in emergencies (e.g. OECD, 1999).

The report is in no way intended as advocacy, or to prescribe solutions. Rather, it provides an overview that is meant to help take stock of and identify gaps in interventions, with stakeholders directly engaged to fill in the content of structures already emerging and recommended as it best makes sense to them in light of their mandates and collective endeavours. This write-up is thus primarily proposed for the Ministry of Education (MoE), its partners and funders, with an emphasis on national ownership under the WHS' localization agenda.¹

Within Ethiopia's present-day context, the study focuses on three traditionally distinct pillars and their increasing interactions: the regular education sector, and humanitarian and refugee responses.² In recent years, a number of reports and discussions on EMIS, information management in education in emergencies (EiE) and data on refugees have taken place, especially regarding lower education levels; however, the present research looks at how these can be brought together from a lifelong learning perspective. This is a diverse, fragmented and rapidly evolving field. Although approaches were kept flexible to allow for consideration of themes as they presented themselves, review of technical and vocational education and training (TVET), along with higher education, will need to be elaborated once restructuring of these subsectors is further underway. One area of growing attention, not in the scope of this report, is cross-border cooperation with respect to resilience and peacebuilding. Perhaps, within its multicountry scope, the umbrella project under which this study falls is well placed to contribute to this domain.

¹ 'Localization' refers to the commitment made by signatories of the Grand Bargain, including some of the largest donors and humanitarian organizations, to make 'principled humanitarian action as local as possible and as international as necessary'. It includes engaging with local and national responders 'in a spirit of partnership' and aiming 'to reinforce rather than replace local and national capacities', particularly in recognition of the fact that '...governments, communities, Red Cross and Red Crescent National Societies and local civil society are often the first to respond to crises, remaining in the communities they serve before, after and during emergencies.' For more information, please see <https://interagencystandingcommittee.org/more-support-and-funding-tools-for-local-and-national-responders>.

² Henceforth, 'humanitarian', 'emergency' and 'crisis' refer to natural and/or man-made disasters or hazards affecting Ethiopian communities; when refugees are referred to, this is specified.

Methodology

The report is based on a desk review of documents, such as policy frameworks, situation analyses, needs assessments, progress reviews and evaluations, and EMIS case studies; iterative semi-structured interviews with different directorates of the MoE and partners at central and decentralized levels (i.e. the Education Cluster, the Agency for Refugee and Returnee Affairs (ARRA), UN agencies, donors and non-governmental organizations (NGOs)); and examination of EMIS and data tools to the extent these could be obtained (such as regular and refugee EMIS school census questionnaires and completion guides, EiE assessment and Cluster monitoring forms, Displacement Tracking Matrix and Living Standards Measurement Study questionnaires, and national and regional Education Statistics Annual Abstracts (ESAA)). The opportunity to attend the kick-off workshop for review of the sector plan as well as the Education Data Solutions Roundtable (DRT) with the Global Partnership for Education (GPE) provided real-time insight into information management for planning.

Stakeholders consulted are main actors dealing with education data, planning and response, identified through MoE and partner recommendations. Players and initiatives herein are not meant to be exhaustive – for example, civil society will need to be engaged; rather, they are to illustrate the state of the field. Information was analysed using grounded theory methods, encouraging conclusions as they emerge from research versus following pre-existing interpretations. Practical constraints did not allow for a representative sample of decentralized locations; those visited – in Gambella Regional State – were selected due to the diversity of their crises, including refugee conditions. While unpacking decentralized practices, no claim is made that modalities are the same in all regions. Interviews were conducted individually with stakeholders to facilitate open and in-depth perspectives; towards coherence, partners were also brought together as best as possible during review of the draft findings and recommendations (the preliminary report was shared for comments with all consulted). Due to logistical considerations, decentralized stakeholders were not represented in the debrief; to enhance alignment and coherence of planning, their participation – together with those at central level – in strengthening EMIS and data for resilience will need to be ensured. Additionally, while this study did not have a fully multisectoral scope, future endeavours should consider engagement for example with the Ministries of Women and Children’s Affairs, Labour and Social Affairs, Innovation and Technology, and Peace, as well as the Disaster Preparedness and Prevention Commission for possible synergies.

Stakeholders who generously contributed to this case study are sincerely thanked.

I. Context

A. General country context

With a population of 110.1 million, Ethiopia is the second most populous country in Africa (UNFPA, 2019). Twenty-one per cent reside in cities, making it one of the least urbanized countries globally; however, it is undergoing rapid urbanization. Half of the population is under 14 years old. Harnessing this demographic dividend potential requires attention to the increasingly complex needs of children and young people.

Ethiopia is among the countries that had made greatest progress towards achievement of the Millennium Development Goals (MoFED & UNDP, 2012); nevertheless, significant challenges remain. While rating of the country has risen between 2000 and 2017, it still ranks 173 out of 189 on the Human Development Index (2019). In 2015/16, the national economy grew by 8 per cent, which was more than thrice the average for Sub-Saharan Africa; however, in recent years, growth has slowed slightly. While income inequality has been on the rise, the share of the population below the national poverty line halved between 1995/96 and 2015/16. Yet a quarter of residents are classified as absolute poor; 88 per cent of children suffer from multidimensional poverty (UNICEF, 2019). With both overall and working-age populations expected to almost double in the coming 30 years, pressure on the economy to generate employment, and on education to endow the workforce with adequate qualifications and skills, is high. According to the German Agency for International Cooperation (GIZ), an additional 20 million jobs are required to keep up with demand (GIZ, 2019).

Ethiopia is vulnerable to crises. The INFORM Report (2019) rated the country 6.8 out of 10 – with risk increasing over the past three years – considering natural and man-made hazards and exposure, vulnerability and coping capacity. While localized, small-scale displacements had always existed from clashes between communities over pasture and water rights in pastoralist and agro-pastoralist areas along regional boundaries, their scale and frequency have been unprecedented in recent years.

Overall in 2019, an estimated 8.86 million people were in need of humanitarian assistance (OCHA, 2019a). Children account for 59 per cent of internally displaced persons (IDPs), out of a total of 3.19 million, with 82 per cent due to conflict, followed by climate-related hazards. In the same year, Ethiopia hosted 735,204 refugees (Operational portal, UNHCR, 31 December 2019); they are mostly accommodated in 26 refugee camps (comprehensive Level (L) 3 registration, completed in mid-2019, revised the number of refugees, with impact on the validity of information – also in this report – relying on pre-registration figures). As per UNICEF's situation analysis (2019), 63 per cent of documented refugees are under 18 years old, with nearly 55,000 children unaccompanied or separated from their families. The greatest shares of refugees are from South Sudan, Somalia and Eritrea, including recent arrivals and those in protracted situations. Ethnically, culturally and linguistically, the Somali region is the most homogeneous; conversely, in Gambella, the refugee population is almost as large as the Ethiopian population and refugees outnumber Ethiopians in several *woredas*. A large majority of new arrivals are of Nuer ethnicity, while Ethiopians are mostly a mix of Nuer and Anuak; the change in balance has brought tension between the two ethnic groups. The refugee population in Addis Ababa is the most diverse, representing 26 nationalities as of 2017 (World Bank, 2019b).

Ethiopia embodies the complexity of overlapping, interrelated crises and risks. For example, extreme

weather events can contribute to competition over scarce resources, fuelling internal conflict, such as between Oromia and Somali in 2017. In the same year, greater political representation and control over land and resources were drivers of protests in Oromia, extending in 2018 to other parts of the country. Communicable diseases – such as acute watery diarrhoea, measles and scabies, which result from water scarcity and poor hygiene practices – especially threaten malnourished children. Overcrowding in communities hosting IDPs and refugees can generate disease outbreaks. In the face of such composite vulnerabilities, compounded by rapid population growth and urbanization, there has been heightened global recognition of the importance of a more anticipatory and preventive approach to crises, linked to strengthening resilience and recovery, with risk management proceeding hand-in-hand with response to need (OCHA, 2014).

Within Ethiopia's federal structure, decentralization proceeded in two stages: The first, starting in 1991, involved the central government devolving state powers to nine geographically-defined ethno-linguistic regions and two chartered city administrations; the second, from 2002, extended decentralization to *woredas* and sub-cities. Accordingly, the federal government initiates and enforces policy, and promulgates laws to be implemented by regions. Regions prepare and implement development plans and approve budgets, in line with the national policy framework. *Woredas* are responsible for planning and service delivery, aligned with regional plans, within the resources available to them. In addition to block grants – principally using a formula that considers development level and capacity along with sectoral characteristics – subnational levels may raise their own resources, though largely these have been limited (World Bank, 2019a). If necessary, regions can establish zones as intermediaries between them and *woredas* to facilitate administrative and development activities, with technical assistance from regions (zones are not autonomous). Local communities also participate in planning, management, monitoring and evaluation (M&E) and/or resourcing of service delivery (for example, at school level).

B. Education context

Ethiopia's education context is one of progress, matched with considerable challenges. Enrolment has risen more or less consistently at all levels, although some remain below target. While attendance has increased, with a narrowing gender gap, progression, quality and equity remain challenges. This is especially so for crisis-affected communities, including refugees, as well as for the emerging regions,³ which host the largest numbers of IDPs and refugees.

Nationally, gross enrolment in early childhood education (ECE) is at 41 per cent (vs net enrolment, which is only slightly over half of this figure). While 98 per cent of all children access ECE in Addis Ababa, 7 per cent do so in Somali (MoE, 2019). Recent rapid expansion with limited financial resources has come at the expense of quality.

At primary level, near-universal enrolment has been achieved, although repetition and drop-out rates persist (at 5 per cent and 11 per cent respectively). Out-of-school children account for 14 per cent of all primary school-age children. This ranges from 1 per cent in Addis Ababa to 60 per cent in Afar.

³ The four 'emerging regions' include Afar and Somali in the eastern part of the country and Benishangul-Gumuz and Gambella in the west.

According to the Household Consumption and Expenditure Survey (2015/2016), 43 per cent of school-age children with disabilities had never attended school.

Trending upwards for almost a decade, completion rates for girls and boys are 84 per cent and 93 per cent respectively in Grade 5; these drop to 60 per cent and 64 per cent in Grade 8. Survival to Grade 5 is 80 per cent in the capital city and 29 per cent in Afar. Average scores on the National Learning Assessment (NLA) in Grades 4 and 8 are 45 per cent and 42 per cent respectively, with significant socio-economic, urban-rural and regional disparities. Net enrolment is 24 per cent in Grades 9 and 10, declining to a fourth of this at upper-secondary level.

Based on data from the UNESCO Institute for Statistics (UIS) (2017), the national literacy rate is 52 per cent. There is near-gender parity in technical and vocational education and training (TVET), 46 per cent are female in adult and non-formal education (ANFE), and 36 per cent in higher education (MoE, 2018). Mismatch between skills training and labour market demand produces low employment outcomes. On the whole, universities are acknowledged as centres of social innovation; significant expansion of higher education over the last thirty years, accompanied by an increasingly diverse student population, amidst existing ethnic tensions, adds to this (Adamu, 2014).

Nationally, over 20 million children are in school. However, in Afar, Benishangul-Gumuz, Gambella, Oromia, Somali, and the Southern Nations, Nationalities and People's Regional State, 385 schools are closed due to conflict, drought and flood (OCHA, 2019b). According to the *Humanitarian Needs Overview* (2019), 2.7 million school-age children in IDP and host communities require EiE assistance.

In Ethiopia, refugees attend a mix of refugee and host community schools (World Bank, 2019b). Children living in camps almost all attend refugee primary schools (for administration of these, see 'Refugee response' below); out of camp there are no refugee schools and refugee children go to primary schools in host communities. At secondary level, where there are fewer refugee students and schools, the picture is more mixed: In or next to camps there are some refugee secondary schools, which both refugee and host community children attend; other refugees in and out of camp go to host community secondary schools. Refugee schools follow the national standards set by the MoE in terms of minimum facilities, qualified teachers, pupil-teacher ratio and language of instruction. The curriculum is that of the national education system.

As per the 2019 ESAA, refugee gross enrolment in ECE is 61 per cent, at primary level 67 per cent (vs. net enrolment of 50 per cent), with 55 per cent girls and 79 per cent boys; just under a quarter of refugee children complete primary education (for coverage of this, see 'Refugee data' below). Gross enrolment at secondary level is 13 per cent. In the 2019 academic year, 1,346 refugees were enrolled in tertiary education.

SECTOR PLANNING

The second Growth and Transformation Plan (GTP II) (2015/16-2019/20) is the overarching roadmap for Ethiopia's development; its 10 national priorities are aligned with the 17 Sustainable Development Goals (SDGs). With the objective to reach lower-middle income status by 2025, human development – with attention to gender and youth – is recognized as the foundation upon which industrial transformation, with a green economy, is to be built. Education priorities are to improve access, equity and quality across the general, TVET, ANFE, as well as higher education subsectors. To facilitate this

transformation, considering global best practice, the Education Development Roadmap – presently under finalization – foresees significant changes. The Ministry of Science and Higher Education, responsible for overseeing TVET and higher education, was established in October 2018; its organization and Strategic Plan are currently under formulation.

In alignment with the GTP II, the Education Sector Development Programme (ESDP) V (2015/16-2019/20) prioritizes access, equity and efficiency; quality; and management across subsectors. While emphasis prior to this had been on access and gender parity, in line with global commitments, the present Programme places quality centre-stage. Towards effective response, the access and equity priority area plan for deeper examination of reasons for persistently high repetition and dropout rates. Special attention is given to the emerging regions. The General Education Quality Improvement Programme (GEQIP) – with funding from GPE and a multi-donor trust fund – supports realization of ESDP V objectives.

The ESDP V's management priority area aims to improve structures, processes and capacities to help administration units and their partners better support schools to raise learning outcomes through (1) relevant structures with clear roles and responsibilities; (2) regular gathering, processing and sharing of information for decision-making; (3) solid coordination and communication within and across levels; and (4) adequate supply of staff with the right skills. Component 2 is based on the recognition that, while a large amount of information has become available, consistency, reliability and systematic analysis, together with dissemination and use for evidence-based decision-making and allocation of resources, need to be strengthened at all levels. Interventions towards this are:

- Compilation of EMIS data into a national statistical abstract in order to guide policy-making and targeting of resources to overcome performance gaps. School report cards, to be produced at *woreda* level, will use EMIS information and inspection results to summarize performance vis-à-vis national standards, in time for annual planning, and to support *woreda* officials in targeted response.
- Piloting and rollout of the School Management Information System (SMIS), which, when fully established, can replace the annual school census by linking to EMIS. The SMIS will enhance school report cards and support school leaders and communities to analyse performance trends and improve local planning and allocation of resources. Data collected regularly at school level but not centrally stored, for example on attendance of students and teachers, are recognized as a resource.
- Integration of the Geographic Information System (GIS) into EMIS, which will increase the efficiency of supervision and of the school cluster system,⁴ and can be used to analyse performance across schools. It will also support school mapping, together with resource allocation, for crisis preparedness and response.

⁴ The 'school cluster system', or 'school clusters', refer to 'the grouping of schools for educational and/or administrative purposes. In a school cluster, several schools come together to share their resources to improve the conditions for the delivery of education.' See Giordano, E. 2008. *School Clusters and Teacher Resource Centres*. Paris, IIEP-UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000159776/PDF/159776eng.pdf.multi>

- Increase in coverage and integration of the Teacher Management Information System into EMIS, which will strengthen monitoring of teacher attributes to inform supply and demand, placement and allocation of incentives, as well as continuous professional development.
- Rollout of the Integrated Financial Management Information System to improve sharing of budget information across the Government and within the MoE and increase efficiency of resource utilization at federal and regional levels.

Efforts are supported by the Education Data Solutions Roundtable (DRT) – a multi-stakeholder initiative convened by GPE in early 2018 – predicated upon recognition that quality data are essential for effective, resilient and accountable education systems. The DRT leverages government, civil society, development and private partner expertise to improve availability and use of accurate and timely data for education planning and management at country and global levels. Based on visits to Ethiopia and The Gambia, the following are recommended, with the understanding that interventions are to be bolstered by an advocacy strategy to build political will for increased investment in EMIS (GPE, 2019a):

- Strengthen institutional frameworks with an education data policy: This will clarify responsibilities and relationships within the MoE, as well as with other ministries that play a role in education.
- Boost human resources and develop data competencies: This could mean creating a pool of information technology (IT) specialists and data scientists to support EMIS in the short term, while preparing a sustainable human resource plan for the long term.
- Put data integration into place sequentially and according to priorities: Initially, this may involve integrating key EMIS data with a limited number of critical datasets. Initiatives should include feedback loops as well as technical support (both in terms of financial and human resources).
- Develop data technology and systems: Draw up minimum functionalities for EMIS and define a technology upgrade path. The latter should encourage more effective deployment of existing technologies and define a pathway to leverage new ones.
- Promote a demand-driven data culture: Show the value of actionable insights from data by using analysis and visualization tools for planning and reinforce community-led accountability by supporting school management through feedback loops.

GPE’s visit to Ethiopia in November 2019 reiterated emphasis on data integration, linking EMIS, learning assessment and inspection through unique school IDs – connected also to school grants – to determine efficiency of investment. The MoE is looking into which schools perform well on examinations and why in order to extract lessons learned. Ethiopia has expressed interest in individual student and teacher IDs, aligned with ongoing efforts, such as vital events registration and licensing.

In the meantime, the GPE annual report notes achievements in schools developing and using improvement plans, an increased number of school inspections, and better data and data utilization on learning outcomes (mostly through NLA and the Early Grade Reading and Mathematics Assessments) (Universalia, 2018). In addition, significant progress is observed in compiling and analysing data generated by different quality assurance systems, including EMIS. However, GPE’s early

2019 visit pointed to data excessiveness, with a great deal of information (not always most useful), collected through diverse sources, and fragmented data management.

Prioritization of information management is echoed in the UN Development Assistance Framework (UNDAF) (2016-2020). Table 1 presents progress, as per the mid-term review, on the dedicated output.

Table 1: Progress of knowledge management for planning⁵

Output 10.5: Capacity of the education system enhanced for the creation, dissemination and use of knowledge for policy development, advocacy, governance, program and school management for enhanced quality education and learning.						
10.5.1: EMIS interfaced with GIS/RALS and interactive mapping and SMIS in place	GIS based EMIS and functional SMIS in place at national and regional level	GIS-based and functional SMIS available at national and regional level	Amhara, Oromia and Tigray regions use EMIS interface with GIS/RALS interactive mapping	X-y coordinates collected for few pilot schools	EMIS interface being used	
10.5.2: Number of regions with latest data and use the MIS to make program decisions	No GIS	11	6	5	11	
10.5.3: Number of research/ case studies/evaluations/ assessments carried out for knowledge generation, dissemination and utilization	6	10	2 conducted (then 8 studies cumulative)	1 (then cumulative becomes 9)	3 (cumulative 9)	

Source: UNDP & Primson Management Services. 2018. *Mid-term review of United Nations Development Assistance Framework Ethiopia*, p.90 (reproduced with permission)

In the ESDP V, emergency falls under cross-cutting issues: Previously, only the Special Education Needs, HIV/AIDS and Gender units existed across subsectors; emergency and other areas, such as school health and nutrition, substance abuse, and water, sanitation and hygiene (WASH), had no specific structure or funds, which limited effectiveness. Under the present Programme they are to be mainstreamed across all priority areas and subsectors, with dedicated offices – assigned responsibility and budget – at federal and regional levels, linked to focal points in zones, *woredas*, TVET and higher education institutions. The purpose of these entities is to coordinate and monitor progress, share information and support technical staff to understand the full range of interventions required. Planned initiatives, with a focus on general education and TVET, are: capacity building of school staff in crisis response in emergency-prone areas, development of a standard package of emergency teaching and learning materials, and pre-positioning of supplies. Strengthening of multisectoral links towards better coordination is also envisaged.

The ESDP V recognizes that EMIS in its present state cannot effectively support planning and response in emergencies (no elaboration is provided). Activities foreseen for EMIS in emergencies are (1) preparation of yearly reports on implementation of cross-cutting issues and (2) improved data collection related to EiE from *woreda* to federal levels. Main weaknesses of emergency engagement observed are inadequate information collection and sharing from school to higher levels to inform resource requests and response, and communities and the system receiving little support in crisis preparedness and response.

The ESDP V mid-term review examines progress on targets; according to information available, this has been mixed (see Tables 2 and 3 below).

⁵ Updated GIS coordinates are now available for the majority of schools; they are not yet integrated with EMIS.

Table 2: Progress of EMIS⁶

Number	Key Performance Indicator	Baseline (2014-2015)	Target (2017-2018)
1	Proportion of KPIs for which yearly information is presented and analysed in the yearly statistical abstract (%)	X% Performance	100 DNA
2	Proportion of federal, regional TVET, university, officed that receive the summary of the yearly statistical abstract by December	X%	100
3	Proportion of a sample of federal, regional TVET, university and woreda planners and managers who express satisfaction with the quality of information at their disposal (EMIS, TMIS, IFMIS ect)	NA Performance	80% DNA
4	Proportion of woredas who prepared and distributed school report cards as an input to planning and management	0 Performance	30 DNA
5	Number of REB that gather and process their school census data and submit to the federal level by July	7 Performance	11 8
6	Proportion of teachers that are covered by the TMIS (%)	NA Performance	65 DNA
7	Number of regional offices using IFMIS for recording transactions	X% Performance	All DNA
8	Number of woreda offices with relevant infrastructure using IFMIS for recording transaction	X% Performance	All 592

Source: Jimma University, 2019

Table 3: Progress of emergency mainstreaming⁷

Number	Key Performance Indicator	Baseline (2014-2015)	Target (2017-2018)
1	Number of coordination offices set up at federal level and in all regions	X% Performance	100 0
2	Proportion of annual operational plans (federal and regional level) that include relevant cross-cutting issues (%)	X% Performance	100 100

Source: Jimma University, 2019

⁶ Data on baseline and progress are not always available.

⁷ Data on baseline are not available.

Key performance indicators (KPIs) in the review do not fully correspond to those in the ESDP V; additionally, information is not available on all KPIs under review (in 2017, there was no Joint Sector Review and in 2018, focus was shared with the Education Development Roadmap, compounding monitoring gaps). Nevertheless, findings indicate persistent challenges with EMIS, for instance delays in submitting school census data, especially in the emerging regions. One reason cited is limited experience and expertise of EMIS staff, not least due to turnover. While the mid-term review acknowledges training provided to planners and managers at all levels, especially in the emerging regions, strengthening of capacity, most of all of lower-level EMIS units (*woredas* and schools), is advised. The recommendation to establish a policy framework guiding EMIS and education data processes has already been endorsed; this framework is to include rights and responsibilities of data producers and users (also encouraging partners to work through more consistent channels), define accountabilities and feature a costed implementation strategy.

HUMANITARIAN RESPONSE

The education sector does not have a consolidated strategy to cope with emergencies; response is highly dependent on humanitarian agencies. There have been discussions between the MoE and the Sector Working Group (SWG) around crisis-sensitive planning. According to information available, a plan was prepared by the Ministry; however, implementation to date has not been clear. In the meantime, the *Global Education Cluster Strategic Plan 2017-2019 Revision* states that, while the Cluster's role is focused on acute humanitarian needs, it should also aim to increase coordination between humanitarian and development actors towards strengthening of the humanitarian-development nexus. Actions include integration of the Cluster into existing strategies and coordination mechanisms, and fostering of ownership by the national government.

Moving towards this – in alignment with the ESDP V and OCHA's comprehensive humanitarian response – the *Ethiopia Education Cluster EiE Response Strategy*, which dates from 2016/17 but has been called a 'living document', defines objectives for EiE, focuses on needs-based targeting, and builds harmonized, holistic and quality response. It identifies roles and responsibilities of partners, applies coordinated monitoring and evaluation, and serves for use in advocacy and mobilization of resources. Standards of emergency education – derived from those of the MoE, aligned with those of the Inter-agency Network for Education in Emergencies (INEE) – are to guide common assessment, monitoring and reporting. Questionnaires and tools are to be standardized with disaggregated indicators (including for children with disabilities and psychosocial needs, pastoralist children and those who work, adolescent mothers and heads of households).

The Cluster is to receive updated information on needs, partner activities, their targets and results through the Education Cluster Monitoring Tool. The Strategy specifies a timeline for partners to submit monthly reports (except for the onset of emergencies, which should be reported in real-time), and for the Cluster to compile and analyse data, produce information products and share them with stakeholders. Partners are to assign focal points to receive data from their field teams, check it for quality and submit it to the Cluster. All school-based data collection is to use EMIS school IDs to allow for integration with EMIS data; cooperation with EMIS more broadly is envisaged (no further specifics are provided).

In addition, the Cluster is to keep a secondary database, regularly updated and including assessment information, to inform preparedness and response on a continuous basis and provide a baseline for future endeavours. Challenges of the Cluster, as identified in the Strategy, have to do with financial support, sub-cluster functions, participation of partners, capacity of focal persons, information management and engagement of MoE EiE officers.

In concrete terms, OCHA's 2019 Humanitarian Response Plan (HRP) focuses on the needs of IDPs and IDP-returnees, while simultaneously responding to the needs of communities affected by food and livelihood insecurity from previous years of protracted drought, as well as other associated multisectoral needs. Of additional concern are IDP-hosting communities, many of which had already been vulnerable before displacement.⁸ EiE response entails provision of learning materials, psychosocial support and life skills training for teachers and children, in conjunction with the Protection Cluster, along with peace education; establishment of temporary learning spaces; and provision of accelerated school readiness for pre-primary and compensatory learning programmes for primary school-age children. Temporary education services act as a platform for delivery of essential health, nutrition and social welfare provisions, and collaboration with the WASH sector ensures supply of safe water to schools in intersectoral priority areas.

The HRP places emphasis on regular, common and in-depth understanding of needs and severity across Ethiopia through coordinated assessment, analysis and information management, including support at subnational levels. This comprises joint assessment, IDP tracking and bolstering of field teams with effective tools to streamline data collection, information management and sharing. Below are specific directions:

- While strengthening humanitarian response – in line with the National Policy and Strategy on Disaster Risk Management, and the Disaster Risk Management Strategic Programme and Investment Framework – the Government and humanitarian partners are working on a joined-up resilience strategy with the whole-of-government, development and funding partners. This strategy – to be aligned with the GTP III, the UNDAF 2020-2024 and a multi-year HRP – focuses on enhancing resilience and durable solutions in prioritized geographic areas, aiming to achieve two to three specific and measurable collective outcomes. The mid-term review of the UNDAF makes comparable recommendations in terms of enhancing integrated programming and the humanitarian-development nexus.
- Intersectoral interventions are to be bolstered through stepped-up collaboration throughout the response cycle, including harmonized registration, coordinated assessment and monitoring, aligned or complementary targeting, and a centralized database also featuring operational information.
- Response strategy and rapid assessments are to be refined in terms of vulnerability considerations.

⁸ Refugees are 'flagged for consistency' on the final page of the HRP, not included in its caseload and financial requirements; within the Cluster, there is no joint planning and response for crisis-affected communities and refugees.

- Monitoring is under improvement for targeted, timely and effective response. To allow for better identification of needs and gaps, and a more fine-tuned response, monitoring is shifting from regional to *woreda* level.
- Monthly response monitoring permits publication of monthly dashboards, providing real-time information on ongoing response or sudden changes in context. This feeds into quarterly reports, which summarize progress on KPIs and funding by sector-specific cluster, as well as update on any context changes and risks. Coordination fora, including the clusters, provide the space where partners can come together, analyse response efforts and make programmatic or funding adjustments if/as required.
- Meaningful participation of crisis-affected communities in decisions is to be strengthened. Focus groups, interviews and perception surveys already form part of seasonal assessments. A common approach to community engagement is to ensure access to information, provision of feedback, intention surveys and participation in planning.
- In education, efforts to strengthen decentralized information management and capacity, in line with the ESDP V, are expected to improve targeting of humanitarian investments and recovery.

Presently, the following factors pose challenges for EiE:

1. The presence of a Cluster Coordinator had been inconsistent, with frequent turnover. UNICEF has since recruited one from December 2019, starting with a 12-month engagement, with consideration to extend it.
2. Not all partners have EiE specialists; regular Education (or Livelihood) colleagues often ‘double-hat’.
3. Regions do not have much presence; short-term surge does not tend to attract the most qualified candidates.
4. The federal MoE has one focal point, under the Planning and Resource Mobilization Directorate, who deals with emergency and refugees, on top of his regular duties. Focal points in regional education bureaus (REBs) are sometimes ‘arbitrarily assigned’, and already have other tasks, so performing EiE becomes a ‘personal negotiation’ (as it is not in their terms of reference). Earlier, the Cluster had proposed a team leader and three experts at federal level; the MoE had accepted it but reforms were interrupted, with discussions again in process.
5. While – in part due to housing of cluster coordination and information management in the Planning Directorate – awareness of EiE has been observed to have increased, engagement of the MoE with the Cluster is limited. It has been noted that the traditional understanding, especially at lower administrative levels that ‘emergency is emergency, not much can be done about it’ contributes to this.
6. For its part, the Cluster has been described as ‘not so functional’, with sporadic attendance of partners and lack of commitment. The need for dedicated members, including at subnational levels, with clear roles and responsibilities and accountability, has been emphasized. With the support of UNICEF, mapping of regional Cluster partners was conducted; an action point going forward is to strengthen *woreda*-level clusters. Limitations in capacity – and consequently,

information (see 'Humanitarian data' below) – have been said to 'clearly impact negatively' on EiE. It has been said to be partly due to this that not more than 25 per cent of the required budget for EiE is met (OCHA, 2019).

REFUGEE POLICY

Following the UN Summit on Addressing Large Scale Movements of Refugees and Migrants in 2016, co-hosted by Ethiopia, the country became one of 17 states to endorse the UN Declaration for Refugees and Migrants and signed up to the Comprehensive Refugee Response Framework (CRRF), extending Ethiopia's historic support to refugees. The CRRF has four objectives: to ease pressure on host countries; enhance refugee self-reliance; expand access to third-country solutions; and support conditions in countries of origin for return in safety and dignity.

In 2017, the Government launched its Roadmap for implementation of its Pledges for application of the CRRF. The Pledges are aligned with the GTP II and the UNDAF. As recognized by the Roadmap, operationalization of the Pledges relies on assessment and analysis regarding refugees and host communities; capacity building at all levels of administration; development-oriented interventions towards bridging the humanitarian-development divide; emergency response, including sustainability through self-reliance approaches for refugees and host communities; and governance through expanded partnerships with humanitarian and development actors, private sector, civil society, academia and others.

The activities of the Education Pledge – with the goal to increase enrolment of refugees in pre-primary, primary, secondary and higher education, without discrimination and within available resources – are:

- Review the National Education Strategy and the Refugee Education Strategy (2015-2018) to ensure compatibility.
- Implement education planning, management and monitoring through applying EMIS tools.
- Strengthen partnerships with relevant government entities, academic institutions, donors and foundations.
- Establish new pre-primary centres, primary and secondary schools in camps as per minimum standards.
- Expand school facilities in existing centres and schools.
- Facilitate refugee access and inclusion in host community schools through expansion of existing schools as/when required.
- Procure student and school supplies.
- Provide material support to local schools hosting refugees.
- Improve sanitation and hygiene facilities in schools.
- Support/provide school feeding programmes in pre-primary and primary schools.
- Equip laboratories, libraries and pedagogical centres in line with minimum requirements.

- Procure and install information and communication technology facilities and equipment.
- Recruit qualified refugee and national teachers and facilitators.
- Conduct yearly learning assessment in Grades 4 and 8.
- Broaden and increase the supervisory role and extension services of REBs in refugee schools.
- Establish and build the capacity of education management committees.
- Implement targeted interventions to increase girls' enrolment and retention.
- Provide special support for inclusion of students with specific educational needs.
- Enhance access to tertiary education.
- Support public higher education institutes to strengthen their absorption capacity of refugees.
- Provide allowances to students on scholarship programmes and organize graduation ceremonies.

Promising a clearer vision on how the changes of the Roadmap are to be delivered, the National Comprehensive Refugee Response Strategy (NCRRS) is in draft form; however, the Refugee Proclamation No. 1110/2019 was passed in early 2019. This law grants refugees the same treatment as nationals with respect to access at pre-primary and primary levels, and access within available resources to secondary, TVET, ANFE and tertiary education.

The principal policy for refugee education had been the National Refugee Education Strategy (2015-2018), developed under the leadership of UNHCR in alignment with the ESDP V. Its focus was on access, with gender parity, to quality education at all levels – with physical protection and skills development, adult literacy and TVET especially pertinent, as a significant share of refugees had come from countries with education systems that had collapsed and their prior participation in education was limited. Improved coordination, including with the MoE and development partners, was stressed, together with strengthened information management – including assessment of EiE, learning outcomes assessment, and refugee data in EMIS – in closer alignment with national systems. While a new Strategy is under development, mainstreaming of refugee education into the ESDP VI – in line with the global *UNHCR Strategy for Refugee Inclusion* (2019) – is envisioned.

In the meantime, grounded in the spirit of the CRRF and contributing to the NCRRS, the education objectives of the Refugee Response Plan (RRP) (2019-2020) are to expand access from pre-primary to tertiary levels by integrating refugees into the national educational system, including adult literacy and TVET. There is a focus on self-reliance and livelihoods through skills development, job matching and private sector engagement. The RRP aims to ensure alignment of interventions supporting refugees with a common set of sectoral objectives and performance targets, towards improved coordination and effective solutions.

Complementing the above, the regional economic community to which Ethiopia belongs and of which it is the long-term Chair – the Inter-Governmental Authority on Development (IGAD) – has also been proactive on refugee education, particularly on matters that require cross-border cooperation. In 2017, IGAD member states agreed on the Djibouti Declaration for Refugee Education, which commits them to integrate refugees into their national education policies, strategies, programmes and plans of

action by 2020. Reflecting the needs of refugees and host communities in 16 *woredas* in the five refugee-hosting regions, the Action Plan – under process of costing – contains commitments on developing minimum standards for refugee education, together with accreditation, certification and mutual recognition of education programmes, to promote inclusion of refugee learners and teachers in national systems. Similarly, the Nairobi Declaration on Durable Solutions for Somali Refugees and Reintegration of Returnees in Somalia commits IGAD member states to enhance education opportunities for Somali refugees.

REFUGEE RESPONSE

Ethiopia's refugee education sector is largely run as a parallel system of service delivery, overseen by the Agency for Refugee and Returnee Affairs (ARRA). Reporting to the Ministry of Peace, ARRA serves as the key government agency on all matters of refugees and asylum seekers, including provision and coordination of basic service delivery. Cooperation has increased between ARRA and the MoE, along with alignment with national and regional education policies and standards. This is underpinned by a Memorandum of Understanding (April 2019), the main purpose of which is to ensure national and international education commitments through joint efforts, and to build synergy and reduce duplication – including through the strengthening of institutional collaboration for management of programmes targeting refugees and host communities. For example, a circular identified areas of collaboration between the MoE and ARRA, instructing directorates and REBs to provide support requested by ARRA by way of school inspection, supervision, short-term training of teachers, educational materials, and inclusion of refugee students in national examinations and placement tests.⁹ Another area of harmonization concerns data: Since 2016/17, data on refugees have been incorporated into the ESAA. These activities have been extensively supported by donors and implementing partners.

A number of projects are underway: to begin with, by ECW (with seed funding), and the multisectoral 'Building self-reliance of refugee and vulnerable host communities (BSRP)', financed by the United Kingdom Department for International Development (DFID), both led by UNICEF. As part of the BSRP, a UNESCO International Institute for Educational Planning (IIEP) intervention aims to strengthen *woreda*, regional and national education coordination, planning and management for refugees and host communities in the five refugee-hosting regions (Afar, Benishangul-Gumuz, Gambella, Somali and Tigray). Support includes school mapping and crisis-sensitive planning, formalization of stakeholder roles and responsibilities, and integration of the ESDP V results framework into regions' monitoring and planning processes. Conducted by the MoE and ARRA, with support from IIEP, a sample survey started collection of data on the multiple risks with which schools are confronted, informing *woreda* development plans and helping ARRA and UNHCR reduce the risks faced by refugee schools. Project stakeholders expressed hope that the survey would inspire systematic gathering of such information as part of EMIS improvements.

Similarly, the World Bank's 'Human capital' project – presently under piloting, to be scaled up in Afar, Oromia and Somali in early 2020 – works to strengthen coordination, participatory evidence-based

⁹ Discussions are underway to include refugees in the NLA; some take part in the International Development and Early Learning Assessment of Save the Children, which – although not mainstreamed into the education system – is intended to provide the government, partners and donors with evidence on child development.

planning and financial accountability towards development of refugee and host communities (under GEQIP). It does so through a whole-of-government approach with focus at the *woreda* level. The initiative is grounded in the Human Capital Index – measuring educational and health outcomes towards growth and equity – where Ethiopia ranks 135 out of 157 (2018).

ECW's catalytic fund for Ethiopia's Multi-Year Resilience Programme (MYRP) was announced on 5 December 2019. With attention to refugees, and increasingly IDPs and returnees – under the outcome of 'Capacity of educational institutions and communities to provide crisis-sensitive education for emergency-affected girls and boys strengthened' – outputs include improved data systems of the MoE and the Cluster at all levels (with human resources, knowhow and, potentially, IT solutions); enhanced coordination, with inclusion of disaster risk management in the sector plan, and of education in crisis preparedness and response plans; and documentation of good practices for advocacy and resource mobilization.

While the majority of initiatives target ECE, primary and secondary education, higher levels are also considered, predominantly within the Jobs Compact. With funding from The Netherlands, the 'Prospects partnership' – presently in its inception phase – sets out to shift the paradigm from humanitarian to development approaches to tackle displacement. Bringing together the International Finance Corporation (IFC), International Labour Organization (ILO), UNHCR, UNICEF and the World Bank, the project connects education and learning, jobs and social protection, and protection and legal status.

Similarly, initiatives under the European Union Emergency Trust Fund for Africa, implemented largely through NGO consortia, aim to create economic and employment opportunities, particularly for vulnerable populations through vocational training, access to micro-finance and industrial parks. GIZ's 'Qualifications and employment perspectives for refugees and host communities' project strives to improve employment prospects through enhancing the quality of provision, broadening the range of TVET opportunities, and fostering entrepreneurship and exchange formats in Addis Ababa, Benishangul-Gumuz and Somali.

For the most part, these interventions operate alongside the current TVET system. UNHCR's global TVET strategy will support the classification of vocational training for refugees in relation to the Education and Livelihood sectors. The latter is where it presently falls with a number of partners. Arguably, this duality is rendering planning, monitoring and management, as well as resource mobilization, less than straightforward. However, UNHCR's Refugee Education 2030, a strategy for refugee inclusion, has prioritised developing strategic partnerships to promote the successful inclusion of refugees into TVET systems. With access to the formal system to-date limited, inclusion of refugees in TVET has not been 'as systematic as at lower levels'. Through demonstration of best practice and stepped-up advocacy, partners expect consideration of 'ways of anchoring' inclusive approaches in the near future. This presents a space of note for potential engagement.

OPPORTUNITIES AND RISKS

Despite encouraging developments, there are voices of caution. Recognizing that profound changes take time, a recent report sees achievements of the CRRF process to-date above all in terms of potential (ODI, 2019a). The main accomplishment has been opening up new possibilities for refugees and those who wish to support them: The process has allowed stakeholders a space in which to discuss

issues; it has brought new actors and more kinds of programmes, and enabled different modalities of financing to be directed at refugees and host populations; there has been greater recognition of the needs of host communities, including those affected by crises, and the importance of working with regional and *woreda* governments. However, going forward, increased coherence and realism in light of the country context are required.

This is a sensitive time for the Ethiopian Government to promote access for refugees. Unemployment, particularly among youth, has become a major concern for citizens and their leaders, and has been a key driver of popular protests in recent years. Issues of conflict are generally handled with caution.

While considerable focus has been on the overarching CRRF legal framework, there is less clarity on how the vision is to be achieved. National policy, defining specific binding steps, is crucial to move forward on the inclusion agenda. Uncertainty has created anxiety for different authorities, particularly those responsible for sensitive areas. Progress has slowed on formal intergovernmental engagement, especially regarding programmatic considerations, partly due to challenges in defining responsibilities. There has been some progress at subnational levels, with variations.

The traditional understanding, grounded in long-standing practice, that refugees will one day return and are predominantly taken care of by the humanitarian community, is slowly beginning to change. This is especially so in areas of administration that have not, until recently, been involved with refugees. The invitation of UNHCR to participate in the Sector Working Group promises furthering dialogue.

Last but not least, the international community has not been clear on how to support CRRF objectives. Projects are of a wide diversity with different or overlapping geographies. Many are delivered through NGOs, which are asked to adapt existing interventions or develop new areas of expertise; others have sought to foster closer partnership with authorities at different levels. The lack of an overarching framework has resulted in fragmentation and sometimes confusion, especially at local levels. There has not been consensus on how the humanitarian-development nexus is to be enacted practically, including with respect to coordination, information and financial arrangements. To promote the New Way of Working, UNICEF held briefings with development partners and shared humanitarian updates in the SWG. Most recently, the ECW Steering Committee has spearheaded efforts to bring together humanitarian and development stakeholders and plans more systematically.

Nevertheless, this is an opportune time to strengthen the resilience of education through EMIS and data in Ethiopia. Amidst significant momentum, a conducive policy framework and a diversity of initiatives that have already started to bridge the humanitarian-development divide, there is anticipation that crisis-sensitivity and inclusion of refugees under the ESDP VI will be furthered. **The review of the Programme – presently ongoing – can lay a solid foundation for improved EMIS and data for resilience, through a coherent sector response.** In addition to adapted KPIs, disaggregation will need to be reviewed towards a fully rights-based approach, with attention to protection considerations.

Achieving this requires consistent and purposeful participation of all stakeholders in the process – government, development, humanitarian and refugee partners – to provide harmonized advocacy and technical input. For the time being, the SWG, Education Cluster and Refugee Education Working Group do not optimally interact (e.g. at the time of this research, key members of the Cluster were not aware

of the ESDP V review, nor of crisis-sensitive planning efforts; indeed, lack of knowledge of each other's activities was repeatedly pointed out by partners). Often the structure of dual-mandate organizations mirrors separations (exacerbated by one or another function sometimes based outside of the country).

To move beyond this, inclusive coordination with purposeful leadership – starting with the review of the sector plan – is critical. More practically, going forward, **a review of participation in coordination mechanisms**, based on mapping of programmes and their interactions, may be beneficial (e.g. enhanced coordination between humanitarian and refugee responses, or humanitarian representation in the SWG). This is an area that requires clarification. Stakeholders have expressed hope that the work of the Overseas Development Institute (ODI) to strengthen coordinated education planning and response in crisis will further this (ODI, 2019b).

Dedicated, predictable and long-term financing, with contribution from partners, is necessary to realize identified objectives (ODI, 2019c). As more than one official at different levels of administration remarked on crisis sensitivity and inclusion of refugees: 'We put in policies and budgets, and then what?' While there is always trust that momentum acquired will carry interventions forward, towards fully credible action, partners will need to better manage expectations, along with facilitating conditions for effective operationalization and continuity of their supported interventions. Localized projects will need to ensure they do not inadvertently add to the misalignment that has already been observed between central and decentralized aspirations and plans; and fail to consider scaling or mainstreaming – especially as the nature of crises evolves, affecting communities in ways for which they may not have been prepared.

As the above has shown, strengthening information management for better planning and response, including in crises and for refugees, has been identified for attention in the sector, humanitarian and refugee response plans, and echoed in the UNDAF. However, progress so far has been mixed. In the words of one official: 'Even if the content of EMIS changes, our approach also needs to change'. The next section considers how and why this is, starting to extract lessons learned for the way forward.

II. Data map

A. Education Monitoring Information System (EMIS)

While the last two sector plans have witnessed significant improvements in EMIS, monitoring and implementation inevitably face challenges in as large and diverse a country as Ethiopia. Recent reviews of EMIS, together with interviews, point to the following interconnected situations (FHI360, 2017; Gizaw, 2016; GPE, 2019b, 2019c; Minogue, 2019):

- EMIS data cover all subsectors, from ECE to higher education, including alternative basic education (ABE), ANFE, TVET and colleges of teachers' education, with information on access, efficiency and inputs, national exam results, and selected teacher attributes, by gender, region, age, grade level and year (TVET and higher education are included in the ESAA up to 2017/18). Most data concern primary and secondary education. While there is some information on WASH and disabilities, emergency is not featured in EMIS. It has been observed that the urge to include too many new indicators associated with the SDGs has made selection difficult (this has also allegedly interrupted

rollout of school report cards, together with low awareness of *woredas* and school principals).

- At national level, the ESAA is usually produced more than a year after data collection (some entries may date from the year prior and may not be available from one year to another); in some regions, the abstract is developed faster. Lengthy production does not allow for reliable identification of needs and response, which require timely information (e.g. regional abstracts note unreliability of dropout rates, which do not take into account new enrolments after movement of populations). Although a work plan with component tasks and timelines exists at federal level, data collection does not follow a strict schedule in all regions, sometimes due to the effects of hazards (e.g. delayed opening of schools).
- Each year, in line with annual plans, the standardized school census questionnaire (hence 'questionnaire' for all education types and levels) is reviewed in consultation between federal and regional levels. The federal EMIS Directorate is responsible for preparation of the questionnaire and corresponding customization of the software (see more on this below), together with training on these for the REBs; regions may supplement information at their own discretion with questions that are locally relevant (e.g. on ethnicity/indigenous status). The paper-based questionnaire is lengthy (approximately 25 pages for primary schools), without sufficient space for some entries, and at the same time with unused questions and spaces. This prompts missing information and data filling errors, as well as inefficient production and distribution costs. Despite yearly orientation provided by the REBs, not all schools know how to complete the questionnaire (mostly performed by principals). For example, data are required on children with disabilities; certain conditions are difficult for school staff to establish. As ECE and ABE are attached to primary schools (hence 'schools' for these types and levels, with reference to EMIS modalities), it is the same principal who fills the different questionnaires. It has been said that ABE is weakest, as it is overseen by lead teachers, who mostly do not have preparation in management, reducing their capacity in EMIS. Beyond the yearly orientation, little guidance and support are provided, largely on informal basis (e.g. schools calling *woreda* offices on their own initiative). Supervisors – tasked to review completion of registers, which inform EMIS – visit schools less than once a year, due to resource constraints. The questionnaire completion guide, which does not always provide sufficient information – for instance on compound tables – is often unavailable.
- Questionnaires are printed by the REBs. They are transported – in three copies: for the school, *woreda* and region – sometimes on foot from *woredas* to schools and back (*woredas* do not have dedicated full-time EMIS staff, the function is shared with Planning). From *woredas*, completed questionnaires are not uncommonly delivered by public transport to the REBs. More often than not, there are no computers at *woreda* or school levels; electricity and sometimes writing materials are limited. Building structures and materials/supplies often leave no space for storage, let alone a conducive work environment: In some schools, registers are worn and torn by students and in others, they are kept in teachers' houses; the risk of misplacement of questionnaires has been noted. Regions may have IT specialists, assisting with technology issues, who may also serve as school teachers. At federal level, the EMIS and Information and Communication Technologies Directorate (with the latter branch responsible for federal IT support), has, in addition to the Acting Director, one expert for training, one for customization (both funded by GEQIP) and five for data analysis and interpretation.

- To certify submission, *woredas* stamp questionnaires; they do not systematically validate their content. Data, most commonly entered by the REBs (often with external support), usually have many errors, with little cleaning by some regions. Adding to this, StatEduc2 – the EMIS application for data entry, processing and display, developed by UIS – does not have a mechanism to fully minimize and report data entry errors. In the region visited for this research, the server had low capacity, not allowing for simultaneous data entry. After training from the REB, clerks entered data from the questionnaires into Excel, which were then re-entered by one officer into StatEduc2. Moreover, with limited capacity to customize StatEduc2 to revisions of the questionnaire (i.e. regional EMIS officers had received training on this about three years ago), data for new questions were processed in Excel. Support with regional customization – whether through enhanced federal outreach or further local training – has been requested by EMIS officers. For reasons that are unclear, some of the data collected and entered yearly are not used in analysis. Last but not least, it has been said that the integrity of data is at times compromised, motivated by incentives, for instance school grants or allocations to regions. Verification on a spot-check basis is conducted on performance-based financing under GEQIP by the Central Statistical Agency (CSA); third-party checks for the sector have been recommended.
- On top of the national ESAA, regions are expected to produce abstracts. This does not happen in all cases due to limited technical skills (while standard operations in StatEduc2 are allegedly mostly managed, analytical and strategic actions pose more challenge). Consequently, *woreda*-level indicators are not always available (especially in *woredas* recently formed, sometimes as a result of conflict). While *woredas* can ‘try to establish numbers’, they have expressed their need for consolidated EMIS data (though there seemed to be less clarity about the use of such data). This is especially so where regional abstracts had been produced earlier but discontinued (at times due to inconsistent donor/partner support). In such cases, no alternative means of information transfer – for example, through selected dashboards from StatEduc2 – has been observed.
- Population projections may differ between federal and regional levels. The federal EMIS Directorate uses CSA projections, while regions rely on CSA’s regional affiliates. Resultant discrepancies affect key indicators, for instance gross and net enrolment rates (GER and NER), and number of children and youth out of school (the NER has been consistently above 100 per cent in EMIS). Population figures at *woreda* level are especially difficult to determine, also given fluctuations due to internal displacement. As regional abstracts observe, the CSA’s periodic revision of population projections makes comparability of data over time difficult. Schools have been encouraged to check registration documents to verify the age of students; however, where these are not available, age-appropriate programming is deterred. Rollout of vital events registration since 2016, including comprehensive birth registration, is expected to have a significant impact on the accuracy of data over time.
- In addition to the above quality concerns, the statistical abstract is more descriptive than strategic. Overall, information does not readily facilitate decision-making, including limited feedback to decentralized levels about their performance. To encourage evidence-based planning at local levels, partners are supporting user-friendly ‘accountability fora’ that allow school communities to better understand and respond to their needs. It has to be recognized that on top of the ESAA, the MoE has other means to manage EMIS data more purposively and in a timelier way for planning,

both before and after the abstract is publicly available. These include indicator reports and quick reference, providing a list of KPIs with arrows to show trends over time, if necessary disaggregated by region (e.g. for the Planning Commission or the Ministerial review on the performance of regions). The EMIS Directorate also answers individual requests for information, for example from researchers (except for sharing teacher profiles, for data protection purposes). The national ESAA, published by the federal MoE, is available on the website of the Ministry and in-country (regional abstracts can mostly be found locally).

In light of the above, lessons emerging from review of the ESDP V include: rationalized KPIs (fewer in number and more strategic), clear indicator definitions and sources, realistic targets, verification of data inconsistencies after analysis, in-depth understanding of reasons behind findings and better information sharing. Additional recommendations, as observed by partners, are: awareness-raising on the importance of EMIS, quality data and the culture of evidence-based decision-making; increased resource allocation to EMIS (including at decentralized levels); greater commitment and accountability; and staff assignment and retention (with incentives to increase motivation) in line with need.

Aside from EMIS, the MoE has available 'vital data' at key points for planning (not accessible publicly). Within the framework of mobilization for school enrolment, following a template developed by the REBs, data are collected in each village especially to determine the number of children expected to enter Grade 1. This serves as the eligible school-age population at the lowest levels of administration, as such information is not otherwise available. Immediately after registration at the start of the school year, enrolment by gender and age is conveyed to the REBs, transmitted in turn to the federal MoE for allocation of resources. Additionally, the REBs conduct monthly school surveys (focusing on the number of students and teachers), submitted in quarterly reports to the regional councils.

Previously, partners aimed to build the capacity of *woredas* and schools (at times through clusters) more broadly to manage and use EMIS data. However, today many of the computers provided are not functional, generators supplied are out-of-order and officers trained have moved on. Within the 'Safe and quality education for girls and boys in displacement situations in Ethiopia and Somalia' project, implemented by Plan International with support from the European Commission, an immediate outcome concerns EMIS. A 'localized, practical approach' is followed, intended to make improvements in the system as it exists in Gambella, including assignment of a technical assistant to the REB. One activity proposed is establishment of a customized database for *woredas* and schools on EMIS; before this, extraction of lessons learned from earlier initiatives – including rigorous follow-up support – is envisaged. Being part and parcel of a broader programme with delivery of tangible gains (such as school construction, materials, supplies and school grants) has been seen to facilitate local endorsement of Plan's work.

In light of the overall need to improve timeliness, accuracy and use value of data, the Education Management Information System Action Plan was developed to modernize EMIS, with the support of FHI360, contracted by the British Council. Core features are: migration of school management functions from paper- to tablet-based in primary and secondary schools, and availability of tablets at *woreda*, zonal, regional and federal levels for monitoring and response; transmission of information – where there is no internet, using SMS technology – to a central server and database on rented cloud

storage or an appropriate government facility; automated updates with the server contacting the tablets at scheduled intervals (doing away with school visits to collect data); and visualization of information at all levels, with online and offline access to pre-authorized views by schools, *woredas*, zones, regions and the federal MoE. For ECE, ABE and ANFE, data are to be collected by *woredas* – or school clusters – with tablets (the same is proposed as an interim solution at primary and secondary levels). Advantages include (1) reporting of key factors (e.g. dropout, attendance) as frequently as necessary and also more accurately (for instance, dropout is calculated residually in EMIS); (2) facilitation of communities of practice between schools and education managers; and (3) a light technology footprint, enabling scalability (unlike SMIS, where, beyond successful piloting, questions have been raised about national rollout given the need for internet coverage to connect to the central database and suitable computers at local levels, and adaptations are presently being considered). Resources have not been available to put the Action Plan into practice; however, this is the vision of the MoE and subsequent efforts have been interpreted to be in line with it. Requests for hardware, to begin with, have been made by the Ministry at all levels.

Relatedly, the DFID-funded Quality Education Strategic Support Programme, managed by the British Council, undertook a pilot to gather data on learning conditions and outcomes. It was conducted through the Delivery Unit of the MoE (practically oriented, focused on the system's priority targets), with the use of tablets by school cluster coordinators and independent data collectors. While this has been interpreted to demonstrate the possibility of IT-based solutions, lessons for strengthening data collection and analysis going forward are: enhanced training for coordinators to allow for less reliance on federal and regional backup; capacity building of the MoE in data analysis/visualization; and mainstreaming of the initiative into EMIS (or if necessary, the National Educational Assessment and Examination Agency).

B. Refugee data

Refugee EMIS uses the same questionnaire as the regular education system, with slight adjustments in content for contextual relevance (e.g. teacher qualifications lower than certificate/diploma, temporary learning spaces, peace education instead of civics and ethics in the national curriculum, orphans). The federal MoE had trained ARRA and UNHCR to train schools on completing the questionnaire, which is in soft copy (schools without computers and printers search for such equipment from partners or camp administration, or are lent them by ARRA). The filled questionnaires in hard copy are collected and entered into Excel by the ARRA zonal offices and transmitted to the REBs, who compile, sometimes analyse and disseminate, and send them onto the federal EMIS Directorate for overall compilation, analysis and dissemination. Verification is conducted by the MoE.

Originally, inclusion of refugee schools in EMIS was managed by the federal MoE; more recently, some regions negotiated managing their own refugee data, starting with analysis (inclusion of refugee schools in EMIS was part of an advocacy effort for GEQIP to cover them in performance-based financing). Where the REBs do not produce abstracts, information is sorely missed. The ARRA zonal offices share with the UNHCR field units the compiled Excel sheets, which are then used for 'informal' analysis, 'the way it can be done'.

Refugee EMIS is widely acknowledged as a significant step towards inclusion. It has been cited as a

precedent for integration of humanitarian considerations into EMIS more broadly. Additionally, it is seen to provide more extensive information than other sources available. At the same time, the following have been observed:

- As the ESAA points out, refugee EMIS solely considers refugee schools. It does not include the approximately 98,000 refugees who live in areas outside of camps, due largely to the Out-of-Camp Policy affecting Eritreans, and to other circumstances, such as health and protection issues or advanced asylum processes (World Bank, 2019a). For example, according to the 'Skills survey for refugees in Ethiopia', 65 per cent of Somalis and 57 per cent of Sudanese attend Ethiopian public schools (World Bank, 2018). However, beyond partner initiatives (with information management as described elsewhere in this report), there are no systematic data on the education of refugees in host communities (they are captured under the regular EMIS, appearing as regular pupils). Conversely, host community children who attend refugee schools – a minority but present – are not featured in the ESAA (although they are included in the refugee EMIS questionnaire). Although disaggregation is important for assurance of equity, as refugee stakeholders have pointed out, any differentiation will need to be carefully considered in light of inclusion or integration endeavours (especially without direct support for every institution also serving refugees).
- The national ESAA contains limited information on refugee education (compared also with data requested in the questionnaire), largely disaggregated by cycle, location and gender: school-age population; number and type of schools (ECE, primary, ABE/accelerated learning programme, secondary); GER in pre-primary, primary and secondary; and completion rates, pupil/section and pupil/teacher ratios, and teacher qualifications at primary level. Placement of the information, as the final chapter in the abstract, has led to the interpretation that refugee education is an 'after-thought'. Refugee stakeholder aspirations are to have the same analysis and display as for regular education to be able to track and address disparities; national administrators have also lamented the absence of a common framework, along with a consistent information management method, between refugee and host community schools, which could reliably reveal, as the case may be, disadvantages in regular schools as well (e.g. in terms of infrastructure). Overall, the strategic value of data has been seen as limited. For example, according to refugee administration, refugee schools tend to be below standard (e.g. in terms of student/classroom or /latrine ratios). Displaying this information could help mobilize targeted support.
- Similarly to the regular EMIS, practical challenges impeding data quality and timeliness include: a shortage of dedicated and accountable school staff (e.g. incentive teachers acting in the absence of assigned principals); unreliable power and worn out IT equipment (especially given lack of maintenance under demanding conditions); limited technical guidance and support; and outdated school registers. Refugee schools had received training in questionnaire completion once in 2017; going forward, some REBs plan to include them in their yearly orientation.
- Data for refugee schools, especially after verification, are processed after regular schools. In its analysis by the REBs and the federal EMIS Directorate, refugee data are handled separately from the rest (i.e. not in StatEduc2 but Excel), making this not only cumbersome but also comparison with other schools not readily established; additionally, in Excel, refugee data are not backed up. These conditions add to delays until the overall abstracts come out. In order to address this, there

have been calls from the EMIS Directorate for partner support with facilitation of customization of the EMIS software to include refugees.

- To allow for increased tailoring of assistance to the specific needs of refugees and their access to a greater range of complementary services, UNHCR had conducted Level 3 registration covering all refugees in Ethiopia since 2017. Upon completion, the number of registered refugees and asylum seekers dropped from 905,831, making data more reliable (see e.g. UNHCR, 2019b).

According to the Refugee Response Plan (RRP), protection is central in refugee education; so is acquisition of skills for livelihood, along with adult literacy. Education in the RRP only includes indicators on pre-primary, primary and secondary enrolment; TVET, with the indicator ‘per cent of vocational training students who graduate’, is under Livelihood, while Protection has an indicator on ‘per cent of children with safe access to community spaces for socializing, play, learning, etc.’. For quality assurance, UNHCR conducts routine monitoring of its partners’ activities; in addition, there are quarterly multifunctional team assessments, in support of planning and management. Moreover, partners report monthly using a standard format in line with their partnership agreement, following UNHCR’s global results framework and national office priorities. Additionally, partners are expected to provide updates to ARRA starting at camp level on the progress of initiatives, as well as challenges and measures taken to address them, largely for operational purposes. Above and beyond these, it is not clear where protection mainstreaming, livelihood outcomes and adult literacy are systematically captured, especially in a form accessible to stakeholders. Lastly, the National Refugee Education Strategy placed emphasis on assessment of refugee education in emergencies. Beyond registration of refugee profiles at influx as well as the data above, it is not clear if there are refugee education in emergency assessments (Education Cluster assessments do not cover refugees, although in certain situations they may be affected by the same hazards as host communities).

Currently, UNHCR is piloting the Digital Education Platform, i.e. child-by-child registration card-based data (linked to L3), expected to be rolled out in all camps in early 2020. Through school/camp-based reading of the card, each child is registered in the database every semester. Linked with the registration profile, this allows for timely, accurate and pinpointed Protection programming, for example targeting children with special needs, those (at risk of dropping) out of school, repeating grades or on the move. Information is expected to be regularly displayed through dashboards, accessible to the Government and partners through a portal (precise operating procedures are to be determined).

For their part, World Bank programmes, including those of the Refugee Sub-Window, are informed by the Living Standards Measurement Study, which responds to the need for policy-relevant (open) data to understand determinants of social sector participation, vulnerability and poverty. Conducted in partnership with the CSA, the Study relies on a household panel sample including refugee, nomadic and host populations. It uses multi-topic questionnaires, featuring health/special needs; labour and enterprise; housing, assets, income and assistance; food production, consumption and security; experience of shocks, complete with natural and man-made disasters; and education, such as school attendance, highest grade completed and literacy. While smaller in scale than the census, the scope of information generated is more extensive and more timely (with the Study conducted every couple of years vs. the census about each ten years). In 2020, coverage is planned to expand along with

representativeness through zonal level data (compared to regional at present). At country level, information is regularly used to triangulate (and pro-rate) EMIS data.

C. Humanitarian data

Upon the onset of emergencies, *woredas* collect essential information (with a focus on the number of students, teachers and schools affected); this is reported immediately to regions, which consolidate and request support from the Education Cluster. While the *woreda* reports may not be fully accurate, participatory or readily available, they serve as a first alert and constitute the backbone of more extensive emergency needs assessment and triangulation of its follow-up.

It is agreed by stakeholders that EMIS in its present form does not fit the needs of EiE. Data take too long to be available and the focus should be on affected populations as granularly as possible (at least at *woreda* if not school or individual levels), with reasons for compromised educational participation determined so needs can be met appropriately, effectively and efficiently. Data need to allow for preparedness planning and relevant, timely response.

There have been multiple attempts by the Education Cluster to address this; however, without systemic linkage to crisis-sensitive planning, they could not succeed. The REBs were requested to provide data on a quarterly basis using a form devised by the Cluster; however, as this was not formally part of the system, it 'depended on negotiation capacity', and was not functional. Subsequently, a pilot tested feasibility to collect data through a mobile application: Save the Children provided 12 tablets and trained *woreda* EMIS officers, who were to enter data from paper-based school questionnaires, supervised by two national EMIS staff, with data transmitted to central servers. While the first round was successful, the load of 50 to 60 schools for *woreda* officers each quarter and the requirement for principals to fill out the questionnaire repeatedly, on top of their other tasks – not to mention the cost of airtime for data transmission and per diems – could not be sustained. Learning from this, provision of tablets directly to principals was considered; however, costs were prohibitive. The concept was adjusted, with *woreda* officers collecting data on hard-copy questionnaires on a rolling basis, visiting five to ten schools per month, but resources were not received. The humanitarian funding streams could not accommodate system-level support; the development side (GEQIP) did not see the place of EiE.

In the meantime, data are collected by the Education Cluster as follows: The Information Management Specialist (IMS) emails partners the 5W in Excel on a monthly basis, who are then to provide *woreda*-level information (site-level was considered but not introduced, due to the high level of effort required). Central offices collect data from field colleagues, sometimes relying on periodic reports already submitted or phone calls. Although quality checks have been mentioned (e.g. adjustment for possible double-counting), data in the 5W are frequently late, incomplete and about process rather than results; in the absence of up-to-date standards – and limited monitoring by the Cluster – interpretation of indicators differs between partners. It has been raised by Cluster members that data procedures put excessive demands on their time. The 5W has to be filled activity-by-activity per location; that the use value of this – i.e. receipt of additional humanitarian funds – is not seen serves to dampen motivation. Reporting is on learning supplies, construction and rehabilitation, school feeding, WASH, psychosocial and life skills training for teachers, training of parent-teacher

associations, and accelerated school readiness and learning programmes, by gender, and child or adult status; it is aligned with the HRP. Nevertheless, information has been observed not to be most relevant. Efforts are being made for the HRP 2020 to include more on education quality (especially as it has been said that partners do not share a common understanding of this). The lack of comprehensively and regularly shared information on school closures or use as shelters has also been noted.

After cleaning to the extent possible, the IMS aggregates data from all partners' 5Ws in Excel and compares them to targets; gaps are discussed in Cluster meetings to guide response (reporting has highlighted considerable discrepancies between targets and results at all levels – for example, according to Humanitarian InSight, the Education Cluster reached not more than a tenth of its targets as of December 2019). Aggregate information is entered by the IMS into monthly 'Response monitoring' online, managed by OCHA. While situation reports by sector-specific cluster have been discontinued (and the weekly 'Humanitarian bulletin' does not include education), Humanitarian InSight, a sector-by-sector online dashboard, provides real-time information by KPI and region. UNICEF produces its situation report monthly, including a list of education activities with numbers reached.

Seasonal assessments, with contextualized global templates, are used to assess and monitor EiE; however, although expected at mid- and end-year, they have not been regular. On top of funding shortages, the value added of multi-cluster assessments has been questioned. The exercise has been described as 'not well consolidated' across methodologies and sectors, especially given the short time available to conduct it. Despite preparation of data collectors, in-depth understanding beyond the templates is limited. As a result, and due to security and logistical challenges, the last multi-cluster assessment was cancelled. Assessments are expected to generate *woreda*-level severity rankings, which allow for efficient targeting of those with greatest need. Without an education assessment, severity mapping has been indirect, inferring needs based on those of other sectors. Especially in view of planning for the HRP 2020, an education-specific assessment took place in late November 2019. The team – comprised of the Government and partners at central and decentralized levels, with logistical support from the latter – utilized tablets with Open Data Kit (ODK); information was consolidated with a report prepared at national level (previously, paper-based information collected had been preliminarily synthesized by regions). Overall, it is not clear how assessments are linked to prior preparedness plans; information is not connected to subsequent monitoring (nor does EMIS systematically serve as a baseline); intervention outcomes – including linkages to resilience or recovery – are not considered in the longer run.

In the absence of assessments, or to triangulate them, the Displacement Tracking Matrix (DTM) of the International Organization for Migration (IOM) – which provides updates on multisectoral needs on a monthly basis – has been relied upon (the dataset is open source to the extent protection and confidentiality considerations allow). Information at site level is on access (based on distance) and attendance in ABE/temporary learning spaces, and formal primary, secondary and adult education, as well as availability of supplies, teachers, latrines, drinking water and school feeding. Data disaggregated by gender, age, and numbers of children unaccompanied or separated, with disabilities, pregnant or household head are available. While this gives valuable insight, it has been noted that information is based on estimates (through key informant interviews cross-checked at various administrative levels) and not always collected from specialized personnel.

Partners also have their own procedures. They conduct individual assessments, mostly prompted by calls for proposals. A checklist is devised for each occasion, with data collected through field visits, including interviews with communities and decentralized offices, complemented by available reports and experience-based lessons learned. In some cases, information from partner assessments is used to inform the Cluster; however, more often than not, partner assessments are for internal purposes. In addition, partners are required to report regularly on progress, results and expenditure of projects to the Government, donors and head offices. While information inevitably overlaps to a degree, these reports are distinct.

Partners have described assessments as the most challenging, given the need for new information rapidly; however, diverse reporting adds to their demands. A noteworthy initiative by GIZ is to establish a set of standardized, contextualized indicators applicable globally, which are under discussion with donors for endorsement, in line with their interest in impact measurement and return on investment. The challenge of results and financial tracking, especially on integrated projects (i.e. targeting refugee and host communities) – where partners may go through different channels, and breakdowns by component may be less than straightforward – has been noted by stakeholders (see also Minford, 2019).

III. Conclusion and summary recommendations

On the whole, the importance of quality data is recognized by the Government and partners, as well as its need to support effectiveness and efficiency; however, there is caution about what programming should look like. There tends to be agreement that it should not be top-down and technology heavy; a bottom-up approach is expected to increase federal capacity as well, focusing on building usefulness of data, which will improve quality. There has not been much discussion on comprehensive system reform, although interventions to-date have started to pave the way for this. **Overall coordination for sustainable system strengthening in EMIS and data, especially including humanitarian and refugee considerations**, has for the most part been absent. The ESDP V and the Education Cluster Strategy both recognize the need to strengthen EMIS to meet the requirements of EiE; however, this has remained outstanding.

Integration of humanitarian considerations with support from development partners has been predominantly from the angle of enhancing basic service delivery, especially for at-risk populations, and is expected to increase resilience of the system and individuals, linking the humanitarian-development divide without leaving anyone behind (World Bank & DFID, 2019). This is especially so in the context of Ethiopia at present, where there is ‘awareness to proceed with appropriate sequencing’, respectful of sensitivities. The important opportunity to strengthen regular EMIS is widely acknowledged and it is here that attention has concentrated.

More recently, there has also been preparation on the humanitarian side to enable better coordinated planning and response across the nexus, under MoE leadership, encouraged by ECW. Mainstreaming of crisis sensitivity into policies at all levels, development of an EiE Advocacy and Resource Mobilization Strategy and strengthening of Cluster capacity, especially at decentralized levels, in EiE data production, management and dissemination are envisaged.

There is general agreement that **efforts to use existing technology and focus on people, policy and process improvements need to proceed hand-in-hand with upgrading to faster, more automated and higher quality technologies**. While some prefer technological solutions in the short run – including platforms such as SMIS or ODK – others warn of limitations in the ecosystem to support sustainability and scale-up (e.g. unreliability of connections and maintenance). In line with a phased approach, any innovation will need to **examine feasibility** first of all, and **systematically document good practices and lessons learned**.

Respecting the call from review of the ESPD V for a ‘better organized data agenda’, the following recommendations are proposed towards a harmonized and rationalized EMIS and data system that begins to bring together humanitarian and development considerations under national oversight. While, as this report has shown, necessary facilitating conditions are often in place or planned – although some ESPD V priorities, for example appropriate structures, roles and responsibilities for EiE in the MoE, need to be better considered – the below begins to give an outline of content for these structures. Technical support, to define precise modalities, has been requested by stakeholders.

- Data in their definition, collection, processing, dissemination and use need to be fit-for-purpose for different stakeholders, all in line with the upcoming sector plan, its associated instruments and international commitments. This requires **review of existing information modalities, considering their alignment with policy and practice requirements and harmonization with each other. Refugee education, for example** – with its multiple considerations such as inclusion, protection and livelihoods reducing secondary migration – **needs to consolidate what data exist and how to capture them systematically**, including increased alignment with regular EMIS practices, and clarification on the relation of the Digital Education Platform to EMIS. In general, information needs to be better connected to baselines, measure outcomes and impact, include multisectoral links and track relevant disaggregated indicators consistently, at least at *woreda* level. Especially for EiE, there have been calls to rationalize information with fewer and better quality indicators to enhance practicality (UNESCO, forthcoming).
- In addition to data for the sector, which are collected on a regular basis, information needs to be gathered, processed and used ad hoc, prompted by emergencies, with participation of the Education Cluster under MoE leadership at all levels. The need for timely information, especially in emergencies may necessitate prioritization of IT solutions, not only at the assessment stage but also in the case of monitoring. This may include **upgrading of the Cluster response monitoring application, complete with linking of information throughout the programme cycle, then to recovery and resilience through connection with EMIS**. Leveraging MoE experience in timely data collection, reporting and response may also be explored – including tallies at local level, which may be most reliable to establish non-traditional population numbers (e.g. school-age or out-of-school children); at minimum, communication between vital data and EMIS with its population denominator should be considered.
- **Enhanced harmonization of assessments, M&E and research between partners and across projects, funding streams and donors** has been recommended (Hall, 2016). In addition to continuous shared learning, this allows for better understanding of outcomes and impact, which can only happen in the longer run, along with their improved measurement. **Government reporting formats for partners may be standardized**, enabling ready tracking of contributions to

sector objectives and expenditures. A number of partners consulted have expressed their need for **capacity building in M&E and research**. Most importantly, the need for an enabling environment both within organizational hierarchies and with donors that not only allows for but insists upon earnest examination and accountable achievement of progress and results – predicated upon informed dialogue, guidance and quality assurance – has been expressed repeatedly by stakeholders.

- Relevant **datasets should interrelate, gainfully complement one another and, to the extent possible, interoperate and integrate** (some regions have allegedly more than ten databases related to different initiatives, making processing and comprehension challenging). Dialogue may consider enhancing education in existing modalities (e.g. DTM). It has been recommended to explore linkages of EMIS with the population census (or Living Standards Measurement Study), which can also triangulate information more difficult to capture (e.g. on disability). There should be consistent use of installation IDs, including for refugee schools, applied across datasets, interventions and sectors. **A central repository of relevant information** regularly updated and with access by stakeholders may be explored (or at least sensitization on the main sources of information available, with their relative strengths and weaknesses). This can also be helpful when certain considerations do not permit inclusion of selected information formally in regular datasets.
- One way or another, the above will involve **review of EMIS and data tools and software**. In the process, an eye should be kept on (1) enhancing the user-friendliness of procedures as well as their agility to respond to evolving demand, which is expected to increase motivation, accuracy and appreciation of information's strategic use; (2) considering data protection needs (especially in light of the present Excel- and e-mail-based protocols); and (3) effectively extending EMIS and data to decentralized levels, with increasing focus on *woredas*. Modalities will have to be rationalized to reduce inefficiency, including not having to: fill soft copies without computers, re-enter data multiple times, collect and process information that is not used or is known to be inaccurate, use information without knowing where it comes from or generate it without knowing what it is used for, plan without a clear plan of realization, or input into recommendations that lead to no result. Without sense in the process, no amount of sensitization to appreciate the value of EMIS and data can succeed.

Despite plans to **establish an EMIS task force**, there is no such group at present for effective conceptualization and rollout (the GPE Data Solutions Roundtable has been called the closest to this). The task force will need to have a roadmap with clear and coherent direction, together with a rollout plan complete with facilitating conditions to strengthen EMIS and data, including for resilience. Existing initiatives – for instance in data integration or strengthening of human resources and capacities under the DRT – should be leveraged. To reinforce the nexus, it has been suggested that the GEQIP task force on system strengthening as well as the coordination structures that have been established for the MYRP of ECW may be useful to draw upon. Engagement with the private sector, especially in IT and telecommunications, may support technological innovations (e.g. for guidance, monitoring and management of EMIS); partnership with universities may boost local capacity in information management. **Stock-taking of interventions to-date** – including the experiences of well-performing regions – should be a gainful starting point, especially since best practices, without systematic

documentation, often remain only with those who have taken part in them.

Review of the ESDP V calls to ‘think differently to improve data quality’; indeed, **quality improvements** – starting with the existing system, with learning to be leveraged over time if broader reform is expected to take a while – should no longer be put off. In the least, data protocols need to be developed, together with capacity strengthening. These include effective guides on questionnaire completion and records management, data cleaning and verification, and especially decentralized production and dissemination of abstracts and/or essential analyses and their strategic use (starting with asking the right questions). Some of these have been tried already; critical new approaches, based on evidence of what works, what does not and why, will need to be developed, also to secure the buy-in of stakeholders. **Data management best practice in humanitarian situations** needs to be defined, applicable to the context, and shared.

In parallel with the above, **dialogue and advocacy**, especially at higher levels and with a unified voice among partners, need to continue to ensure crisis sensitivity, emergency, refugees and resilience – within a coherent thematic – are duly considered in EMIS and data, and ultimately planning and response (the success of the GPE with not only technical assistance but also incentives tied to (monitoring of) performance has been proposed for consideration). Among others, the planned EMIS and data policy and updated Education Cluster Strategy are important spaces for engagement. **Sensitization and awareness-raising** of both humanitarian and development partners on the new agenda, together with capacity strengthening of both sides in relation to one another, has been called for (e.g. EMIS officers noted that strengthening their capacity at federal and regional levels on crisis-sensitivity, education in emergencies and refugee issues will help with strategic analysis).

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