Federal Democratic Republic of Ethiopia
Ministry of Health

SCHOOL HEALTH PROGRAM FRAMEWORK

Be Healthy to Learn and Learn to be Healthy

Addis Ababa, Ethiopia
August 2017

Forward

The Federal Democratic Republic of Ethiopia, Ministry of Health (MoH) recognizes that a lack of health and nutrition programs in schools impacts a child's ability to learn and leads to poor school attendance and higher dropout rates, increasing education wastage. We also recognize that disease, disability and ill-health conditions are major impediments to effective learning—limiting the realization of children's full productive potential and national development and poverty reduction efforts. This initiative will strengthening Ethiopian health services to focus on a life-cycle approach as concern shifts away from mere survival towards improving the quality of life.

The MoH in collaboration with other line sector ministries, in particular the Ministry of Education (MoE), is responsible for equipping students with the necessary knowledge of health, hygiene and nutrition for better academic performance and later on increased working potential and productivity. Building on the National School Health and Nutrition Strategy, whose development was led by the MoE, this document aims to move beyond nutrition and close the gap on reaching children with health services by providing comprehensive school health service packages at all levels of schools ranging from the pre-primary to tertiary level of education.

This school health program (SHP) framework aims to help guide service providers and administrators at different levels of education to provide quality, standardized and comprehensive promotive, preventive, curative and rehabilitative health services to school students at the pre-primary, primary, secondary and tertiary levels of education in a healthy environment. The ten service packages listed here in this document are organized and contextualized according to the level of school and consider the age and sex of the students. During the implementation of the SHP, close linkage and collaboration of school health care centers with the existing health facilities and administrative offices will be ensured.

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Acronyms and abbreviations

AYH	Adolescent and Youth Health
BCC	Behavior Change Communication
CSA	Central Statistics Agency
EMIS	Education Management and Information System
EPHI	Ethiopian Public Health Institute
EiE	Emergency in Education
MNS	Mental, Neurological and Substance use
FHAPCO	Federal HIV Prevention and Control Office
GBV	Gender Based Violence
GTMP	Global Trachoma Mapping Project
HBAgs	Hepatitis B surface Antigen
HC	Health Center
HEP	Health Extension Program
HEW	Health Extension Workers
Hgb	Hemoglobin
HIV	Human Immunodeficiency Virus
HMIS	Health Management and Information System
HO	Health Officer
HPV	Human Papilloma Virus
HTP	Harmful Traditional Practices
IEC	Information, Education and communication
ISHP	Integrated SHP
ITNs	Insecticide-treated bed nets
IUCD	Intrauterine contraceptive device
MDA	Mass Drug Administration
MoE	Ministry Of Education
MoH	Ministry of Health
MOWIE	Ministry of Water, Irrigation and Electricity
MHM	Menstrual Hygiene Management
MUAC	Mid Upper Arm Circumference
NCD	Non Communicable Diseases
NGOs	Non-Governmental Organization

OCP	Oral Contraceptive Pills
PHCU	Primary Health Care Unit
PTAs	Parent–Teacher Association
PID	Pelvic Inflammatory Diseases
RDA	Recommended Daily Allowance
RPR	Rapid Plasma Reagent
RUTF	Ready-to-use therapeutic food
SBCC	Social and Behavioral Change Communication
SHN	School Health and Nutrition
SHP	School Health Program
SRH	Sexual and Reproductive Health
STI	Sexual Transmitted Infections
SLOT	Strength Limitation Opportunity and Threat
SDG	Sustainable Development goals
SSA	Sub Saharan Africa
TB	Tuberculosis
Td	Tetanus diphtheria
TOT	Training of Trainers
TT	Tetanus Toxoid
TVET	Technical and Vocational Education and Training
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
URTIs	Upper Respiratory Tract Infection
VCT	Voluntary Counseling and Testing
Vit A	Vitamin A
WASH	Water, Sanitation and Hygiene
YD	Youth Dialogue
ARF	Acute Rheumatic Fever
RHD	Rheumatic Heart Disease
GAS	Group A Streptococcal

Operational definitions

School: An institution (both private and public) designed to provide learning spaces and learning environments for the teaching of students under the direction of teachers from pre-school to tertiary level of education

Preschool or pre-primary level education: Preparatory teaching for primary level education

Primary level education: 1-8 grades (1st cycle grades 1-4, second cycle grades 5-8)

Secondary level education: 9-12 grades (High school grades 9-10; Preparatory grades 11-12)

Tertiary level education: TVET, Colleges and Universities

SHP: A program designed with a defined package of health services offered in schools that are designed to promote students' physical, emotional, and social development, and to prevent and treat health problems of students

Child: Any person less than 18 years of age

Adolescent: Any person between 10 to 19 years of age

Youth: Any person between 15 to 24 years of age

Young person: Any person between 10 to 24 years of age

Pre-school or pre-primary children: children 4-6 years of age enrolled in KG or any other alternative pre-school setting

School-age children: Children attending schools at all levels in the country who are age 7 and greater

School Feeding Program: A Social Safety Net instrument that targets children in chronically food insecure areas and protects them against the worst consequences of household food insecurity and contributes to better learning and educational outcomes as well as to better nutrition

School Health Steering Committee: An inter-sectorial school health steering committee comprised of members mainly from the Ministries of Health, Education, Women and Children, Youth and Sport, Water Resources and other relevant stakeholders

Health communication: The study and practice of communicating promotional health information, such as in public health campaigns, health education, and communication between doctor and patient to influence personal health choices by improving health literacy

Health Extension Program (HEP): A defined package of basic and essential preventive and selected high impact curative health services targeting households and communities

Health literacy: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions

Health promotion: The process of enabling people to increase control over their health and its determinants, and thereby improving their health

School health center (የትምህርት ቤት ጤና ማዕከል): Primary care centers based in both public and private school at all levels to provide a combination of health promotion, basic curative service and referral

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1. Introduction

Globally, the concept of school health has evolved over a period several decades. The World Health Organization (WHO) has supported implementation of the school health concept worldwide since 1995. In 2000, UN agencies, including WHO, UNESCO, UNICEF, and the World Bank organized a strategy session at the World Education Forum in Dakar, Senegal to raise awareness of school health among the education sector and made a strong case of the value of school health in achievement of 'Education for All'. School health programs (SHPs) increase the efficacy of other investments in child development, ensure better educational outcomes, increase social equity and are highly cost effective.

Nigeria and South Africa are two African countries that have long-term experience implementing SHPs. Nigeria developed a National School Health Policy that provides strategic guidance to the implementation of SHPs in the country. South Africa established a Health Promoting Schools Committee with representatives from Education Ministries in order to introduce and implement the SHP, which addresses health issues such as road safety, personal hygiene, substance use, HIV and nutrition through teenage clubs, outdoor camps, and teacher support groups. Inter-sectorial approaches were employed in both cases.

Between 2002 and 2007 E.C., the net education enrollment rate has increased from 86.6% to more than 94% in Ethiopia, which shows that an increasing number of young people are attending school. The majority of Ethiopia's 37 million school aged population is currently attending schools. The Government of Ethiopia has designed and implemented different policies and strategies in order to reach the school age population, such as designated some schools as priority service delivery points for the HEP and providing for adolescent- and youth-friendly sexual and reproductive health services in youth centers and health facilities throughout the country. The Woreda Transformation Agenda, as part of the Health Sector Transformation Plan (HSTP), emphasizes school health as one of the criteria for a model Kebele. Additionally, the strategic initiative set by the HSTP to implement the second generation health extension program (HEP) includes strengthening school health services.

In Ethiopia, there have been several programs and strategic plans meant to address the health needs of children, adolescents, and youths. The Health Extension Package (HEP) has emphasized school health in its packages at the Kebele level. In addition, the National Adolescent and Youth Health Strategy, first launched in 2006 and again revised in 2016, contains service and intervention packages to address adolescent and youth sexual and reproductive health needs. The MoE launched the National School Health and Nutrition Strategy in 2012.

All pre-primary and primary schools and the majority of secondary schools in Ethiopia do not currently have school based health services. Unlike lower level education in Ethiopian, universities already have health clinics and health clubs staffed with a limited number of health professionals and counselors who can provide comprehensive health services to students. There are, however, newer initiatives within Ethiopia that target schools as the point of service, such as the provision of HPV vaccines to adolescent girls and the roll-out of school feeding programs in some areas. Additionally, there are other vertical programs implemented at schools with the support of local and international organization. These initiatives lay the foundation for the establishment of a comprehensive SHP that can fully address the needs of Ethiopian students' health.

Even though the above interventions are being implemented in the country, major gaps still exist in providing comprehensive school health services around basic knowledge and life skills to school children and adolescents across all levels in Ethiopia and limited, vertical program implementation may result in a duplication of efforts. Therefore, a comprehensive school health approach is needed to encourage each school to look at its whole school community and develop an encouraging environment and culture that promotes healthy ways of living standards.

The MoE developed and launched the National School Health and Nutrition Strategy in 2012 with the aim of improving access to educational achievement of school children through health and nutrition interventions within educational institutions. In line with the other existing health related policies, such as the HIV policy, the HSTP, the HEP, the Health and Nutrition Strategy, and the HIV intervention package, the new comprehensive SHP outlined below will bring together ten school health service packages:. Social behavioral change communication and life skills training to promote healthy lifestyles; Nutritional status assessment, counseling and support; Water sanitation and hygiene (WASH); Management of common infections, infestations and disorders; Routine and catch up vaccination program; Sexual and reproductive health services; HIV/STI prevention and control services; Mental, neurological and substance (MNS) use disorders prevention and management; Prevention of non-communicable diseases (NCDs) and injuries; and, school health preparedness, response and recovery during education in emergency.

2. Background

Ethiopia is a vast and diverse country with the second largest population in Africa, estimated at over 93 million in 2016 (CSA Projection 2013) and increasing at an average annual rate of 2.6%. The pyramidal age structure of the population remains young as school children (ages 5 to 9), adolescents (10 to 19) and youth (15 to 24) together constitute 46.5% (over 43 million) of the Ethiopian population.

Ethiopia has a federal system of governance, nine regional states and two city administrations. The Regional States have considerable authority and responsibility, ensured by the constitution, and exercised and discharged through councils at Region, Zone, Woreda and Kebele levels. Health and education are the shared responsibilities of each of these administrative tiers.

The Government of Ethiopia (GoE) has invested heavily in health system strengthening, guided by the country's policies and strategies, resulting in significant improvements in the health status of Ethiopians. As a result, Ethiopia has done remarkably well in meeting most of the Millennium Development Goals (MDG) targets. Of note is the achievement of MDG-4 with a 72% reduction in under-five mortality from the 1990 estimate. The significant reduction in child mortality has significantly contributed to an increase in average life expectancy at birth from 45 years in 1990 to 64 years in 2014. Additionally stunting and underweight in children less than five has decreased in the past two decades from 58% to 38% and from 41% to 23%, respectively (EDHS 2016).

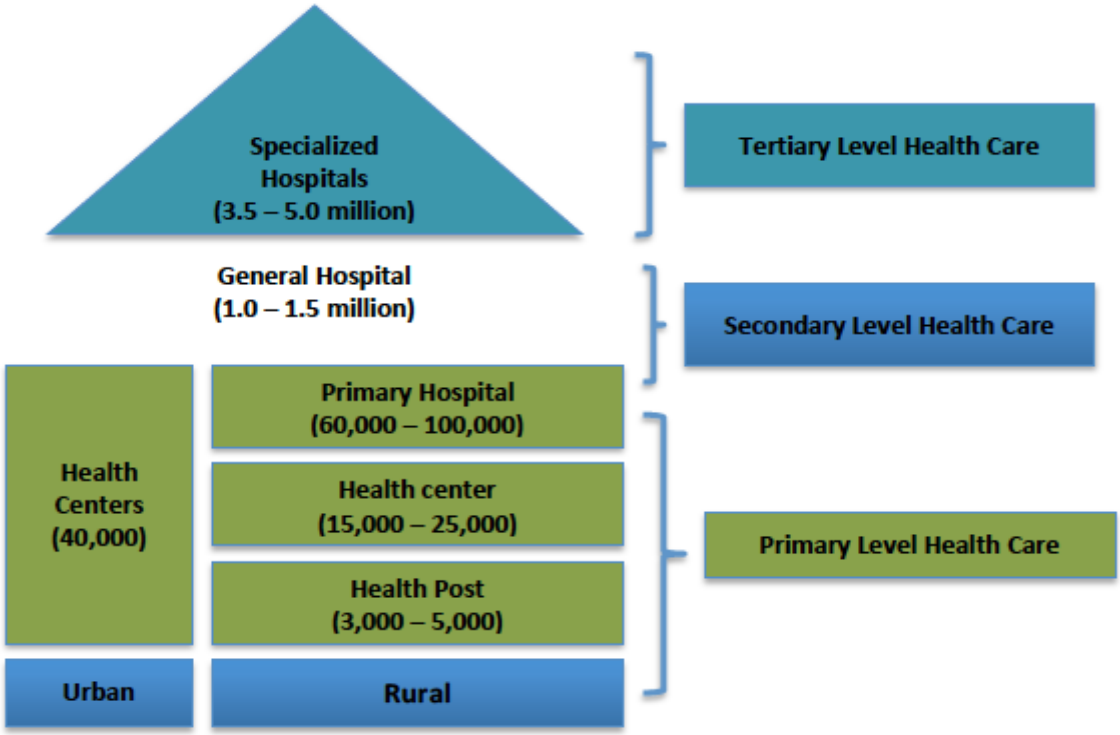
Even though the nation has achieved impressive reductions in morbidity and mortality and increased overall access to primary health care, high regional disparities remain in the majority of health outcome

indicators, driven by differences in the social determinants of equity such as gender based violence (GBV) and harmful traditional practices (HTPs), economic and educational status, access to basic utilities, poor network of roads and food security. The government has recognized these challenges and strategized to provide special support to regions and Woredas that are lagging behind from the others in the majority of health development indicators.

The significant gains made are as a result of the political commitment and strong leadership at all levels of government, as well as community engagement and ownership of health programs including school health. The country's flagship program, the Health Extension Program (HEP) has been the principal vehicle to expand access to essential health service packages to all Ethiopians, with a specific focus on women and children. Over the last 20 years, the country has successfully implemented its strategy of expanding and rehabilitating primary health care facilities. More specifically, 16,440 health posts, 3,547 health centers and 311 hospitals are providing health service to the population. The Ethiopian health service system is structured as a three-tier system:

- **Primary level** health care is composed of a primary hospital (PH), health center (HC), and five satellite health posts (HP). The PH provides inpatient and ambulatory services to an average population of 60,000 - 100,000. The HC serves a catchment population ranging from 15,000 - 25,000 people in rural areas and 40,000 people in urban areas. The HC is expected to provide both preventive and curative services and serve as referral centers and practical training site for Health Extension Workers (HEWs). The HP is the lowest level of Ethiopian health care system staffed by two HEWs each per Kebele and expected to serve a catchment population of 3,000 – 5,000 people;
- **Secondary level** health care comprises a general hospital which provides inpatient and ambulatory services to an average of 1 million – 1.5 million people;
- **Tertiary level** health care is composed of a specialized hospital that serves an average of 3.5 million - 5 million people and serves as a referral center from general hospitals.

FIGURE 1 THE THREE-TIER HEALTH SYSTEM OF ETHIOPIA



Similar to the health system, the current Ethiopian education system is multi-tier:

- **Pre-school programmes** are delivered through three modalities. The first, kindergarten, is predominantly operated by non-governmental organizations (NGOs), communities, private institutions, and faith-based organizations. The second, non-formal pre-school service, is delivered mainly through the child-to-child initiatives. The third modality, the setting up of 'O' class, is the most widespread and responsibility of local governments.
- **Primary education** is classified as primary first cycle which encompasses grade 1-4 and primary second cycle from grade 5- 8.
- **Secondary level** of education is categorized as secondary first cycle for grade 9-10 and the secondary second cycle from grade 11-12, is also called preparatory schooling.
- **Technical and vocational education and training** (TVET) is another level of education that is delivered at levels ranging from level one to five and intended for those students who have completed grade 10.
- **Undergraduate and postgraduate degree program**.

Through this system, a total of **37,325,971** students have been enrolled at different levels of the Ethiopian education system (MOE 2015/16). Out of these, 13,581,208 are pre-school students, 19,977,441 are in primary school, 2,421,163 are in secondary school, 515,872 are in TVET and colleges of teacher education (CTE) schools, and 830,287 students are in higher education (college and universities). The number of enrolled students has dramatically increased over time. Detailed school enrollment can be found in Annex I – III and below in Figure 2.

As of 2008 E.C., EMIS data shows that there are a total of 4,391 pre-schools, 34,867 primary schools and 3,156 secondary schools owned by the government, NGO or private sector. The number of universities in the country has been increasing and currently stands at 37 public universities. There are also 98 private colleges, 36 colleges of teacher education (CTEs) and 919 technical and vocational education and training schools (TVETs).

FIGURE 2 SCHOOL GROSS ENROLLMENT (MO, 2008 E.C., 2015/16 G.C.)

Level of education	Male	Female	Total
Pre-primary (KG or O class)	7,236,606	6,344,602	13,581,208
Primary (1-8)	10,569,951	9,407,490	19,977,441
Secondary (9-12)	1,276,046	1,145,117	2,421,163
CTE	126,320	85,413	211,733
TVET	146,163	157,976	304,139
Higher (University & College)	552,536	277,751	830,287
Total	**19,907,622**	**17,418,349**	**37,325,971**

The number of primary and secondary schools that have the infrastructure for a clinic within the school compound varies from region to region, but currently only one–in–four secondary schools has a clinic infrastructure. There are also significant disparities in terms of the extent and quality of health services provided at the school clinics. Many of the clinics in secondary school provide basic first aid services only. Detailed information on school clinics is available in Annex IV.

3. Situational analysis

A review of existing literature, surveys and guidelines was conducted in order to assess the situation of health, disease/disorder burden within the context of existing school circumstances. The situational analyses were framed in line with the SHP packages to be delivered at all pre-primary, primary, secondary and tertiary levels. The following situational analyses each relate to the SHP packages, which are broadly grouped as follows:

1. Social behavioral change communication and life skills to promote healthy lifestyles
2. School nutrition
3. Water, sanitation and hygiene (WASH)
4. Common infections, infestations and disorders
5. Vaccination and immunization
6. Sexual and reproductive health
7. HIV and sexually transmitted infections
8. Mental, neurological and substance use disorder
9. Non-communicable diseases and injuries
10. School health during education in emergency

3.1. Social behavioral change communication and life skills to promote healthy lifestyles

The National Health Promotion and Communication Strategy (2016-2020) indicates that further health improvements in Ethiopia are possible with improved awareness and adaption of healthy behavior, which can be facilitated through social and behavioral change communication (SBCC) approaches. The Strategy also indicates that adolescents' and young people's low health service utilization is driven by preferences and health seeking behaviors, a lack of youth friendly services, poor communication, and providers' attitudes and competencies, as well as other socio-cultural impediments. The Strategy emphasizes the need to put in place comprehensive SBCC interventions that target behavior change at community and household levels to address the increasing 'triple burdens' from communicable diseases, non-communicable diseases, and injuries and accidents.

School-based SBCC interventions that address students' awareness and behavior regarding communicable diseases, including reproductive health, HIV and non-communicable diseases, are limited in Ethiopia. However, in Ethiopia, the prevalence of teenage pregnancy is 13% and there are an estimated 500,000 unsafe abortions each year (National Health Promotion and Communication Strategy 2016). In addition, comprehensive knowledge about HIV is low among young women (24.3%) and men (39.1%) aged 15-24 years (EDHS 2016).

There has been no comprehensive assessment of the effectiveness and contribution of SBCC programs currently implemented in schools to provide health information and improve students' health status. Modalities for SBCC include group discussions/school community conversation, life skills and peer education, youth dialogue, use of IEC/SBCC materials, mini-media and entertainment programs, student clubs and other curricula activities.

Thus, it is crucial for this program to focus on the gaps in existing health programs, including behavioral and non-behavioral factors and individual-level determinants of health by strengthening school community empowerment and engagement, and by creating an enabling environment in order to sustain positive health behaviors and outcomes.

Life skills are a group of psycho-social and interpersonal skills, which can help people to make informed decisions, communicate effectively and develop coping and self-management skills that may help an individual to lead a healthy and productive life. Life skills can have significant health and social benefits for school children. They can help students transition successfully from childhood to adulthood by developing healthy lifestyles. They also equip students with skills to negotiate difficult or risky situations and equip students with problem solving and mediation skills. In addition, life skills help students differentiate between skills of learning, hearing and listening, and therefore help reduce instances of misconception or miscommunication regarding issues such as drugs, alcohol use and early sexual debut.

Schools are an appropriate place for the introduction of life skills education as they play an important role in the socialization process of an individual. In addition, schools are an economically efficient way of reaching out to young people by making use of existing infrastructure. It is also a place where children and adolescents can easily be reached on a larger scale. Experienced and influential teachers can serve as role models as they practice and exercise life skills and capitalize on their high level of credibility with

parents and other community members. Life skills development in school also contributes to creating an enabling environment for learning and self-development and lays a strong foundation for the future life of the students through building self-confidence, resisting peer pressure and fostering respect for themselves and others.

Although there is very little life skills education at present in Ethiopia, there is rich experience from other countries. Despite the general practice of providing life skills education in secondary schools, global evidence has shown that life skills education provided in primary schools is very effective in bringing both adaptive and positive behavior changes that enable individuals to deal effectively with the demands and challenges of everyday life. Life skills education focused on communication and interpersonal negotiation/refusal, decision-making and critical thinking, coping mechanisms and building self-confidence has been shown as successful.

In the Ethiopian context, adolescents face risk of substance use (e.g., alcohol, tobacco, and khat), early sexual initiation, and teenage and unintended pregnancy, potentially resulting unsafe abortion. This is mainly due to lack of information, education, services and skills that help them make informed decisions. These problems are often addressed by life skills development to equip students to mitigate peer pressure and improve decision-making and control other social and emotional factors that may influence them.

3.2. School nutrition

School children are often thought of as naturally healthy, but in many areas in Ethiopia, school children are stunted, underweight, wasted, anemic and deficient in zinc, vitamin D, iodine and vitamin A. In many areas, school children are affected by health- and nutrition-related problems that constrain their ability to thrive and limit their ability to attain their education potential. These inadequate nutritional conditions, highly prevalent in a number of Ethiopian regions are all believed to lead to impaired cognitive ability. The EDHS 2016 indicates that in Ethiopia 38.4% of children are stunted and 23.6% of children are wasted with strong rural-urban disparities.

Studies show that providing meals at schools improves scores on arithmetic tests by increasing regular attendance and improving cognitive capacity (Simeon 1998). Missing breakfast impairs learning performance to a greater extent for children of poor nutritional status. Stunted children enroll in school later than non-stunted children (Bundy et al 2006). The Cost of Hunger Study in Ethiopia (COHA 2013) revealed that 16% of all primary school grade repetitions in 2009 were associated with stunting and that stunted children achieve on average 1.1 years less in school education. The study further estimated Ethiopian's annual economic cost due to school repetition is about 93 million ETB. The study showed that ill health and malnutrition affect access to education, participation, completion and achievement.

Micronutrient deficiencies, commonly called "hidden hunger", take a longer time than protein-energy malnutrition to manifest physically and visibly. Micronutrient deficiencies have a significant impact on children's cognitive and physical growth and school performance. At the global level, micronutrient deficiencies are major public health concerns, of which the key deficiencies are vitamin A, iron, iodine, and in more recently, zinc. Vitamin A, zinc and iron deficiencies account for 19% of the 10.8 million global child deaths annually (WHO 2002). In terms of the number of children suffering from micronutrient deficiencies, reports note that worldwide 85 million school-age children are suffering from

vitamin A deficiency, 210 million from iron deficiency anemia, and 60 million children are affected by iodine deficiency (Drake et al 2002).

Iron, zinc and iodine deficiencies have been linked to poor cognitive development and poor educational performance. Children with iron deficiencies are less likely to attend school. Vitamin A deficient children have a weakened immune system, visual defect and an increased risk of dying from diarrhea, malaria and measles and zinc-deficient children experience growth failure as well as weakened immunity (Nederveen 2010).

The National Food Consumption Survey clearly indicated that Ethiopian's consume both macro- (protein and fat) and micro-nutrients (Calcium, vitamin A, folic acid, zinc, etc.) at levels far below the Recommended Daily Allowance (RDA) (EPHI 2013). The survey also indicated that in all age groups people's daily calorie intake was almost exclusively based on cereals and animal-based food products. The proportion of households consuming from five or more food groups was found to be only 20% (EPHI 2015).

The National School Health Nutrition Survey also found a 12.8% prevalence of night blindness among school children and adolescents (MOH 2008). The recent National Micronutrient Survey indicated a subclinical vitamin A deficiency among 10.9% of adolescents. The same study showed a 25.6% prevalence of anemia adjusted for altitude among school-aged children (5 to 14 years). Micronutrient deficiencies were more prevalent among rural residents and pastoral communities (EPHI 2016). The national prevalence of zinc deficiency was found to be 36% in the same age group (5 to 14 years). The prevalence of iodine deficiency, as measured by mean urinary iodine concentration below the cut off (100 µg/L), was 48%, despite the fact that iodized salt coverage at household level is 85%. The survey also found a goiter prevalence of 3.7% in school age children with strong regional disparities. In general, school-based health programs can provide a cost-effective and low-cost solution to address nutritional deficiencies.

3.3. Water, sanitation and hygiene (WASH)

Global evidence suggests that the provision of safe and adequate water supply, improved sanitation facilities and safe hygiene practices are essential services and interventions in schools. This is because schools without adequate water, excreta disposal and hygiene services create high-risk environments for children and staff, and thus exacerbate children's particular susceptibility to environmental health hazards. Children's ability to learn may also be affected by inadequate sanitation and hygiene services in several ways; for instance, through creating breeding sites for harmful insects, helminthes, bacteria and viruses (NHN Strategy 2012).

A number of studies showed that each year children lose 272 million school days due to diarrhea and that an estimated one in three school-age child in the developing world are infested with intestinal worms. Further, the average IQ loss per worm infestation was 3.075 points, representing 633 million IQ points lost for people who lived in the world's low-income countries (Hutton and Laurance 2004).

The majority of primary schools in Ethiopia have sanitation facilities, with 86% having some toilet or latrine provision. However, the majority are traditional pit latrines and only 31% of school toilets or

latrines are classified as 'improved sanitation'. Many schools lack adequately separated facilities for boys and girls, as well as provisions for special needs and young age groups. As a result of inadequate sanitation provision, only about half (49%) of all schools are considered to be free from open defecation. Hand washing is equally vital to ensure a healthy school environment for the school community. Only about one fifth of primary schools (21%) report having hand washing facilities and only 5% have soap. Hygiene education activities (including menstruation care) are currently undertaken in few schools. Provisions for menstruating girls are only available at 20% of primary schools.

The same data source also indicated that most secondary schools have some sanitation facilities, with 87% having some toilet or latrine provision. However, a lot of provisions are traditional pit latrines with only 41% school toilets or latrines are classified as improved. Hand washing provision is somewhat better than in primary schools, but still only about half of secondary schools (46%) report having hand washing facilities and only 7% have soap. Hygiene education is provided in two thirds (68%) of secondary schools. The 'Safe WASH at Schools' Indicator combines indicators in the questionnaire to identify schools that have a protected water source which is functional and meets demand, as well as improved latrines and hand washing facilities; only 10% of schools meet this standard.

3.4. Common infections, infestations and disorders

Despite an overall increase in coverage and quality of child health services delivered through existing strategies, health care utilization remains low due to barriers to access and limited demand. In order to achieve the full potential of demand-generation activities for accessing and utilizing health care services, targeting major school-age diseases while at schools can play a critical role. The common school-age childhood diseases and disorders are outlined below.

3.4.1. Intestinal infections and infestations

Soil transmitted helminthes infections are among the most prevalent intestinal infestations in developing countries. Generally, these parasites are most common in areas with tropical climates. The most prevalent intestinal infestations include *Ascariasis*, *Enterobius Vermicularis*, *Hymenolepis* and hookworm infestations. School age children are among the most vulnerable group to be exposed for intestinal parasitic infestations. For many children, going to school is the first opportunity to come in contact with people other than close relatives and neighbors. Consequently, school enrollment may also represent the first exposure to a range of infectious diseases.

Worms do not reproduce in human body but produce eggs, which then contaminate the environment, including water and soil. People who use contaminated water for drinking and sanitation and those who walk barefoot are often prone to worm infection and infestation. Children are particularly susceptible to worm infection due to the fact that children's behaviors make them vulnerable to oral-fecal and or soil-to-skin contact, increasing the likelihood of worm infection. Such infections predispose students to anemia and malnutrition and other co-infections. Worms can be diagnosed microscopically and treated accordingly. However, individual diagnosis is much more expensive than treatment. Hence, periodic anthelminthic treatment as a part of child health services in schools plays a crucial role in protecting children from worm/parasitic infections.

The WHO estimates that over 270 million pre-school children and over 600 million of school children are living in areas with high levels of parasite transmission and are in need of treatment and preventive interventions (WHO Neglected Tropical Diseases 2010). Intestinal helminthes contribute to about 39 million disability adjusted life years and thus result in substantial economic loss. Moreover, intestinal obstruction and related abdominal complications caused by large adult worms contribute to preventable child deaths.

In Ethiopia, intestinal parasitic infections increase susceptibility to other infections, are among leading causes of mortality and morbidity and related to public health problems such as malnutrition, anemia, and growth stunting. Evidence from a variety of studies shows that intestinal parasites are prevalent in varying magnitudes among school children in Ethiopia. In eastern Ethiopia, the overall prevalence of intestinal helminthiases was estimated at 27.2% with *Hymenolepis Nana*, hookworm and *Schistosoma amansoni* contributing to half of the burden. Additionally, prevalence as high as 60% was reported in studies in other parts of the country. Prevalence is closely related with low income, poor personal hygiene, poor environmental sanitation, lack of pure water supply, limited access to clean water, lack of regularly wearing shoes and low altitude. Therefore, health information dissemination and SHPs should focus on personal hygiene, in particular the benefits of washing hands after defecation and the health benefit of wearing shoes in particular for very young children.

Helminthiases, which have significant effect on body iron status, are widespread in the country. Close to 23 million school age children live in areas with high infection rates and therefore qualify for anti-helminthes treatment. In the first Mass Drug Administration (MDA) in 2007, one million school-age children were dewormed for soil-transmitted *Helminthiases* (STH) and *Schistosomiasis*, while 6.8 million and 7.8 million school-age children received similar treatments in 2013 and 2014, respectively. Although deworming is mainly done in schools for the specified age group, children between the same age group who are not enrolled in schools also need to be treated.

3.4.2. Fungal and bacterial skin infections

Global evidence shows that there is a significant burden of skin disease in school age children of which infectious dermatoses are most common. The common skin conditions that prevail among school age children include fungal infections, bacterial infections, such as impetigo, and parasitic skin diseases.

The situation is similar in Ethiopia; a retrospective analysis performed on 17,967 medical records of children aged 0 to 18 years attending the Dermatological Centre in Mekele from January 2005 to December 2009 showed that skin infections and infestations accounted for 47% of the disorders seen. Fungal infections were the most common (44.1%), followed by bacterial and parasitic diseases. Dermatitis constituted the second most common diagnostic category (24.7%), with contact dermatitis was the most common diagnosis (48.8%) within the category. (Marrone R et al 2012). A 30% rate of *tineacapitis* was reported in one study among school children (Figueroa JI et al 1997).

Given the overall high prevalence of these contagious skin problems in school age children, it is imperative that SHPs be inclusive of active case finding approaches and preventive measures to curb the existing prevalence of fungal and bacterial skin infections.

3.4.3. Skin infestation

Studies report that the prevalence of ectoparasites (skin infestations) is still a public health problem affecting school children. Among the common skin infestations are head lice, scabies, *Meiosis* and *Tunisair*. These forms of ectoparasitosis are a major health concern in schools as well as in the wider community.

In school-aged children, head lice infestation can cause sleep disturbances and concentration difficulties, potentially leading to poor performance in school, social distress, discomfort, parental anxiety, embarrassment, and unnecessary absence from school. In developing countries, persistent infestation has also been associated with high morbidity, including secondary infections and impetigo. *Tungiasis* can also be incapacitating especially due to severe physical disability emanating from its pathological effects of severe itching, pain and sensation of a foreign body on the skin. A survey undertaken in school children in southwest Ethiopia found that infestations were the most prevalent skin pathology followed by fungal infections, thus making it a disease of significant health concern (Figueroa JL et al 1996)

Given that schools are usually the first time children are exposed to varying highly contagious diseases, periodic screening among students is obligatory in a SHP to establish a healthy school environment.

3.4.4. Upper respiratory tract infections (URTIs) with emphasis on rheumatic heart disease

Acute rheumatic fever (ARF) and its sequel rheumatic heart disease (RHD) continue to cause significant morbidity and mortality in developing countries and have been under-recognized as a global health problem for decades. Overall global burden estimates show that there are 471,000 annual cases of ARF, with an incidence in children aged 5 to 15 years ranging from 10 cases per 100,000 in industrialized countries to 374 cases per 100,000 in the Pacific Region. The overall burden of RHD is estimated to be 15.6 million prevalent cases with 282,000 new cases and over 233,000 deaths per year (Carapetis JR et al, 2005).

The highest prevalence of RHD is in Sub-Saharan Africa (SSA) with a prevalence of 5.7 per 1,000 children, compared with 1.8 per 1,000 in North Africa, and 0.3 per 1,000 in economically developed countries with established market economies (WHO 2007).

Ethiopia is one of the high burden countries for RHD in SSA. According to one study, the prevalence of RHD in school-age children between 13 to 15 years ranges from 6.4 per 1,000 and 7.1 per 1,000 children. Consistent with observations from elsewhere in the world, the burden of ARF and RHD in Ethiopia is higher among the poor, and is more common in rural than urban areas, except in urban slums.

Prevention of RHD can be achieved through the control of ARF. Effective methods of controlling ARF and RHD include prompt and adequate treatment of suspected or confirmed Group A *Streptococcal Pharyngitis* with penicillin before the occurrence of ARF (primary prevention), and long-term regular administration of penicillin to prevent recurrent ARF (secondary prevention), since the majority of RHD are a result of recurrent ARF. But as it is the case in most countries in SSA, primary and secondary prevention strategies have not been fully implemented in Ethiopia. While challenges to controlling the epidemic of ARF and RHD in Ethiopia are many, if not insurmountable, the above-mentioned proven and cost-effective means of controlling the problem do exist.

As schools play a large role in spreading streptococcal infection, they can also play a large role in its control. Where school health services exist, they should be used to identify children with signs suggestive of ARF. Screening school children for ARF is worthwhile in areas with a high prevalence of RHD, which can be carried out by primary health care workers. Hence, through a SHP, it is possible to boost the preventive, early case identification and appropriate treatment interventions that are crucial in addressing this preventable child health problem.

3.4.5. Eye health

Around the world, an estimated 19 million children are visually impaired and are officially classified as either blind or with low vision. Of these, 12 million children are visually impaired due to refractive errors, which is easily diagnosed and corrected with a pair of glasses. In addition to refractive errors, primary school age children may be affected by allergic eye disease, conjunctival infections, including trachoma, and eye injuries. Some children may have more serious conditions, which require surgery, such as cataracts. Other children may have conditions associated with permanent vision loss. Ethiopia has one of the highest prevalence of active trachoma, which remains a major health problem, and a leading cause of blindness. The trachoma survey carried out by the Global Trachoma Mapping Project (GTMP) in 2013 revealed that trachoma is endemic in 604 rural Woredas with around 73 million people at risk of infection.

In addition, the prevalence of blindness and low vision in Ethiopia is one of the highest in SSA. In Ethiopia, cataracts are responsible for around half of all blindness with other major causes being trachoma (11.5%), other corneal opacities (7.8%), refractive errors (7.8%) and glaucoma (5.2%). Similarly, the major causes of low vision are cataracts (42.3%), refractive errors 33.4% and trachoma 7.7% (HSTP). Among children visiting a tertiary eye center at Jimma University Hospital, the most common childhood ocular diseases diagnosed in 2010 were ocular surface and eyelid infections (30.5%), ocular allergies (28.1%), ocular traumas and injuries (15.5%) and refractive errors (5.8%).

Avoidable eye diseases accounted for about 97% of ocular morbidities. Children with sight problems must be provided with spectacles, low vision devices or medical intervention (Vision 2020). Refractive services in schools, especially in primary schools for children aged 7-15 years, could contribute a great deal to relieving this burden. By 2015, the total number of schools performing screening had reached 1,750; however only 250,000 students were screened and only 25,000 students received eye glasses (MoH Health Strategic Plan 2016).

3.4.6. Hearing defects

Recent WHO estimates indicate that 32 million children across the world live with disabling hearing loss. Disabling hearing loss is unequally distributed globally with SSA accounting for 9% of the total burden. In children, prevalence of hearing defects decreases exponentially as GNI increases. In most regions, prevalence in children decreases linearly as parental literacy rates increase.

In a community based survey in rural eastern Ethiopia in 2014, hearing loss was the most frequent disability among children aged 0 to 14 years. Among these students almost half of them had chronic ear discharge and the majority of children had treatable hearing problems. One of the main impacts of hearing loss is a child's ability to communicate with others. Spoken language development is often delayed in deaf children. Hearing loss and ear diseases such as otitis media can have significantly adverse effects on

the academic performance of children (WHO 2012). Around half of all cases of hearing loss and deafness are avoidable through primary prevention and many cases can be treated through early diagnosis and suitable management.

3.4.7. Oral health

The major oral health problems include dental caries, periodontal disease, malocclusion and dental fluorosis. The most common chronic dental diseases in children worldwide are dental caries (tooth decay) and gum disease (gingivitis). Across the world, dental caries and gingival bleeding, indicative of gingivitis, affect 60% to 90% of school children. In Ethiopia there is very little epidemiological research available. In one study conducted in Addis Ababa in 2000, periodontal disease affected more than half (53.4%) of the study subjects and was significantly higher in males, those with high consumption of sweets, those having 'injera' as staple diet and those with poor oral hygiene. The prevalence of malocclusion was 23.7%, while crowding and spacing of teeth were found in 23.8% and 18.3% of the subjects, respectively. The prevalence of dental fluorosis was low (1.6%). Another study conducted among marginalized children aged 6 to 15 years in Addis Ababa indicated that prevalence of dental decay and gum disease was significantly high in HIV positive and orphaned children.

Most dental caries in children remain untreated and may have general health consequences. Diseases of teeth and mouth affect children's ability to eat and chew, the food they choose, their appearance and the way they communicate. Pain from teeth and the mouth can compromise children's attention and their ability to learn at school, thereby hampering, not only their play and development, but also denying them the full benefit of schooling. The essential risk factors involved with mouth disease among children and young individuals relate to an unhealthy diet, in particular those high in sugar consumption, poor oral hygiene, and use of tobacco and alcohol. Lack of sanitary facilities and clean water, lack of experience in promoting health and prevention of mouth diseases among school teachers, lack of health education tools and isolation of oral health from school curricula contribute to poor dental hygiene. In addition, lack of school health services may limit the control of mouth diseases in schoolchildren. Lack of referral of children for dental care is another factor, which may limit prevention and treatment of mouth diseases.

3.4.8. Physical disability

Children with disabilities may suffer from long-term physical, mental, intellectual or sensory impairments that may hinder their full, effective and equal participation in society. Although disability is believed to be prevalent among children in Africa, official statistics are unavailable either due to lack of reliable data or due to an attempt to conceal the extent of the problem. Most countries in Africa depend on UN estimates, which reported about 5% of children in the age bracket of 0 to14 years as having one or more disability.

3.5. Vaccination and immunization

Immunization is among the most cost effective infection prevention methods and is an established public health intervention. Its introduction in Ethiopia dates back to 1974 with limited antigens against six major childhood infections. The scope of immunizations in Ethiopia has expanded to more than 11 antigens with the introduction of new vaccines.

In Ethiopia immunization coverage with specific antigens has shown a progressive increase in the past years. The most recent WHO and UNICEF estimates of national immunization coverage (wuenic) for

2015 shows 86% and 78% coverage for the third dose of Diphtheria-Pertussis-Tetanus (DTP3) and the measles vaccine, respectively. The 2016 EDHS assessed tetanus toxoid vaccination coverage in women of reproductive age through the proxy indicator of infants protected at birth, showing that only half (49%) were protected from neonatal tetanus risk. The Human Papilloma Virus (HPV) vaccination demonstration project in two districts used schools and other existing platforms for immunization and (Gomma, Jimma zone and Ahferom, central Tigray) from 2015 - 2017 showed high coverage rates for girls aged 9 to14 years. Even though Ethiopia's overall immunization coverage continues to increase at the national level, there are regional disparities with lower coverage of key antigens in pastoral and rural areas. The recent EDHS confirmed this trend. There is a significant opportunity for the integration of immunization screening and service linkages with vaccines into schools in order to advance immunization coverage in the country.

Having an established school platform for immunization will provide a modality for immunization catch up in early school years and will increase the potential uptake of current vaccines as well as those that will be introduced in the near future, such as HPV. This will reduce the rate of accumulation of susceptible children and the risk of an outbreak of the particular disease.

3.6. Sexual and reproductive health

Adolescence is time when physical, social, and emotional changes occur in the life of any child. Adolescent is also characterized by the development of secondary sexual characteristics, including menarche among girls. It is also an important time to lay a strong foundation for education, build positive health behaviors and critical thinking skills. Access to comprehensive reproductive health (RH) services provides support and protects students from multifaceted RH problems during that critical time of transition.

However, evidence shows that lack of access to RH information, education and services negatively affects the health of students and may lead to physical problems, guilt, ambiguity, and confusion related to changes in their bodies. Girls also need a safe space, friendship and support networks and older girls and women as role models (Population Council 2011; Browne 2014). In developing countries, particularly in Africa, pregnancy and delivery related complications are the second most common causes of deaths among adolescents (10 to19 years) next to injury, violence, and infections (UNFP 2012). The most common factors associated with morbidity and mortality of adolescents and youth in Ethiopia includes early sexual debut, risky sexual practices, child marriage, early child bearing, unintended pregnancy, unsafe abortion and STIs, including HIV.

A study conducted among university students in Jimma showed that students have inadequate and fragmented knowledge on sexual and reproductive health (SHR) related problems (Setting et al 2013). As a result, most of them are not adequately equipped to make informed and responsible decisions. This lack of information could increase their engagement in risky sexual practices such as early sexual initiation, having multiple sexual partners, inconsistent or non-use of condoms and low use of other contraceptives. The study also indicated that young people's SRH information and service utilization are very low, which may contribute to the existing burden of SRH problems among this age group.

Early sexual debut and sexual activity before age of 18 years is common in Ethiopia. According to the EDHS 2011, among women age 25 to 49 years, 29% had their first sexual encounter before age 15 and 62% before age 18. The median age at first sexual intercourse for women age 25 to 49 years is 16.6 years, which is very close to the median age at first marriage (16.5 years). A study at five public universities in Ethiopia in 2011, reported that more than 30% of the 5,000 interviewed students had started sexual intercourse before they joined university and the mean age at first encounter was 16.7 ± 2.7 years. A more specific analysis of Hawassa University showed that about 68% and 12% started sexual practices while they were in high school and primary school, respectively (Berhan Y et al 2012).

Students also responded that they were engaged in unsafe sexual practice such as having multiple sexual partners (31%), unprotected sex (sex without condom with non-regular partners) (27%), sex with commercial sex workers, and non-consistent and improper use of condoms. About 34% of childbirths among young women aged 15 to19 years were unintended, which result undesirable health outcomes such as obstructed labor, obstetric fistula, chronic pelvic pain and depression (Tebekaw Y et al 2014).

Another study conducted in Bahir Dar suggested that barriers in utilizing RH services are related to inconvenient working hours and fear of being seen by parents or people whom they know. Students between ages 20 and 24 are 2.31 times more likely to utilize RH services than students' age 15 to 19 years. Similarly, students who had RH related problems are 1.54 times more likely to utilize services than students who had no reproductive illness. According to EDHS 2011, the highest unmet need for family planning is among the adolescent age group (15 to19 years). This shows that there is limited access to RH services that meet the diverse needs of adolescents.

3.7. HIV and sexually transmitted infections

The prevalence of HIV among adolescents and youth in Ethiopia is 1.22%, with significant variation between young females and males (EPHI 2015). Studies on sexual practices of adolescents and youth in Ethiopia show that a significant number of young people practice unsafe sex. Initiation of first sex by Ethiopian youth is around 16-years-old for both boys and girls, however some studies indicate the sexual initiation for girls can be 6 to 7 years earlier than boys (MOE and FHAPCO 2013).

A research review on youth in Ethiopia documented that 49.7% are sexually active; and more than half of those youth reported having two or more sexual partners. A study among high school students in northwest Ethiopia indicated that while most students were well informed about the major modes of HIV transmission, 39% reported having unprotected sex (sex without condom); and 43.3% of sexually active students had more than one sexual partner (Attwelly 2004). A study conducted among five universities also indicated that on average around 30% of university students, both male and female, were sexually active. In both cases, unprotected sexual practice patterns among students lags behind knowledge and attitude towards prevention of STIs and condom use. Students suffer from complications of unsafe sex such as STIs and abortions (Desalegn et al 2011).

A review of the Ethiopian Higher Education Institutions HIV and SRH Package shows that students' SRH receive little attention in higher education institutions. When SRH care is available, many students do not know where to go or are unable to pay for it. Furthermore, available services are not youth friendly. Universities focus on academic and administrative issues and pay less attention to HIV and SRH. Health

service providers also impose age restrictions on providing family planning methods, including condoms, even when such restrictions are neither medically justifiable nor officially sanctioned.

Researchers also indicate that most sexually risky behaviors among adolescents and youth are related to engaging in exploratory behavior, unprotected sex, inconsistent condom use, peers' social approval, false sense of non-vulnerability, use of substances, misuse of technology for pornographic products, etc. In addition to these individual risk factors, other structural socio-demographic factors exacerbate young people's vulnerability including gender inequality, poverty, and place of residence, HTPs, labor abuse and lack of adequate infrastructure (Nigatu R & Seman K 2011).

3.8. Mental, neurological & substance use disorder

According to the WHO definition, mental health is "a state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". It should be noted that the definition does not refer exclusively to the absence of "mental illness", but also addresses the concept of "mental wellness". Identifying and preventing MNS and related problems in children, adolescents, and young adults is critical to ensuring behavioral and physical health. Behaviors and symptoms that signal the development of a behavioral disorder often manifest two to four years before a disorder is diagnosed. In addition, people with a mental health issue are more likely to use alcohol or drugs than those not affected by a mental illness. The lack of attention to the mental health of children and adolescents may lead to mental disorders with lifelong consequences, undermine compliance with health regimens, and reduce the capacity of societies to be safe and productive.

Globally, it is estimated that about 10 to 20% of children and adolescents suffer from mental illnesses. Nevertheless, most young people's psychosocial problems related to socio-cultural and economic factors can be addressed through promotion and prevention services. Evidence indicates that about 75% of mental disorders in adulthood have their onset in youth, particularly in the 12 to 24 year age group. A systematic review conducted in 2012 to determine rates of psychopathology in children and adolescents in SSA reported an overall prevalence of 14.5% for children up to age 16 years. Additional studies from Kenya and South Africa reported prevalence of 10.8% and 34.9%, respectively.

In Ethiopia, mental illness in children and adolescents is estimated to be between 17% and 23%, with lower prevalence in rural settings. A cross-sectional study undertaken in Butajira (Southern Ethiopia) indicated that 3.5% of study participants had at least one or more mental and behavioral disorders, among which anxiety disorders (1.6%) was the most frequent followed by attention deficit hypersensitive disorder (1.5%), disruptive behavior disorders (1.5%), mood disorders (1%) and elimination disorders (0.8%). The most significant risk factors for the development of psychopathology in children and adolescents are related to socioeconomic problems. These include maternal psychopathology, disruption of the family and marital status, exposure to stressful events, and poverty related factors (such as insufficient food, low socioeconomic status, and illness). The GoE has undertaken several measures to address mental health problems. In 2010, a survey of psychiatric problems in children and adolescents in Ethiopia revealed schizophrenia, bipolar disorder, depression, suicidal attempt, alcohol abuse and cannabis use/abuse as major psychiatric problems.

In 2012, MoH developed a Mental Health Strategic Plan for 2012/13 to 2015/16 with an aim to address the mental health needs of all Ethiopians through quality, culturally competent, evidence-based, equitable and cost-effective care. In this plan, particular attention was given to the special needs of particular vulnerable populations including children and adolescents. The National Initiative for Mental Health in Ethiopia (NIMHE) was established in 2005 to guide the overall development of national mental health in Ethiopia focusing on child and adolescent mental illness. Mental health services in schools should be comprehensive and continue to focus on promoting healthy development and address barriers to development, learning, parenting and teaching. The services should also address issues such as school adjustment and attendance problems, dropouts, physical and sexual abuse, substance use disorder, relationship difficulties, emotional upset, delinquency and violence.

The forms of violence found in schools can be physical, sexual and emotional, and can occur together. Violence perpetrated by teachers and other school staff include corporal punishment and other cruel and humiliating forms of punishment or treatment and sexual and gender-based violence. Violence perpetrated by children includes bullying, sexual and dating violence, schoolyard fighting, gang violence and assaults with weapons (United Nations 2006). Such incidences are often not reported and active tracing of survivors needs to be undertaken by health workers in close consultation with school teachers.

Use of narcotic or psychotropic substances affects an individual's health and psychosocial behaviors. Use of substances such as khat, tobacco and alcohol is widespread among adolescents and youth in Ethiopia. The 2011 EDHS report indicated that 45.6% of Ethiopian adolescents and youth consume alcohol more than six times in a month with higher rates in males (47.7%) than females (43.5%). Recently, the national prevalence of khat consumption among adolescents and youth is 51%, again with higher rates among males (56.5%) than females (36.6%) (CSA ORC Macro 2011). Furthermore, khat chewing is presumed to increase the prevalence of smoking cigarettes, Shisha, hashish and other highly addictive drugs. A study in Bahir Dar University students revealed that lifetime prevalence of khat chewing was 24% of which 12.7% were current users.

3.9. Non-communicable diseases and injuries

Non-communicable diseases (NCDs) are the leading causes of death globally, killing more people each year than all other causes combined. Of the 56 million deaths that occurred globally in 2012, 38 million (68%) were due to non-communicable diseases, comprising mainly cardiovascular diseases, cancers, diabetes and chronic lung diseases. Contrary to a widely held opinion, available data demonstrates that nearly 85% of deaths due to NCDs occur in low- and middle-income countries. The main causes of NCDs are known. A set of common risk factors are responsible for most of the major NCDs including unhealthy diet, physical inactivity, harmful use of alcohol and tobacco use. Elimination of modifiable risk factors would prevent 80% of premature heart disease, 80% of premature stroke, 80% of type 2 diabetes and 40% of cancer.

In Ethiopia, khat use and indoor air pollution are additionally considered as important risk factors for NCDs. Khat is included as a risk factor because of the vicious cycle between khat chewing and other major NCD risk factors. While chewing khat, individuals concomitantly consume high levels of tea, sugary carbonated drinks and coffee and the ceremony is often accompanied by cigarette smoking. The WHO estimates that in Ethiopia 30% of deaths in 2012 were due to NCDs in the year, of which cardio-

vascular diseases accounted for 9%, cancer for 6%, chronic obstructive pulmonary diseases for 3% and diabetes mellitus for 1%. In addition, other various NCDs contributed 11% of mortality and injuries an additional 9%. Communicable, maternal, perinatal and nutritional conditions accounted for 60% of the deaths in the same year. The Ethiopian National STEPS Survey on NCDs conducted in 2015/16 among adults aged 15 - 69 years showed 4.2% as current smokers and nearly 41% had consumed alcohol during the past 30 days prior to the survey.

A total of 60.4% of respondents responded that they always or often add salt or salty sauce to their food before eating or as they are eating. About six percent of the study population did not meet WHO recommendations on physical activity for health and among those who reported physical activity 21.8% were in the low level of activity group and about 16% of respondents were current khat chewers. Regarding injury, about 3% of respondents were involved in a road traffic crash as a passenger, driver, or pedestrian during the past 12 months preceding the survey. About 3% of respondents had been seriously injured in a non-road traffic-accident (commonly falls, cuts and animal bites) in the past 12 months. In the past 12 months, 1.5% of respondents were involved in violent injury. Almost 2% of the respondents were sexually abused during adulthood. In the same study, prevalence of raised blood pressure (SBP > 140 and/or DBP > 90 mmHg) among Ethiopian adult population was 16%, 6.4% were overweight or obese and 21.6% were underweight. From the study participants, 6% had raised blood glucose or diabetes. Rheumatic heart disease which occurs following *streptococcal tonsilopharyngitis* is also a major cause of cardiovascular morbidity and mortality in children and young adults in Ethiopia as shown by recent studies at hospital level, in schools and at the community level.

Cancers are also common medical problems in Ethiopia. Breast and cervical cancer are leading causes of cancer in women while prostate cancer, colorectal cancer and hematologic cancers are the leading causes of cancer among men. Studies in Addis Ababa and Gondar show the prevalence of chronic respiratory diseases, such as asthma, in children and adolescents is 2.8% and 3.8%, respectively.

Unfortunately, there is a common misconception that NCDs do not affect children, but are diseases of adulthood only. However, evidence shows that NCDs and their risk factors have enormous impact on the health of children. Children suffer from a wide range of NCDs; some are triggered in childhood by complex interactions between the child's body, surrounding environment, living conditions, infectious agents, nutritional and/or other factors. There is a rise globally in overweight and obese children and children with type 2 diabetes. Globally, nearly 22 million children under 5 years of age are overweight. Overweight and obese children are likely to stay obese in adulthood and more likely to develop NCDs like diabetes and cardiovascular diseases at a younger age. The overall prevalence of overweight/obesity ranged from 5.9% to 17% in studies on children and adolescents from Ethiopia. The prevalence of current and lifetime smoking varied between 1.8% - 28% and 5.8% - 22.8%, respectively among adolescents and young adults in studies among these age groups. Effective interventions are available and urgent action is required.

Injuries are the other important health problems affecting children and adolescents. The young age of schoolchildren, the stage of their development and the manner with which they interact with the world make children especially susceptible to injuries. Injury prevalence is highly associated with age and stage of development. According to the World Health Organization Global Health Estimates (GHE 2014), injuries caused 5.14 million deaths globally and of those, 372,512 were in children under than 5 years and

367,540 among children aged 5-14 years. Child injuries are a serious public health problem and unintentional injuries are among the top causes of child mortality in Ethiopia. According to GHE 2014 of the 68,948 total injury deaths in 2012 G.C. in Ethiopia, 13,002 deaths were among children under 5 years and 9,267 among children 5 - 14 years old. These are likely underestimates as many injured or disable children do not access formal care.

3.10. School health during education in emergency

Ethiopia is vulnerable to both natural and human made emergencies such as drought, floods, heavy winds, storms, landslides and armed conflicts. In 2015, Ethiopia experienced the worst drought in 50 years. The delay of rain fall and its erratic nature resulted in failure of major crop production and greatly affected livestock population and the livelihood of 5.6 million people. In 2016 the number affected has increased to 7.8 million people. It seems that emergency is becoming a recurrent phenomenon.

The education sector is one of the emergency affected sectors. A review of emergency responses implemented from 2010 to 2014 shows that the number of school age children affected by emergencies averages 250,000 annually. About 2.1 million school age children were affected in 2015. This has grown to 2.8 million in 2017. According to the Meher Assessment findings, affected schools are experiencing closures and quite a number of school children are experiencing absenteeism and gradually dropping out with the main drivers being shortage of nutrition/school feeding, water and health services which can be addressed by a SHP. About 90% of Education in Emergency (EiE) responses have been provided by the government particularly in terms of school feeding and school WASH. However, there is a fear that Ethiopia's past gains in achieving the Millennium Development Goals (MDGs) may be lost in the Sustainable Development Goals (SDGs) due to the growing number of emergency situations if EiE is not given serious attention and addressed through a pragmatic approach to incorporate EiE in school health and related programs.

4. SLOT analysis

The overall strengths, limitations, opportunities and threats (SLOT) analysis in implementing the SHP were assessed during a round table discussion among experts from partners and stakeholders as well as brief school visits by the team to explore the existing situation. The figure below summarizes the consensus reached on the review of the SLOT analysis for the SHP.

FIGURE 3 SLOT ANALYSIS FOR SHP

Strengths	Limitations
• Government and ministerial goodwill • Increasing number of schools, pre-schools TVETs and universities • High school enrollment rate • Increasing number of teachers and other staff • Existence of the SHN strategy by MoE	• Nonexistent or limited health services in schools/universities • Infrastructure and space limitations in schools (Class rooms, toilets, clean water, playground) • High turnover of teachers and other staff • Mixed attitude at school for some package components

• Increasing primary health service coverage • Strong community health program • Availability of national strategies and guidelines on childhood, adolescent and youth health (AYH) strategy (2016-2020)	• Low health literacy level of teachers and students • Weak linkage and referral between schools and health facilities • Weak student engagement in the program • Underdeveloped health insurance
Opportunities	**Threats**
• Favorable global momentum on childhood, adolescent and youth health through SDGs • Economic growth • Increasing health seeking behavior • Urbanization and globalization • High infrastructure and communication technology development (Mobile, FM) • Existence of Education Development Army (EDA)	• Unpredictable local and international funding • Urbanization and globalization • Growing young population • Climate change • Suboptimal multi-sectoral collaboration and coordination • Increasing access to unhealthy foods and drinks • School closure time missed opportunities due to seasonality of school calendar

5. Rationale

The period of rapid growth and development that occurs in childhood has a profound impact on future health outcomes and the quality of life enjoyed in adulthood. It therefore represents a window of opportunity in terms of improving the overall lifetime health of populations and promoting the right to health for all. About 70% of adulthood diseases and health conditions are the result of health behaviors during adolescence and young age.

If comprehensive intervention strategies are not adequately designed and implemented, children and adolescents are prone to disease burden. A focus on children that promotes generational and population based change is needed. Children can be powerful health agents and peer educators for positive change.

In Ethiopia, over 37 million people are enrolled at various levels of the education system, which provides a unique opportunity to reach nearly one third of the Ethiopian population through school based health interventions. The existing school based health initiatives lack an evidence-based approach for the systematic integration of health including nutrition information and services within the education structure at all levels. In addition, different school based health interventions such as HEP, WASH, HIV, nutrition and youth friendly services have been implemented in vertical approaches. More importantly, the existing interventions do not address the needs of most fragile and critical populations of pre-primary students (age group 4 - 6 years) and students of primary schools (age group 5 - 10 years). Adolescent students also do not get necessary services for MHM as well as sexual and reproductive health education.

In order to narrow the gap and to expand health services in an equitable manner, the MoH and stakeholders see the need for a comprehensive SHP with essential health services tailored to students at different levels in order to create health promoting schools as a means to alleviate current health problems and promote generational and population-based positive change. The school health packages proposed under this new program are therefore intended to provide evidence-based, standardized and

comprehensive school based health information services and referral to all Ethiopian students from pre-school to tertiary educational levels of education.

6. Strategic framework

6.1. SHP objectives

General objective: To improve health and well-being of students and enable them to be health change agents in their communities by providing a comprehensive SHP.

Specific objectives

- To improve the knowledge, values and attitudes of students in order to make and act on the most appropriate and positive decisions for health.
- To produce a 'health conscious' generation through formal and informal education and practice.
- To help early detection of diseases through routine screening.
- To enable students to be health change agents for their families and the community at large.
- To contribute to student retention in schools and increase their education efficiency.
- To promote convenient and healthy school environment.

6.2. Scope of the SHP and alignment with existing strategies

The SHP Framework is intended to encompass all available health services including promotive, preventive and curative services for students from the pre-school to college and university level across all types of schools irrespective of their ownership (i.e. private, community and government owned).

The SHP Framework provides the list of service packages by school type (pre-primary, primary, secondary and tertiary levels) that will be delivered using school health centers. It also outlines inputs, processes and monitoring and evaluation requirements at each level of schools.

This proposed program, however, will strongly support already functioning programs such as HEP (Health Extension Program), school feeding program, school WASH program, etc.

6.3. Guiding Principles of the SHP Framework

Right-based: Students have the right to obtain comprehensive health services in an appropriate and convenient place.

Equity and inclusion: The package guides SHPs to recognize and address the needs of students of different age levels and both genders in an equitable, non-discriminatory manner that is free from stereotyping. For those students with special needs the existing system and infrastructure will be utilized to address their health needs.

Life-course approach: Efforts are targeted to break or disrupt negative intergenerational cycles that are created by or contribute to health inequities. Students in turn will create the condition for healthy future generations as parents, grandparents and caregivers.

Comprehensive care: Comprehensive means not only that care responds to the full range of health problems, but also that care for any condition encompasses, health promotion and prevention, diagnosis and treatment or referral (WHO 2015).

Student friendly services: An approach to care that consciously adopts the perspectives of individuals, families and communities, and sees them as participants as well as beneficiaries of trusted health systems that respond to their needs and preferences in humane and holistic ways. It requires that people should have the education and support they need to make decisions and participate in their own care.

Integration: Integration of student health care services is emphasized. Focus is on integration of student health care services within the existing primary and referral care systems, the systematic integration of basic student health care service indicators in regular information systems, and coordination and implementation through the integration of actions and strategic areas at all levels.

Innovations: There is a focus on the wide use of interactive media and technologies for SBCC and as means of service delivery. More investment will be made for testing and scaling up of new technologies, products and theories/models to increase access, utilization and coverage of services.

Compassionate, respectful and competent human resource: Focus on compassionate, respectful and competent health care service by ensuring adequate skill mix of human resources at school and at all levels of the health system. Care, empathy, trust, and enabling environment for informed decision making characterize the relation between service providers and their clients.

6.4. Strategic Principles and Approach

The strategy to be followed promotes a unified definition of a comprehensive and inclusive SHP, one that reflects the following principles:

A child-centered and child-friendly approach means a strengthened focus on the well-being of children; identifying, and responding to their individual health needs of medical treatment, psychological, and special aid and support.

Increased focus on prevention of diseases and protection of health and well-being by addressing health risk behaviours through skills based health education, as well as recognizing and addressing social and environmental barriers that affect students' health and wellbeing.

Service delivery will be integrated with tailored delivery of promotive, preventive including regular screening, curative and rehabilitative services. On-site (static), outreach, and mobile forms of service delivery will be used. Integrated and age appropriate information, education and services that can meet the exact need of children at school will be provided. Promotion of healthy lifestyles and behaviour change that protect children from harmful behaviour and practices will be included. The curative services will focus on common communicable and non-communicable disease such as skin diseases; mild respiratory infections, injury, first aid care and other diseases are addressed. Children affected by diseases

or nutritional problems or addiction problems will receive additional follow up and care. The service delivery of school healthcare will occur during working hours of the schooling. For those students with special needs the existing system and infrastructure will be utilized to address their health needs.

Ownership by school management and staff requires that school health is an integral part of school plans and ongoing activities and that all teachers and school administrative bodies at different levels take responsibility for health education, students' health and well-being.

Parental and community engagement, together with the school health team and teachers, will be encouraged in order to share information on the health needs of their children to take an active role on needed actions and support.

Capacity building of teachers and counsellors will be strengthened at school to ensure ownership and sustainability of SHPs.

Referral network and linkages will be formed between schools and health facilities along all tiers.

Inter-sectorial collaboration as MoE and MoH will play a central role in communication and information sharing, joint planning and implementation of school health activities and must be flexible and responsive in order to react and follow up to health needs of students. Since school health is not the responsibility of one single sector, the establishment of an institutional framework, along with collaboration and networking, advocacy and resource mobilization, and monitoring and evaluation will govern the overall work at all levels of program implementation.

6.5. Conceptual framework and logical score card

Figure 4 highlights the concepts used to develop the Ethiopian School Health Program and guides selection of interventions appropriate for the priority health problems among children and adolescents in schools. Table 1 is the logical scorecard developed to monitor and evaluate the implementation of the SHP.

FIGURE 4 SHP CONCEPTUAL FRAMEWORK

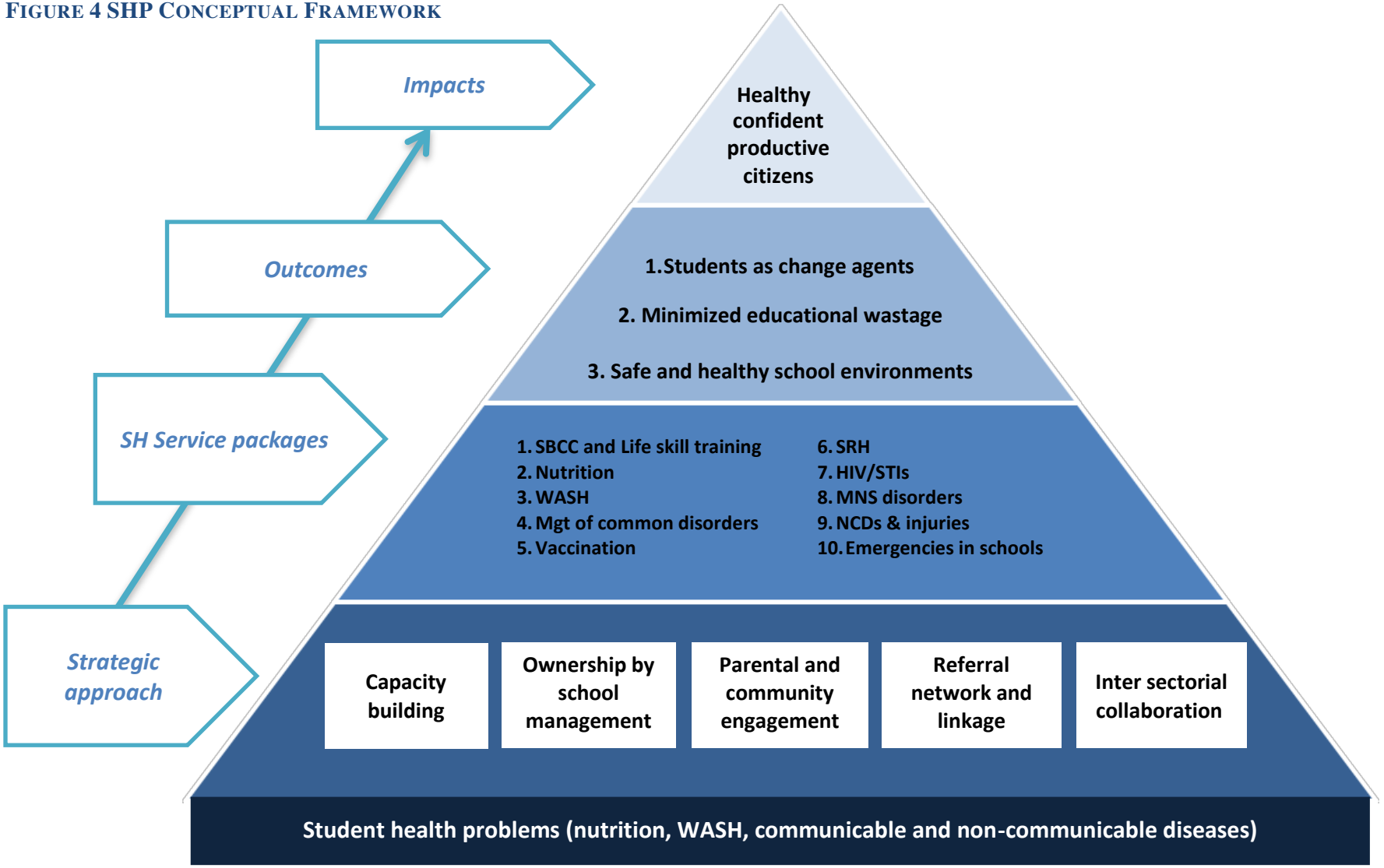


TABLE 1 SHP LOGICAL SCORECARD

Results-Chains	Performance Indicators/Sources of Verification
Impacts	**From Year 2017- 2020**
Healthy, confident, productive and competent citizen	**IV1**: Improvement of health status of the school age citizen
Outcomes (Mission)	
Increased students efficiency and effectiveness Safe and healthy school environment creating health conscious and Change agent students for themselves, families and communities.	**OM1-1:** measure of educational achievements **OM1-2:** Percentage of school that are environment and child friendly **OMI-3:** Percentage of students who are health conscious **OMI-4:** Percentage of schools insured health seeking behavior of students
Outputs (Deliverables)	
OUT-1: {Hardware}: Access to School-based Health Centers with adequate space, supplies including medical drugs and clinical equipment, printed manuals /guidelines for Health Packages by 2020.	**OD1-1:** 38,023 school Health centers functional by 2020 **OD1-2:** Approved manuals in place in all school health centers **ODI-3:** Percentage of schools having access to sanitation facilities **ODI-4:** Percentage of schools having access to water facility **ODI-5:** Percentage of schools received nutritional assessment **ODI-6:** Percentage of schools received mass deworming
OUT-2: {Software}: Curriculum for the SHP in place PLUS school health promotion conducted through clubs, health workers and other methods on a regular basis by 2020.	**OD2-1:** The curriculum for SHP in place by 2020 **OD2-2**: Percentage of schools provide regular school health education as the program required
OUT-3: {Human resource}: Teachers, school health workers, administrators, PLUS students at all educational levels trained in 'positive health seeking behavior' and supported to use their knowledge and skills by 2020.	**OD3-1**: Percentage of schools having functional school health clubs **OD3-2:** Percentage of schools received training on school health for teachers, school health workers, and school administrators.
OUT-4: {Management}: The SHP is efficiently and effectively managed by 2020.	**OD4:** Project managed within budgets and plans.

Activities (Processes)
Act-1: {Hardware}: Design, plan and build or identify and designate spaces for school-based health centers PLUS write guidelines/training manuals for the SHP
Act-2: {Software}: Review, develop and update existing curricula of schools PLUS rules, regulations, procedures, methods for delivering the Health Packages (i.e., information, services and referral).
Act-3: {Capacity building}: Design, plan, and implement a comprehensive capacity building initiative for the SHP.
Act-4: {Management}: Undertake key functions pertaining to planning, achieving and learning including annual work planning, mobilization of team members, agreement on roles and responsibilities (HR), effective internal and external communication, mobilization and management of funds, and effective supportive supervision, and Monitoring and Evaluation.
Inputs / Resources for:
Essential infrastructure, facilities, materials and supplies and human resource

7. SHP Packages

The MoH and relevant stakeholders shall ensure that health issues be included in the school curriculum and be taught as subjects in all schools. They shall also make sure that updates to the health related topics occur based on revisions to national health strategy. The MoH shall also facilitate and support provision of health services in schools such as counseling and social services, visits by nurse/doctor and linkages to the referral system for the package of interventions described below. The intervention packages are areas where schools shall provide a comprehensive and holistic health and support services to students with a focus on health education, health services, social support and physical environments in order to meet the health and health related needs of students within the school. The packages are broadly grouped as follows:

1. Social and behavioral change communication and life skills development
2. School nutrition services
3. Water, sanitation and hygiene (WASH) provision
4. Management of common infections, infestations and disorders
5. Routine and catch-up vaccination and immunization service
6. Sexual and reproductive health services
7. HIV/STI prevention and control services
8. Mental, neurological and substance use disorder prevention and support
9. Prevention and management of non-communicable diseases and injuries
10. School health preparedness, response & recovery during education in emergency

Package 1: Social and Behavioral Change Communication (SBCC) and life skills development

Health education is a combination of learning experiences designed to help school communities and parents improve their health by increasing their knowledge, skills and attitudes. Knowledge alone does not necessarily foster appropriate health habits. To facilitate effective decision making in health matters, the school system should provide every child with the opportunity to acquire knowledge and skills essential for understanding healthy functions, develop attitudes and habits that promote a healthy lifestyle, and practice health skills conducive to effective learning and living.

SBCC can be provided through direct teaching, use of mini-media and school health clubs, printed materials (e.g., flyers, stickers, posters), audio and audiovisual materials (e.g., documentary films, dramas, feature stories, spots, and news stories), entertainment programs, e-learning (e.g., social media, blogs), peer learning, life skill learning, youth dialogue, guidance and counseling, panel discussions, health-related questions and answers and round table discussions.

Life skills allow for the development of adaptive and positive health behaviors that enable individuals to deal with demands and challenges of life. They are essential for promotion of health and wellbeing of children and adolescents. Life skills development activities in schools encompass the most important skills a person needs to have during young and adult life. These skills include decision making, problem solving, creative thinking, critical thinking, communication, relationship building, self-awareness, empathy, coping with emotions and stress management.

The life skill training should also emphasize the prevention of harmful traditional practices (HTP) including prevention of early marriage, which affects the lives of many adolescent girls in Ethiopia. This package will promote skills that ensure adolescent girls are enable to exercise their full and comprehensive sexual and reproductive health rights, including the right to choose when and whom to marry and how many children they want to have without peer and community influence.

The activities for life skills development for school children includes in-school activities such as class discussion, brain storming, role play, educational game and simulations, case stories, storytelling, debate and school linked programs and out-of-school activities, such as campaigns to promote community interventions and social norms.

Package 2: School Nutrition Services

This package encompasses activities for school feeding, school gardening, micronutrient supplementation, nutritional status assessment, counseling, support and referral. Good nutrition is required for optimal health and physical and intellectual development. School feeding services will be provided to pre-primary and primary school children in schools as part of SHN program as school meals attract learners into schools and relive short-term hunger that slows the learning process. The package also provides nutritional support for severely malnourished students and those with special needs. School feeding programs, which are already in place in drought affected and food insecure urban areas of the country, help to create an enabling environment and are well equipped to drive and support other interventions on education, health, nutrition/ hunger and sanitation. The existing school feeding programs also will serve as spring board and good platform to act and prevent nutritional related health problems.

The package includes supplementation of micronutrients to prevent deficiencies. Establishing school gardens, promoting homestead gardening in order to increase food diversification, cooking demonstrations and provision of skills in basics of food safety are also part of the package. The package will be delivered to children and adolescents through nutritionists and trained health professionals, food experts and post-harvest and agriculturists or trained teachers.

Nutritional status assessment, counseling and support to be provided include:

- Screening for macro- and micro-nutritional status;
- Macronutrient under nutrition in children (Stunted, wasted, underweight/stunted-wasted)
- Macronutrient over nutrition in children (overweight, obesity)
- Micronutrient under nutrition/deficiency (e.g., iron, vitamin A, zinc, iodine, vitamin D)
- Assessment of dietary adequacy, quality and safety;
- Counseling on healthy dieting and life style;
- Teaching students on the detrimental and long consequence of malnutrition;
- Providing educational materials that reinforce messages about healthy eating and skills on essentials of dietary planning;
- Supplementation of micronutrients;
- Linking students with acute macronutrient deficiency/acute malnutrition to feeding centers.

Package 3: Water, Sanitation and Hygiene (WASH)

This package focuses on ensuring the availability of an inclusive, adequate, and potable water supply, gender segregated improved latrines and hygiene facilities and proper solid and liquid waste management at all schools. It also focuses on the development of clean, safe and well-ventilated classrooms and playgrounds for outdoor sports and physical activities. Schools are often a place where children become ill as the physical environment and cleanliness of a school facility significantly affects the health and well-being of children. Disease can spread quickly in crowded spaces with limited classroom ventilation and unsafe school environments where hand-washing facilities, detergents, and toilets are unavailable.

The provision of a WASH package compliments national and local interventions to establish equitable, sustainable access to safe water and basic sanitation services in schools. Poor sanitation, water scarcity, inferior water quality and inappropriate hygiene behavior contribute to the health and well-being of school-aged children who spend long hours in schools. The WASH package at the school level advocates for evidence-based WASH knowledge management through the engagement of the MoE regarding the existence, benefits and conditions of WASH structures at schools.

Provision of an adequate supply of clean water for cleaning, washing and drinking at schools plays a pivotal role in prevention of common communicable diseases and reduces water borne diseases. Hence this package considers the availability, quality, adequacy and continuity of clean water, toilet facilities and waste disposal systems to help make the school environment free of foul smell and disease-causing pathogens.

This package also encompasses mechanisms to control for fire, electrical and other accidents and injuries with full first aid services available to prevent and control accidents.

Package 4: Management of common infections, infestations and disorders

The intention of this package is to help school children prevent and manage curable diaseases and disorders through the evaluation, diagnosis and treatment of diseases. Delivery of onsite evaluation and curative services for common infections, infestations and disorders in children and youths is an important package in the SHP. Although there is no limitation to screening, treating or referring of any medical problems affecting children in schools, special emphasis will be given to the detection and intervention of thecommon health problems of children and youths outlined below:

- Fungal and bacterial skin infections,
- Skin infestations (Sarcoptes scabie, Myiasis, chiggers, dust mites, lice),
- Intestinal worm infestations,
- Eye (trachoma) and ear (otitis media and externa) infections,
- Visual defect (refractory errors) and hearing defect,
- Upper respiratory tract infections (URTIs),
- Sexually transmitted diseases (STDs),
- Dental caries and periodontitis,
- Physical disabilities and accidents.

Training of the the health service providers in the school health centers will focus on these common problems.

Children are more susceptible to worm infection due to the fact that children's behaviors make them vulnerable to oral-fecal or soil-to-skin contact. Such infections have negative effects on growth, nutritional status, physical activity, cognitive development, mental concentration, and school performance. Adolescent girls are at risk of anemia, aggravated by parasitic infections. Schools are an ideal place to conduct periodic assessment and treatment to control these diseases. Periodic school-based mass deworming is one of the most cost effective interventions in child health. Therefore, this package focuses on conducting periodic mass deworming campaigns at schools using common anthelmintic drugs in order to improve student health and academic performance.

The intention of the package is to improve the health of school children, including those with special needs, by providing timely evaluation and treatment of diseases and disorders. Therefore, other infections and disorders, as listed above, will be diagnosed and treated at the school health center, or in the case of more severe cases, be referred for further evaluation and definitive treatment to health centers. This package compliments preventative and curative services rendered at the primary health care level. The school community needs to be vigilant in the handling minor injuries and, in the rare instance, occurrence of major accidents; therefore, the school health center will be equipped with first aid instruments to provide for the emergency management of injuries, including splinting, open wound care and suturing .The services will be provided by skilled health professionals in collaboration with the school administration.

Package 5: Routine and catch-up provision of vaccinations and immunizations

The school can serve as a service delivery point for providing booster doses and other nationally recommended childhood and adolescent vaccinations. Teachers and school authorities should ensure that all pre-school children are fully immunized for their age before enrollment. Children who are not fully immunized per national guidelines for their age group will be referred to the school health facility for their missed vaccinations.

The health center at the school needs to ensure that there is at least one health education session per academic year focused on vaccine-preventable diseases and immunization. As the school enrollment rate is now at 94%, schools will be used as the primary venue for immunization campaigns when new vaccines are introduced. The new national immunization schedule, which includes TT/Td immunization for girls and boys in first cycle primary school and human papilloma virus (HPV) vaccines for girls 9 to 14 years of age, will be implemented using schools as the delivery point. Per the new immunization schedule all girls age 9-14, regardless of school enrollment, will be vaccinated for HPV, as early as in 2017 (G.C.) or immediately thereafter. For operational purposes, grade 3 up to grade 8 will be considered for initial multi-year targets; and after the first year of vaccine introduction, the routine cohort schedule will target 9 year old girls in grade 3. Based on the epidemiology of the diseases and launch schedules, students in school will be targeted in the coming years for the hepatitis B virus vaccine, the meningitis A vaccine, the second-dose of measles vaccine and the measles-rubella vaccine.

During supplemental immunization activities, school-based health facilities and school authorities shall ensure that all students in their schools have obtained potent and valid doses of the supplemental and catch-up vaccinations. The catch up vaccination program will provide an opportunity to administer vaccines missed during infancy. These school-based facilities also will support the planning, registration and reporting of vaccination coverage in their schools to the health authority.

Package 6: Sexual and reproductive health (SRH) services

Access to SRH services is a primary concern of adolescent and youth due to the sensitive nature and risk of sex and sexuality issues. In this package, age appropriate SRH information and education will be provided at each level of school. The provision of SRH services will be comprehensive and rights-based. Comprehensive SRH rights state that services should be voluntary, informed and affordable.

The major focus of the SRH package will occur in the 2nd cycle education and will focus on sexual health education and health behavior promotion, including information on delaying and abstaining sexual activity. The package will also provide for the management of menstrual disorders, diagnosis and treatment of common STIs and HIV counseling. At the secondary school level, students seeking HIV testing and sexually active students seeking contraceptive services like condoms, oral contraceptives (including emergency contraception), injectables, and implants will be referred to the nearby health facility. At the tertiary level of education, HIV counseling and testing and all types of contraceptive services, including intrauterine device (IUCD) insertion will be provided. In addition, as per the rule of the country, comprehensive abortion care services will be provided for students who encounter unintended pregnancy. Counseling, treatment and referral services to address gender based violence, either physical or sexual, will be provided at all levels of education. Depending on the level of the school health care center, trained nurses, health officers or general practitioners will provide the youth friendly SRH services.

Package 7: HIV/STI prevention and control services

Effective HIV and STI programming focuses on the critical relationship between the epidemiology of HIV and STI infections, the risks associated with the infections, and the cultural, institutional and structural factors that drive those risk factors. Risk behaviors are entangled in a complex web of economic, legal, political, cultural and psychosocial determinants that must be analyzed and addressed by polices that are also effectively implemented and scaled-up. Efforts targeted to prevent and reduce HIV and STI infections for youth will primarily focus on measures that directly support age-appropriate risk reduction by providing information and developing skills, as well as provide access to services and commodities like condoms, IEC materials, and voluntary counseling and testing (VCT) for the school-aged population. The SHP HIV/STI package addresses the collective social and institutional factors such as sexual norms, gender inequality, and stigma related to sexual behaviors that will otherwise continue to contribute to HIV and STI infections.

This HIV/STI package helps not only to understand risk factors but also enables students to adopt safer behaviors, understand why they engage in risky behaviors, motivate them to reduce their risk, develop their knowledge and skills and improve their access to means of protecting themselves in a friendly and supportive way. HIV care and treatment services provided to students are susceptible to stigma and

discrimination, confidentiality, consent and assent issues. Thus, the services should be provided according to national HIV testing and counseling guidelines. The health care and behavior change communication services of the HIV/STI package will be designed to be age-appropriate across the primary, secondary and tertiary education levels.

Package 8: Mental, neurological and substance use (MNS) disorders prevention and support

Promoting mental health and preventing MNS disorders is fundamental to reducing the impact of behavioral health conditions in our communities. MNS disorders can have a powerful effect on the health of individuals, their families, and their communities.

The main interventions to address psychosocial, mental health, substance use and violence issues in schools will focus on: ensuring academic success and promoting healthy cognitive, social, and emotional development and resilience; addressing barriers to student learning and performance including educational and psychosocial problems, external stressors, and psychological disorders; and providing social/emotional support for students and staff. The major areas of concern related to barriers to student learning in relation to mental health include:

- Addressing common educational and psychosocial problems (e.g., learning problems; language difficulties; attention problems; school adjustment and other life transition problems; attendance problems and dropouts; social, interpersonal, and familial problems; conduct and behavior problems; delinquency problems; anxiety problems; affect and mood problems; sexual and/or physical abuse; neglect; substance abuse; and psychological reactions to physical status and sexual activity).
- Countering external stressors (e.g., reactions to objective or perceived stress/demands/ crises/deficits at home, school, and in the neighborhood; inadequate basic resources such as food, clothing, and a sense of security; inadequate support systems; hostile and violent conditions).
- Teaching, serving, and accommodating disorders/disabilities (e.g., learning disabilities; Attention Deficit Hyperactivity Disorder; school phobia; conduct disorder; depression; suicidal or homicidal ideation and behavior; post-traumatic stress disorder; anorexia and bulimia; and special education designated disorders such as emotional disturbance and developmental disabilities).

Package 9: Prevention and control of non-communicable diseases (NCDs) and injuries

The risk of NCDs may occur at critical periods of human growth and development or risks may accumulate with age and be influenced by factors acting at all stages of the life span. Thus, prevention and control of NCDs should target people at all stage of the life span.

Schools can provide an excellent setting to educate students to refrain from risky behaviors and adopt healthy life styles and to transmit these messages to the larger community. School settings also provide an opportunity for screening and early detection of certain NCDs in children and adolescents such as heart diseases, hypertension and diabetes. The SHP will focus on limiting exposure to and use of substances such as tobacco, alcohol, khat and other drugs and promoting a healthy diet and physical activity.

Exposure to khat and to tobacco either by direct use or through second hand smoke is detrimental to the health of children and adolescents. Every effort should be made in schools to increase awareness of the hazards of tobacco and khat, to improve life skills to combat commercial and peer pressure, and to establish schools and universities as tobacco and khat free. Teachers and other staff should not be allowed to use these substances in the school environment. Additionally, any level of alcohol use is harmful to physical and mental health of children and adolescents. Hence schools are the ideal places to learn about harm related to alcohol use and inculcate the idea of alcohol free childhood and youth.

When diseases such as diabetes and cancer occur in children and adolescents, they are a huge burden to the individual and the family. The individual will be affected by the disease itself and also by the stigma and discrimination in the school environment. It is imperative that teachers and the school health team identify children with such medical conditions and increase awareness within the school community about the conditions and their management. Screening can also be completed for selected NCDs in schools and universities based on availability of personnel and resources. Rheumatic heart disease, diabetes, hypertension and cancer screening programs have been completed elsewhere and showed good outcomes and could be replicated in this context. The promotion of healthy diets and physical activity by encouraging culturally appropriate, affordable and balanced dietary habits for school children and adolescents and encouraging activities of daily living and recreational activities, such as walking, cycling and sport is also be a part of the package to reduce modifiable risk factors for NCDs.

Also part of this package is a focus on injury preventing strategies. Schools at all levels are excellent outlet in providing injury prevention and control services. Basic principles that underlie most successful child injury prevention programs in schools include: environmental modification of playground and other indoor and outdoor facilities; promotion of safety devices (e.g. helmets and seat-belts); development and implementation of standards for school safety (e.g. zebra crossing and appropriate type and depth of playground surface material); and health education and life skills development (e.g. first aid and swimming lessons). Standardization of safety education curricula increases the likelihood that all children will receive similar information. Table 2 outlines interventions to reduce injuries that should be promoted in the school environment.

TABLE 2 INTERVENTIONS TO REDUCE INJURIES

Goal	Interventions recommended
To avoid or minimize road traffic injuries	○ ***Engineering***: Create safe playing areas and safe roads to school, use roads with less traffic. ○ ***Education***: Targeted messages to particular places in communities with repeated injury incidents (family, household, daycare centers, and nursing schools, guardians) to create awareness. Do not leave children unattended on the streets. ○ ***Legislation***: Enforce speed limits, car seats, and substance use, passenger limit in school buses/minibuses. Import cars with safety design. Promote not taking children 0-4 years on motorcycles. Explore use of first aid kits in all schools. ○ **First aid skills** for caregivers, police, teachers, drivers, and fire fighters. Every vehicle should have first aid kits. ○ Establish trauma centers and ambulance systems and link them with places with repeated injury cases. Trauma centers should be decentralized and equipped with necessary appliances.
To avoid or minimize falls	○ ***Engineering***: side railings on roads, railings on windows and beds,

	safe playgrounds. ○ ***Education***: teaching and training of caregivers, make the environment child protective. Educate the family, teachers and guardians on avoiding falls at home or in school. ○ ***Legislation***: enforce building codes and standards. All schools shall have a health center to care for injury ○ **First aid** training ○ Establish and strengthen referral to trauma centers including psychological treatment and rehabilitation.

Package 10: School health preparedness, response & recovery during education in emergency

Emergency situations are becoming a recurrent phenomenon in Ethiopia. School age children are one of the affected groups during natural and human made emergencies such as drought, conflict, disease outbreaks, flood, earth quake, heavy winds and storms. There is a need for and quick and seasonal assessment of emergency risks, identification of needs in case of emergency and provision of responses in case of emergency.

Education in Emergency (EiE) has not been given adequate attention in Ethiopia. It is a legal and a moral imperative to ensure that children continue their education without interruptions. Practices indicate that emergency affected school age children require service provision during emergencies such as the provision of school feeding, WASH and psycho-social support and these need to be regularly assessed depending upon the emergency. EiE responses shall be provided with the engagement of community members, MoE, MoH and other partners as part of the school health package.

8. Implementation modality

The implementation of the SHP requires the availability of appropriately skilled professionals, adequate supplies, commodities, and equipment, proper information management systems, sound governance and management, a sustainable financing mechanism and appropriate quality improvement and service delivery outlets. Moreover, the availability of adequate space and infrastructure for proper delivery of the service is critical. The SHP and its service provision indicators need to be integrated into the planning and reporting system (HMIS or equivalent) for routine evaluation and monitoring. The sustainability of such initiatives requires direct participation of school communities, students and parents in the management and accountability of the service. Therefore, the following specifications for implementation are proposed.

8.1. Human resources and infrastructure

To provide the quality school health package in all schools across the country, Table 3 outlines the required human resources and infrastructure for adequate service delivery of the SHP by level of school. The tasks of school health centers include planning of school health activities, provision of school health

packages and reporting of school health activities. The human resource and infrastructure needs will be revised as required based on regular assessments of workload and infrastructure.

TABLE 3 HUMAN RESOURCE AND INFRASTRUCTURE REQUIREMENTS

School level	Human resource needed	Infrastructure	Remark
Pre- school	• A diploma nurse for urban KGs	Three rooms with the necessary inputs	The rural pre-school (O-class) addressed through primary education clinics.
Primary	• A diploma nurse OR • Health extension worker (from local health post)	Three rooms with the necessary inputs	MoE will avail rooms for school feeding
Secondary	• A Health Officer/ BSC nurse • A psychologist	Three rooms with the necessary inputs	An existing psychologist will be part of the team
Tertiary	• A physician/health officer • A nurse • A psychologist • A laboratory technician	Four rooms with the necessary inputs	An existing psychologist will be part of the team
Woreda/Zone	• SHP – Coordinator • Nutritionist	N/A	

To fulfill the human resource requirement additional health workers will be deployed and they will receive pre-deployment training on the SHP framework and implementation strategies. In addition in-service trainings will be given regularly. Similarly, existing rooms in schools will be designated and refurnished or new student health care centers will be built.

8.2 Supplies, equipment and drugs

An initial list of essential drugs, medical supplies and equipment required for implementation for the SHP will be prepared. During the initial phase of the program all essential drugs, supplies and equipment will be organized as a school health kit and will be delivered by MoH and partners to all schools. As the program develops, school clinics will be linked to the nearby health center and they will be managed in the same manner as health posts, whereby the health center will incorporate the drugs, supplies and equipment needs of school clinics in their forecasting plans and fulfill distribution accordingly.

8.3 Program financing

Due to the public health importance of the SHP, the services will be provided to students free of charge. Development partners will have a significant role in establishing the SHP. In order to create a sustainable SHP, the Woreda administration through revenue collection and support from MoH and MoE will take responsibility of the local SHP budget. All implementing ministries will include a list of activities and materials pertaining to the implementation of the SHP packages in their sectoral strategy and plan. The required finances will be budgeted for by the respective sectors as per their annual and strategic plan. In addition, Woreda administrations should mobilize resources from the community, private sector and NGOs which may strengthen the implementation of the program. Many aspects of the SHP packages are already being implemented through MoH or MoE and are budgeted for in existing federal MoH or federal MoE budgets. Therefore, the costing only includes new cost categories to the government, such as new

hires or new capital expenditure, and does not capture costs related to increased demand of services that are already budgeted for through the MoH or MoE, such as vaccines and deworming.

The total cost of the SHP for the first four years is ETB 11.7 billion. Overall, 44% (ETB 5.1 billion) of the overall costs are capital costs and the rest (ETB 6.6 billion) are recurrent costs, including salaries and medical equipment. This total cost reflects an overall financial requirement of ETB 9.3 billion in the first 3 years for both service delivery and the initial capital cost required for the SHP roll out. Starting with Year 4 of the program, and following full roll out, the yearly recurrent cost is estimated to be ETB 2.4 billion. Detailed cost breakdowns are provided in Annex VII.

8.4 Monitoring, evaluation and research

A monitoring and evaluation plan will be in place to assess the implementation of the SHP and each individual package. A monitoring and evaluation framework is outlined below in
Table 4, and a more detailed list of specific indicators is designated in Annex VI. The indicators are designed to assess and measure the accessibility of the overall SHP and the individual service packages as well as the program's outputs, outcomes and overall impact. As needed, service delivery registers, tally sheets and reporting formats will be provided to track data at the student' health centers and the reports will be integrated with the Health Management Information System (HMIS) and Education Management Information System (EMIS). In addition, regular and integrated supportive supervisions will be conducted by sector ministries and partners to identify the gaps in implementation and provide support accordingly. Regular review meetings involving all concerned stakeholders will be held to evaluate the implementation of program as well as to share best practices. In line with this, high performing (model) schools and Woredas will be evaluated, graded and awarded based on a set of defined metrics. Moreover, for evidence based program implementation, research will be completed to identify the implementation status, challenges, outcomes and impact of the program and the findings will be used to improve program implementation.

TABLE 4 MONITORING AND EVALUATION FRAMEWORK

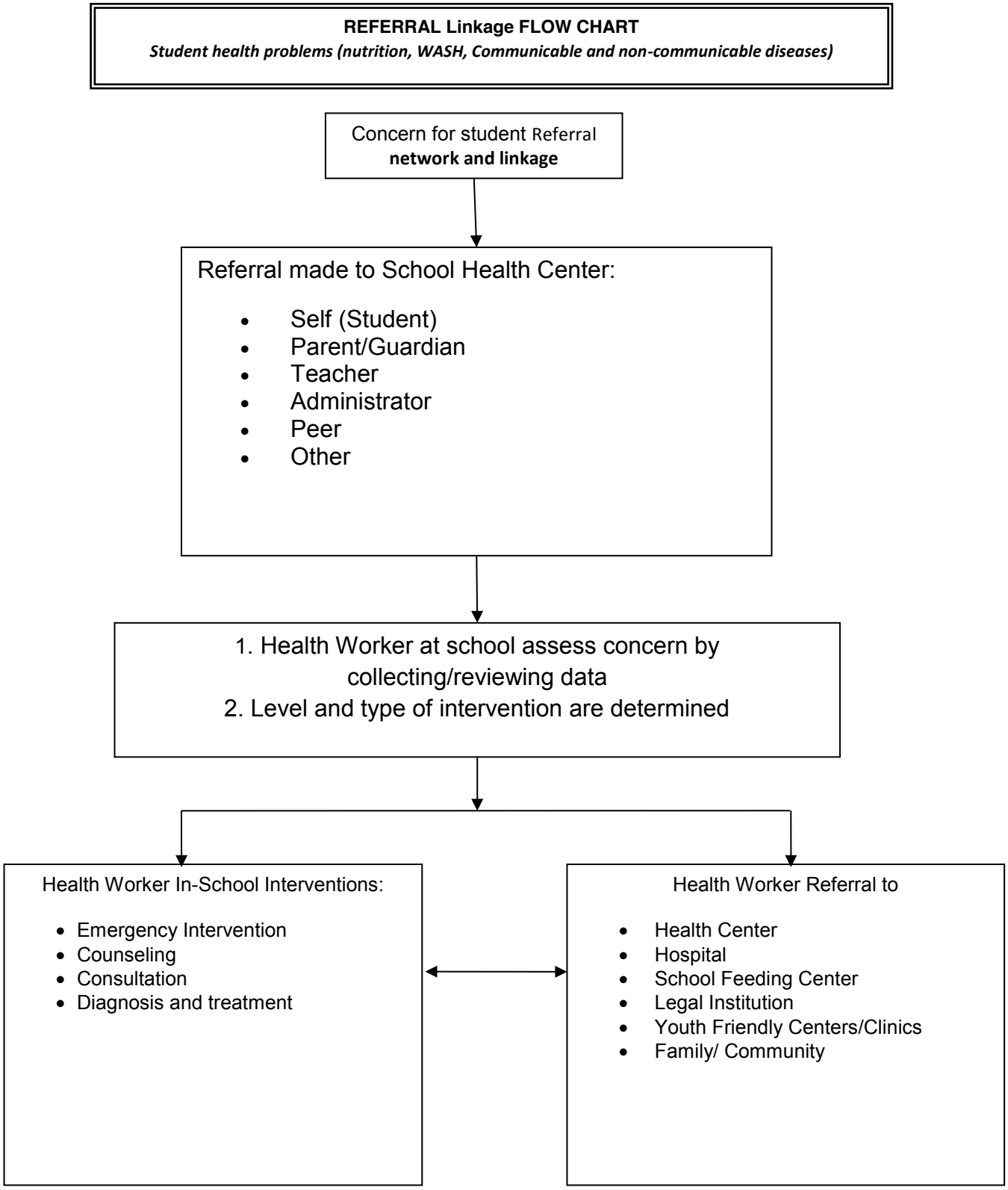
Input	Process	Output	Outcome	Impact
• National policies and strategies • Health work force • School health package, guidelines, job aids • Register, reporting and referral formats • Code of conducts • Medical	• Recruitment and deployment of health work force • Training of health work force • Conducting advocacy meetings and sensitization workshops • Construct/assign school health centers	• Schools with the minimum package of school-based health services • Health education sessions conducted per package • Health services provided • Students screened for nutritional/psychosocial or mental/common childhood disease /congenital problems • Schools with complete WASH facility • Common childhood	• Reduced NCDs risk factors (use of alcohol, tobacco, physical inactivity, unhealthy diet) • Reduced educational wastage • Reduced adolescent pregnancy	• Age specific morbidity and mortality • Improved student performance • Improved nutritional status of

supplies and equipment • Financing/budgeting • Infrastructure • School facilities • Health facilities	• Supportive supervisions & review meetings • Supply chain management	illnesses managed in schools • Students referred to health facilities • Students dewormed • Improved student knowledge on healthy behaviors • Schools with physical activity facility (Playground, separate room for girls)	rate • Reduced violence in schools	student

8.5 SHP service linkage

The school health center will be mandated to provide health promotion, disease prevention, screening and very basic curative services. To support this mandate, strong linkage with the existing health system for additional services is required. The linkage will be as follows: primary school to health center; secondary school to health center or district hospital; tertiary school to general hospital or teaching hospital and it will follow the conventional referral system for serious health problems. The school health centers will also be linked with feeding centers in the catchment area and to the community for psychosocial support. The service linkage is summarized in Figure 5 below.

FIGURE 5 LINKAGE AND REFERRAL CHART FOR SHP



9. Leadership and governance

At the national level, coordination of activities will be assured by the MoH. The MoH will collaborate with other sectors such as the MoE, Ministry of Youth and Sport, Ministry of Water, Irrigation and Electricity and Ministry of Agriculture in order to support the school health center based on the gap assessment.

Both the MoH and MoE will be fully responsible for the proper implementation of the SHP. However, the MoH will take the lead role with the MoE as co-leader of the program. The MoH will produce the needed guiding documents, SOPs and job aids in collaboration with the MoE. In addition, the MoH will coordinate the necessary human resource and medical logistics and oversees the implementation and monitoring of planned activities. The MoE will show commitment by creating favorable environments and spaces for school health centers. Partners supporting the school health centers will take part in the whole process of intervention from the planning stage, resource mobilization and allocation to the monitoring and evaluation of program implementation.

Since the SHP is the extension of health services to the school, the leadership and governance will follow the existing system at Regional, Zonal and Woreda levels and be composed of representatives from RHBs, REBs, RWIEBs, RYSBs and other stakeholders. The Woreda Health Office will be responsible for the overall management of the school health centers. This structure is outlined in Figure 6 below and the roles and responsibilities of each party are outlined in Table 5.

FIGURE 6 ORGANOGRAM FOR THE SHP

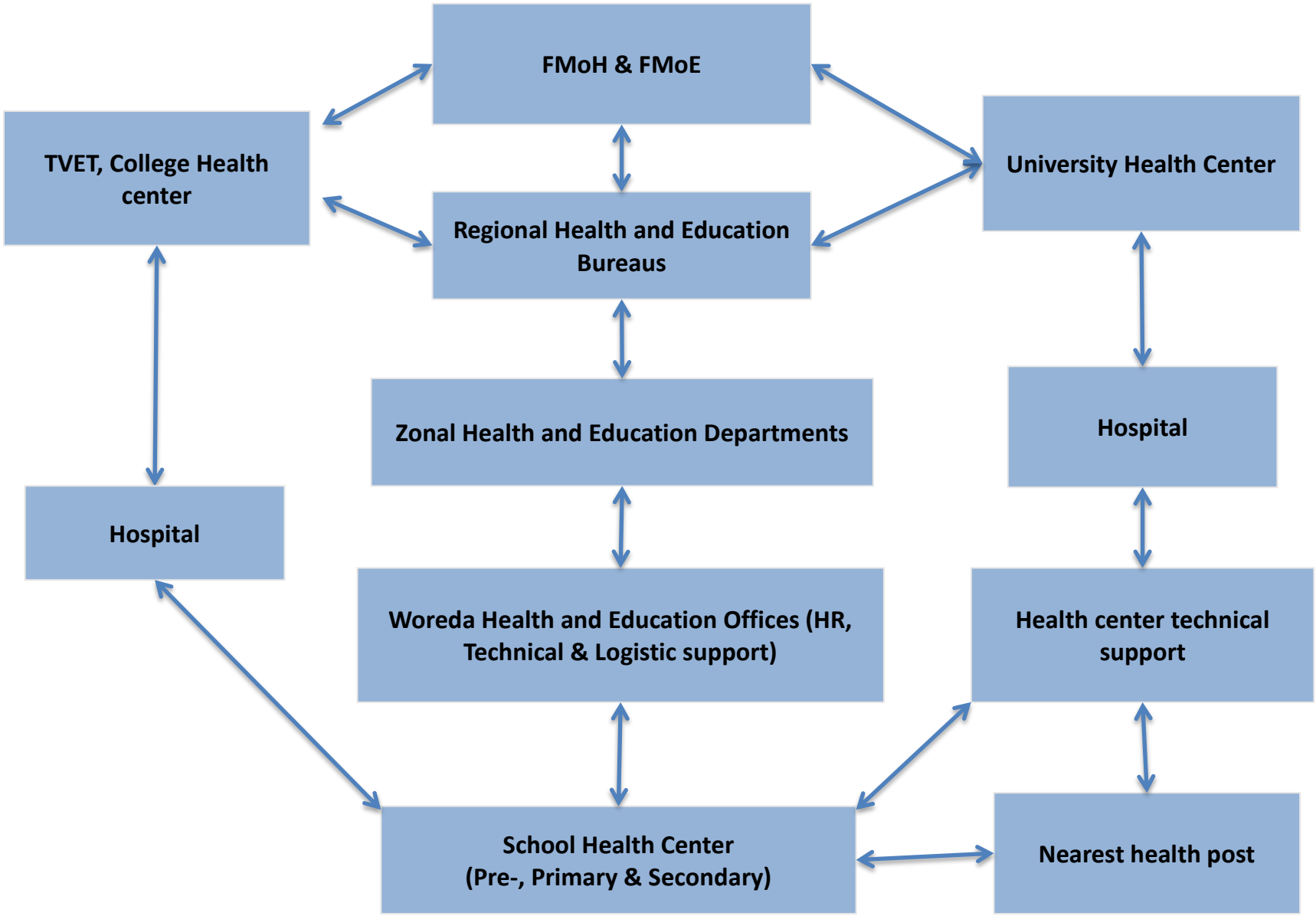


TABLE 5 ROLES AND RESPONSIBILITIES FOR THE SHP

Organizations	Roles and Responsibilities
Joint responsibility of MoH and MoE	• Allocation of budget and provision of logistic support to all level • Promote and advocate SHP activities, using different media outlets (both electronic and print media) • Create an enabling environment for scale up and sustainability of SHP • Ensure quality of the SHP service provision • Ensures that package activities, strategies and results are monitored, evaluated and reported within the HMIS and EMIS systems • Coordinate and give training (capacity development) to health workers, school community, stakeholders and other staff on SHP • Assist the Regions to identify their program gaps and management deficits and provide them with the technical assistance or the capacity development they require • Mobilize resources for SHP implementation • Strengthening public private partnerships(PPP) to support the SHP • Joint operational and strategic planning • Joint monitoring and evaluation • Establish coordinating body • Cascade the SHP program at all levels
Ministry of Health	• Leading role for the SHP • Provide for the new buildings for service provision, medical equipment, medicines, vaccines and supplies • Prepare and disseminate SHP guideline, standards, training materials, SoP, job aids, manuals and facilitate actual implementation of guidelines including the roll out of trainings • Design and provide in-service and other short-term training for implementation of SHP • Avail health workers and nutritionist proficiently • Coordinate all stakeholders and actors at all levels on SHP
Ministry of Education	• Co-leading for the SHP • Provide for office furniture and supplies, school feeding facility, and adequate space for nutrition sensitive agriculture practice • Facilitate implementation of guidelines • Ensure adequate water, sanitation and menstrual hygiene facilities in schools • Ensure the SHP is incorporated in the curriculum • Ensure the alignment of SHP with other strategic document and manuals • Avail school psychologist at all school level • Develop SHP co-curricular materials
Ministry of Water, Irrigation and Electric	• Consider accessibility of new water scheme to school during construction • Consider accessibility of new Electricity line to school during construction • Technical support to school as needed
Ministry of youth and Sport	• Prepare different sport competitions for students and entertainment programs • Strengthening and support sport training material • Give shorthand long term training to school community (different sport games and life skill)

Ministry of Women and Children Affairs	• Create an enabling environment for scale up and sustainability of SHP • Provide technical support to school as needed • Give gender sensitive short-term training to school community
Ministry of Agriculture and Natural Resource	• Promote different nutrition sensitive agriculture activities in schools • Provide technical support for school community • Develop school gardening training materials
Ministry of Livestock and Fishery	• Promote livestock and poultry initiatives in school environment and linking with school feeding program • Provide technical support for school community • Give short-term training to school community
Development partners/ Private sector/ CSOs	• Engage to support MoH/MoE and its structural offices at all levels to implement the SHP to the optimal level • Adopt the package to develop promotional materials including tools, learning aids, etc. • Provide support to MoH/MoE in familiarization, dissemination and implementation of the SHP • Collaborate with MoH/MoE in evaluating the effectiveness of the SHP • Promote SHP information to community organizations. • Provide technical support and consultation for the implementers. • Play advisory role for the service providers
Joint Responsibility Of BoH and BoE	• Budget allocation and provision of logistic support to all level • Promote and advocate SHP activities, using different media outlets (both electronic and print media) • Create an enabling environment for scale up and sustainability of SHP • Ensure quality of the SHP service provision • Ensures that package activities, strategies and results are monitored, evaluated and reported within the HMIS and EMIS systems • Coordinate and give training (capacity development) to health workers, school community, stakeholders and other staff on SHP • Assists Zones and Woredas to identify their program gaps and management deficits and provides them with the technical assistance or the capacity development they require • Mobilize resources for SHP implementation • Strengthening the public private partnerships (PPP) to support the SHP • Joint operational and strategic planning • Joint monitoring and evaluation • Establish coordinating body • Cascade the SHP program at Zonal, Woreda and school level
Regional Health Bureaus	▪ Leading role in the implementation of SHP ▪ Provide for the new building for service provision , medical equipment , medicines, vaccines and supplies ▪ Contextualize the developed guideline, including translation to local languages; and disseminate SHP guideline, standards, training materials, SoP, job aids, manuals and facilitate actual implementation of guidelines including the roll out of trainings

	• Designing and implementing in-service and other short-term training program for implementation of SHP • Avail necessary human resource ▪ Coordinate all stakeholders and actors at regional level ▪ Support and distribute logistics all level
Regional Education Bureaus	• Co-leading role for implementation of the SHP • Provide office furniture and supplies, school feeding facility, and adequate space for nutrition sensitive agriculture • Facilitate actual implementation of guidelines • Ensure adequate water, sanitation and menstrual hygiene facilities in schools. • Cascade and contextualized co-curricular materials
Regional Water, Irrigation and Electric Bureaus	• Consider accessibility of new water scheme to school during construction • Consider accessibility of new electricity line to school during construction • Technical support to school as needed
Regional Youth and Sport Bureaus	▪ Promote and conduct periodic sport competitions for students ▪ Prepare different entertainment programs ▪ Strengthening and support sport training material ▪ Give short and long term sport activity trainings to School community (different sport games and life skill)
Regional Women and Children Affairs Bureaus	▪ Create an enabling environment for scale up and sustainability of SHP ▪ Provide technical support to school as needed • Give gender sensitive short term training to school community
Regional Agriculture Bureaus	▪ Supply modeling of school for different nutrition sensitive agriculture activities ▪ Provide technical support for agriculture activities • Provide and cascade school gardening training to Zones and Woredas
Joint Responsibility Of ZoH and ZoE	• Transfer the budget allocated and provision of logistic support to all levels • Promote and advocate SHP activities, using different media outlets (both electronic and print media) • Create an enabling environment for scale up and sustainability of SHP • Ensure quality of the SHP service provision • Ensures that package activities, strategies and results are monitored, evaluated and reported within the HMIS and EMIS systems • Coordinate and give training (capacity development) to health workers, school community, stakeholders and other staff on SHP • Assist Woredas to identify their program gaps and management deficits and provides them with the technical assistance or the capacity development they require • Mobilize resources for SHP implementation • Strengthening public private partnership (PPP) to support the SHP • Joint operational and strategic planning • Joint monitoring and evaluation • Establish coordinating body • Cascade the SHP program at Woreda and school level

Zonal Health Department	• Leading role in the implementation of the SHP • Shall provide the new building for service provision, medical equipment ,medicines, vaccines and supplies • Contextualize the developed guideline, including translation to local languages; and disseminate SHP guideline, standards, training materials, SoP, job aids, manuals and facilitate actual implementation of guidelines including the roll out of trainings • Facilitating and implementing in-service and other short-term training program for implementation of SHP • Avail necessary human resource • Coordinate all stakeholders and actors at regional level • Support and distribute logistics at all level
Zonal /Education Department	• Co-leading role for the SHP • Provide office furniture and supplies, school feeding facility, and adequate space for nutrition sensitive agriculture • Facilitate actual implementation of guidelines • Ensure adequate water, sanitation and menstrual hygiene facilities in schools. • Cascade and contextualized co-curricular materials
Zonal Water, and Energy Development Department	• Consider accessibility of new water scheme to school during construction • Consider accessibility of new electricity line to school during construction • Technical support to school as needed
Zonal Youth and Sport Department	• Promote and conduct periodic sport competitions for students • Prepare different entertainment programs • Strengthening and support sport training material • Give short and long term sport activity trainings to School community (different sport games and life skill)
Zonal Women and Children Affairs Department	• Create an enabling environment for scale up and sustainability of SHP • Provide technical support to school as needed • Give gender sensitive short term training to school community
Zonal Agriculture and Natural Resource Department	• Supply modeling of school for different nutrition sensitive agriculture activities • Provide technical support for agriculture activities • Provide and cascade school gardening training to Zones and Woredas
Woreda Agriculture and Natural Resource office	• Supply modeling of school for different nutrition sensitive agricultural activities • Provide technical support for agriculture activities • Give short term school gardening training to school community as needed
Health center / Hospital	• Lead all technical part of SHP in the health center catchment • Provide logistical support (Medical equipment, medicines, vaccines and supplies) • Create an enabling environment for scale up and sustainability of SHP • Incorporate statistics on SHP into the facility statistics (facility HMIS report) • Establish referral linkage mechanisms. • Monitor and evaluate the SHP activities

	• Create sense of shared responsibility about the intervention package for the whole school community • Establish linkage with different stakeholders facilitate on- job and other short-term training program for implementation of SHP • Facilitate advocacy and promotion activities at school and community levels; and include SHP as a priority agenda for the school community • Assist the school to identify their program gaps and management deficits and provides them with the technical assistance or the capacity development they require
School (from nursery to university level)	• Own Keble education and Training board for effective implementation • Play administrative role • Administrative control of SHP staff • Jointly monitor and evaluate the SHP activities with collaboration of nearest health facility • Record and report to the respective office • Create sense of shared responsibility about the intervention package for the whole school and surrounding community • Mobilizing and liaising with the school community including educators, the school governing body and other role-players. • Ensuring that all components of the SHP packages are provided to all students • Managing newly constructed center and equipment • Build partnerships with external providers including NGOs and other community organizations. • Implementing SHP co-curricular activities at the school level
Health Post	• Work with SHP staff and school community • Create an enabling environment for scale up and sustainability of SHP • Monitor and evaluate the SHP activities • Plan the activities with collaboration of SHP • Advocate for and promote activities at school and community levels; and include SHP as a priority agenda for their own Kebele
Community	• Monitor and evaluate the SHP activities • Advocate for and promote SHP activities • Support implementation process of the package at all levels • Resource mobilization and contribution. • Ensure safe and healthy learning environment
Kebele Admin	• Monitor and evaluate the SHP activities • Advocate for and promote SHP activities • Providing support for the successful implementation of the package
Students	• Advocate for and promote SHP activities • Create an enabling environment for scale up and sustainability of SHP • Engage with all activates of SHP
Students	• Advocate for and promote SHP activities • Create an enabling environment for scale up and sustainability of SHP

Associations	• Become involved in the implementation, monitoring and evaluation of SHP activities • Support the implementation process of the package at all levels • Establish linkage with students to SHP

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Annex 1: Pre-primary gross enrollment, by region and gender (age 4 – 6 years) (MoE ESAA 2008 E.C./ 2015-16 G.C.)

Region	Gross enrollment			Population age 4-6 years			Gross Enrollment Rate (GER)%		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Tigray	201,078	192,581	393,659	196,209	190,685	386,894	102.5	101.0	**101.7**
Afar	5,314	5,363	10,677	68,257	64,617	132,875	7.8	8.3	**8.0**
Amhara	457,661	429,079	886,740	862,085	833,498	1,695,584	53.1	51.5	**52.3**
Oromia	609,605	548,421	1,158,026	1,521,774	1,492,666	3,014,441	40.1	36.7	**38.4**
Somali	14,738	12,199	26,937	253,497	247,933	501,430	5.8	4.9	**5.4**
SNNPR	16,631	14,431	31,062	43,164	41,694	84,858	38.5	34.6	**36.6**
Ben-Gumuz	560,170	528,396	1,088,566	785,475	770,274	1,555,749	71.3	68.6	**70.0**
Gambella	8,831	7,660	16,491	15,327	14,904	30,231	57.6	51.4	**54.6**
Harari	6,904	6,195	13,099	8,142	7,777	15,919	84.8	79.7	**82.3**
Addis Ababa	86,272	82,076	168,348	89,634	89,370	179,004	96.2	91.8	**94.0**
Dire Dawa	8,177	7,516	15,693	19,906	18,533	38,440	41.1	40.6	**40.8**
National	**1,975,381**	**1,833,917**	**3,809,298**	**3,863,471**	**3,771,952**	**7,635,423**	**51.1**	**48.6**	**49.9**

Annex II: Primary gross enrollment by region and gender (Grades 1-8) (MoE ESAA 2008 E.C. / 2015-16 G.C)

Region	Gross Enrollment			Population Age 7-14			GER %		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Tigray	590,368	548,530	1,138,898	505,704	492,790	998,494	116.74	111.31	114.06
Afar	109,274	86,130	195,404	157,522	137,492	295,014	69.37	62.64	66.24
Amhara	2,230,637	2,115,832	4,346,469	1,964,019	1,931,757	3,895,776	113.58	109.53	111.57
Oromiya	4,183,219	3,609,667	7,792,886	3,765,079	3,709,130	7,474,208	111.11	97.32	104.26
Somali	512,650	376,793	889,443	492,482	434,785	927,267	104.10	86.66	95.92
Benishangul Gumuz	126,454	102,693	229,147	106,548	102,576	209,124	118.68	100.11	109.57
SNNP	2,458,662	2,173,362	4,632,024	2,014,753	1,994,844	4,009,597	122.03	108.95	115.52
Gambella	63,798	53,601	117,399	39,718	36,338	76,056	160.63	147.51	154.36
Harari	24,290	20,027	44,317	20,952	20,131	41,083	115.93	99.48	107.87
Addis Ababa	232,626	287,244	519,870	175,365	179,977	355,342	132.65	159.60	146.30
Dire Dawa	37,973	33,611	71,584	53,043	48,940	101,982	71.59	68.68	70.19
Total	**10,569,951**	**9,407,490**	**9,977,441**	**9,295,184**	**9,088,760**	**18,383,944**	**113.71**	**103.51**	**108.67**

Annex III: Secondary Gross Enrollment by region and gender (Grades 9-12) (MoE ESAA 2008 E.C / 2015-16 G.C.)

Region	Gross Enrolment			Population Age 16-19			GER %		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Tigray	106,227	106,794	213,021	236,630	232,060	468,690	44.89	46.02	45.45
Afar	8,587	4,628	13,215	86,495	66,797	153,293	9.93	6.93	8.62
Amhara	289,198	307,402	596,600	911,356	889,615	1,800,970	31.73	34.55	33.13
Oromiya	421,232	342,410	763,642	1,650,451	1,624,492	3,274,943	25.52	21.08	23.32
Somali	33,737	17,531	51,268	259,356	198,815	458,171	13.01	8.82	11.19
Benishangul Gumuz	16,631	13,024	29,655	47,880	46,897	94,777	34.73	27.77	31.29
SNNP	302,730	247,541	550,271	897,146	889,718	1,786,864	33.74	27.82	30.80
Gambella	16,755	10,021	26,776	19,401	17,568	36,969	86.36	57.04	72.43
Harari	3,784	3,448	7,232	9,924	9,999	19,923	38.13	34.48	36.30
Addis Ababa	69,572	85,888	155,460	87,153	101,805	188,958	79.83	84.36	82.27
Dire Dawa	7,593	6,430	14,023	27,322	25,496	52,818	27.79	25.22	26.55
Total	**1,276,046**	**1,145,117**	**2,421,163**	**4,233,113**	**4,103,262**	**8,336,375**	**30.14**	**27.91**	**29.04**

Annex IV: Number of schools with and without clinics (MoE 2015/16 G.C.)

Region	# of pre-schools	# of primary schools	# of primary schools with clinic infrastructure	# of secondary schools	# of secondary schools with clinic infrastructure
Tigray	208	2124	602	189	46
Afar	38	761	129	34	3
Amhara	405	8627	1774	433	119
Oromia	1631	13853	2357	1297	220
Somali	33	1188	282	124	35
B/Gumuz	32	571	118	68	11
SNNPR	761	6452	1447	705	197
Gambella	21	287	43	53	12
Harari	52	87	60	15	8
Addis Ababa	1106	804	731	217	186
Dire Dawa	104	113	94	21	14
National	**4,391**	**34,867**	**7,637**	**3,156**	**851**

Annex V: Detailed School Health Program Packages

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
1	SBCC and life skills	• Build positive healthy behavior • Skills of Knowing and living with oneself • Skill of knowing and living with others • Skills for making effective decision	• Self-awareness, assertiveness, coping with emotions • Empathy, effective communication nonviolent conflict resolution • Creative thinking, critical thinking, problem solving (puzzle)	• Age appropriate health message audio visual and printed (drama, songs, Mezmur, poems, teaching games, role plays storytelling, pictorials, carton films) • Speaking books • Puzzles • Teaching games • Audio visual • Role plays • Interactive dramas	• Teachers • Health workers • Parent engagement • Teachers Health workers Parent engagement	• Develop interactive and attractive visual learning through posters, pictorials, cartoon films, best storytelling, role plays, application and card games, computer applications set according to their age etc. • Identifying /observing preschoolers characteristic's that deviate from the normal behavior and give special support and create linkage to PHCU • Prepare interactive tools/guides to assess the different child cognitive, social, psychological, developmental issues • Skill building activities for parents/parenting, • Skills building for parents with special need children. • Develop / adapt life skill training manual for teacher, facilitators and club members to implement • Prepare age appropriate and engaging life skill activity guide for teacher, facilitators and club members to implement • Conduct TOT for KG teachers, facilitators and Student leaders (Grade 5- 8 could practice leading with the support of KG teachers)

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
						• Prepare age appropriate teaching aids
2	Nutritional services	• Nutrition assessment and monitoring • Food and nutrition education and counseling • Nutritional support for malnourished children • School feeding program • Micronutrient Supplementation (Vit A, Zinc, Iron folate, calcium)	• Awareness creation on nutrition assessment and monitoring for parents • Age appropriate Education/ promotion on diversity, balanced diet, healthy dieting, food safety • Promotion on healthy diet planning • Food substitution for diversification • Home based diet diversification • Fortification of products with micronutrient	• Weight scale • Height scale • MUAC tape • School meal assessment (safety, quality, diversity and adequacy) • Charts • Registration and referral slip • Food groups • Food pyramid • Pictures showing poor and good nutrition • Supplementary foods, therapeutic foods (RUTF), and multivitamins • Antibiotic • Case management guide line • School feeding guide lines • Food items • Kitchen and utensils (room for store, plates, cups) • Improved stoves • Water, electricity/ Buta gas), serving		• Nutritional screening and follow up • Growth monitoring and promotion • School meal assessment (adequacy, quality and safety) • Regular monitoring • Referral linkage • Education on diversity, balanced diet, healthy dieting, food safety (food item selection, processing, storage) • Training to pre- school facilitator • Parental counseling • Celebration of national nutrition day • Nutritional status assessment • Referral linkage to higher level • Case management • Supply management • Parental education and counseling • Recording and reporting • Assessment of eligibility of school /students for school feeding program • Supply of food items • Cleaning • Food serving • Link small holder farming • WASH linkage • Age and case identification • Supply management

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
				place • National micronutrient guide line • Registration • Nutrition supply • (Vit A, zinc, iron, folic acid, calcium)		
3	Water sanitation and hygiene (WASH)	• Personal hygiene promotion • Promotion of appropriate utilization and management of latrine • Water supply • Food hygiene • Solid and Liquid waste management • Greenery of the school environment • Compound sanitation • Ventilation of class rooms/ safe class rooms	• IEC/BCC materials • Mini media • Role playing • Puppet show • History telling	• Infrastructures of toilets and Urinals (isolated for male and female) • Clean and adequate supply of water • Water treatment chemical • Manuals of waste management • Infrastructures of Waste disposal depend on the area (sewerages lines, composting areas, pits) • Standard design of class room • Plants to be planted		• Promotion hands washing with soap or substitute. (Every critical time) • Personal hygiene monitoring program (Washing of body and hair, Combing hair, cutting nails, brushing teeth, face washing, neatness of dress and wearing shoes or slippers) • Hand washing day celebration • Provision of Improved latrine • Awareness creation of the safe use of toilets and urinals • Awareness creation and promotion of appropriate Anal cleansing material • Toilet day celebration • Provision of safe drinking water • Awareness creation drinking water, handling, storage and utilization • Children know how to store food appropriately and recognize common signs of spoiled food • Meal box checking regularly • Medical checkup of food handlers (depend on type of School) • Waste disposal site preparation • Facilitate collection and disposal of

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
						solid and liquid waste management (putting dust pin in front of classes) • Sanitation campaign • Construction and ready waste management sewerage lines, composting areas and pits • Inspection of each classroom cleanliness every day • Avail plants for school area greenery • Routine follow up of class rooms • Awareness creation of communicable disease (influenza, TB)
4	Management of common infections, infestations and disorders	• Diagnosis and management of common childhood illnesses (diarrhea, pneumonia and malaria, etc. • ICCM/ IMNCI • Treatment of scabies/ skin diseases and intestinal parasitosis • Management of minor wounds and splint • Provide care on eye, ear and upper respiratory tract infections	• Age appropriate SBCC on common diseases • Educate teachers on prevention of the common diseases and early detection of signs and symptoms • Utilize appropriate models to demonstrate care • Strengthen interpersonal communication during student encounters • Education on WHO 5 key rules of food safety • Linkage with WASH	• First aid kit (Plaster, gauze, cotton, iodine, alcohol, scissor, sutures) • Snellen's chart • Oral and teeth model for demonstration of teeth brushing • Otoscope • Job aids • ITN • ICCM/IMNCI algorithm • Essential equipment and drug list • Broad spectrum anti-helminths (mebendazole, albendazole and prazequantel)	• Health workers, HEWs and teachers	• Focused training of health workers, HEWs and teachers on the common diseases and care • Avail appropriate job aids • Supportive supervision from health offices • Recording and reporting of routine vaccination services • Avail disease distribution dossier • Avail anti-helminthic drugs • Train and educate health workers • Monitor and evaluate implementation

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Provide dental care • Referral services • School based mass deworming				
5	Routine catch up vaccination and immunization	• Using immunization card, routine screening for vaccination status, especially during enrollment • Vaccinate based on the child's vaccination status for routine immunization • Measles Rubella	• Educate teachers on target diseases for vaccination and available vaccines in Ethiopia • Strengthen interpersonal communication on vaccine schedule, appointment and adverse events following immunization • Age appropriate	• Cold chain boxes • Safety boxes • EPI monitoring chart • Tally sheets, registration books and reporting formats • Student health profile folder	• HEWs, Teachers and other HWs	• Train health workers on immunization in practice • Avail job aids • Appropriate venues for vaccination sessions in schools; Session plan for vaccination; • Supportive supervision from health offices • Recording and reporting of routine and supplemental vaccination services

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		Other supplemental Immunizations as recommended by MoH	SBCC on targeted diseases and vaccines			
6	Sexual and reproductive health (SRH)	• NA	• NA	• NA	• NA	• NA
7	HIV/STI	• NA	• NA	• NA	• NA	• NA
8	Mental, neurological and substance use disorders	• Screening of mental illness, disorders and risk factors • Screen children for mental illness and disorders of at school entry annually • Identifying children with risk factors (social, economic, behavioral problems) in the class by teachers • Linking with the school health centers for further assessment and actions	• Promote warm, friendly and rewarding learning school environment. • Cooperation rather than competition • Supportive and open communications. • Inform children of what they can do if they are being abused, or even suspect that a friend or relative is being abused in the school or their home • Promotes the right of boys and girls through equal opportunities and democratic procedures	• Data collection tools, reporting formats and referral forms • Job aids	• Trained Nurse • Psychologist	• Develop policy/rules/code of conduct on substance use, violence, bullying in school • Prepare training materials/job aids/guideline • Providers training for Health care providers and mangers , teachers community and religious leaders , families , and other relevant bodies • Orientation for students/family/care givers • Conduct advocacy activities to enforce the education polices and school standards on substance use related issues.

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Periodic screening integrated with other health screening program. • Referral for further psychiatric treatment and/or social supports • Prevention of physical punishment, bullying, harassment and violence				
9	Prevention of NCDs and injuries	• Develop physical activity and fitness	• Support schools to provide students with daily physical education and should be equipped with appropriate facilities and equipment.	• Safe field for playing • Locally available recreational facilities& tools • First aid kid • Training manuals • Lesson plans	• Home room teacher • Sport teacher • Supportive nurse	• Encourage children to have at least 10 minutes of playing physical activity daily at flag ceremony • Physical activity should consider growth and developmental status of children • Playing games, sports, walk as means of transportation, recreation, physical education, or planned exercise, in the context of family, school, and community activities can be held
		• Injury prevention and care	• Health education on Injury prevention and control • Awareness raising activities to school	• Appropriate SBCC materials • Training manuals	• Teachers, guards, health workers, psychologist ,	• Awareness raising of school community and parents on injury prevention • Advocacy for legislation and regulation and enforcement---seat

PRE-SCHOOL (AGES 4 -6)						
. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			community , students and parents on injury prevention strategies • Advocacy to ensure policies and legislations are in place on injury prevention and control		community	belt, helmet, zebra crossings • Conduct health education sessions • Capacity building for school community on injury prevention and control • Ensure safe school environment, play grounds etc. • Safe school buses, taxis, and disciplined drivers
			• Treating minor Injuries • Referral linkage , and rehabilitation/follow up providing training for health workers	• First aid kit • Minor injury treatment tools	• Nurse • Teachers • Assistants	• Treating Minor injuries • Referral • Follow up/rehabilitation • Psychosocial support
10	School health preparedness and readiness in education during emergency	• Provide micro nutrient supplement • Provide emergency food supplies • Provision of ORS and medical supplies • Sensitize children on emergency situations	• Create awareness using pictures, songs and drama	• Micronutrients • Foods • Drugs • Anti-pains	• Nurse, HEWs or teacher	• Awareness raising of school community and parents on emergency preparedness and readiness • Establish emergency team with the school community • Screen for malnutrition and dehydration link with nearby health facility • Provision of micronutrient supplements (such as vitamin A, iron and iodine) • Provide psychosocial support

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
1	SBCC and life skills	• Build positive healthy behavior • Inter personal communication (child to child approach 1 to 5) • Mass communication		• Age appropriate health message audio visual and printed (drama, role play, music, poems, teaching games, pictorials, demonstrations) • Models / demonstration on health packages • Mini medias • Smart projector • Speaking book • Comic books	• Teachers • Health workers • Parent engagement	• School health action committee (school administration , PTAs, PHCU, Parents, students, teachers) • Strengthen mini-media, edutainment programs • Integrate school health clubs • Capacity building on effective communication skill for all implementers (teachers, facilitators, health workers). • Capacitate on the development of Edutainment activities (drama, role play (participatory theatre), sing, poems, videos, teaching games (card and application), pictorials etc.…) • Standardize age appropriate health messaging • Produce and disseminate age appropriate child appealing health education and promotion messages and different SBCC materials (posters, leaflets, banners, billboards etc.)(centrally) • Conduct different festivals like parents day ,annual school health day events • Organize different health-related question and answer events • Participative musical sport games tide to key health messages • Strengthen 1to5 student linkage • Facilitate health education session (period)

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
						• Facilitate health education to be given by health workers • Pre service training for teachers at each level
	SBCC and life skills in primary 2nd cycle (5-8)	• Inter personal communication (Child to child approach 1 to 5) • Peer health education • School community conversation, • Guidance and counseling • Awareness creation • Strength adolescent friendly service • School health days • Mass communication (school mini media, educational mass media, community radio) • Community outreach/community, health days, campaign etc.		• Guiding manuals • SBCC materials, audio, audio visual (TV, DVD) and printed, fact sheets, role play/drama scripts • School gardening • Smart projector • Speaking book • Comic books	• Teachers and health workers • Psychologists	• Adapt training curricula to train TOTs, Pts.) • Recruit Peer health Educators (PE) based on the selection criteria • TOT for peer health educators • Conduct, monitor and support the peer education and life skill session by trained peer health education • Manual and activity book for club management • Establish and strengthen School health clubs • Strengthen mini-media, parents day and edutainment committee, health spot • Conducting an effective dialogue with students on health risks at this age, means of prevention, transmission • Debating • Participative musical sport games tide to key health messages(e.g. modified abebayehosh, etemeyite, meharebenyayachihu) • Education on Adolescence, Biological, physical and Behavioral changes related with age • Age appropriate content based and time allocation for health education

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• School health exhibition.				in regular bases • Edutainment/ folk media/hidden drama/street show • Integration with all current government educational curriculum and trainings • Bring health services to school environment and invite parents as a symposium
		• Skills of Knowing and living with one self • Skill of knowing and living with others • Skills for making effective decision • Skills as a tool for making good leaders	• Self-awareness • Assertiveness, Coping with emotions, self-esteem, coping with stress • Empathy, effective communication nonviolent conflict resolution, negotiation relating with others, managing peer relation ship • Creative thinking, critical thinking, problem solving, decision making	• Facilitation manuals, teaching aids • Puzzles • Teaching games • Audio visual • Role plays • Interactive dramas	• Teachers • Health worker	• Develop / adapt life skill training manual for teacher, facilitators and club members to implement • Prepare age appropriate and engaging life skill activity guide for teacher, facilitators and club members to implement • Training of Trainers (TOT) on life skill facilitation • Train and supervise the facilitators • Conduct life skill sessions • Follow-up and monitor sessions • Build skills on Skills of Knowing and living with one self, Skill of knowing and living with others ,Skills for making effective decision • Strengthen school health cubs by using student leaders from LS sessions

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
2	Nutritional services	• Cooking • Demonstration (for primary and 2nd cycle)	• Awareness creation about nutritional assessment	• Weight scale • Height scale • MUAC tape • School meal assessment (safety, quality, diversity and adequacy) • Charts • Registration and referral slip		• Nutritional screening • Micronutrient assessment • School meal assessment (adequacy, quality and safety) • Regular monitoring • Referral linkage
		• Food and Nutrition Education and counseling	• Education/ promotion on diversity, balanced diet, healthy dieting, food safety (best before, optimum heat, storage/ preservation)	• Food groups, • Food pyramid, • Pictures showing poor and good nutrition		• Education and counseling on diversity, balanced diet, healthy dieting, food safety (food item selection, processing, cooking and preservation/ storage • Establish and strengthening nutrition club • Parental counseling • Celebration of national nutrition day
		• Nutritional support for Acute malnourished (supplements, prescription and counseling)	• Awareness creation on prevention of malnutrition • Benefits of balanced diet	• Supplementary foods, therapeutic foods (RUTF), and multivitamins • Antibiotic • Case management guide line	• Nutritionist	• Nutritional stats assessment • Referral linkage to higher level • Case management • Supply management Parental education and counseling • Recording and reporting
		• School feeding program (To be implemented by MoE scale up plan and is not costed in this framework)	• Promotion on healthy diet planning • Food substitution for diversification • Promotion on Home Grown School	• School feeding guide lines • Food items • Kitchen and utensils (room for store, plates, cups) • Improved stoves	• Food technologist	• Assessment of eligibility of school / students for school feeding program • Supply of food items • Food preparation and cooking • Cleaning • Food serving

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			Feeding (HGSF) (for primary 2nd cycle)	• Water, electricity/ Buta gas), serving place		• Link small holder farming • WASH linkage
		• School gardening for teaching easy method of food diversification	• Promotion on homestead gardening (take home skill)	• Vegetable seed • Fruit seedlings • Plot for fruits and vegetables • Water facility for irrigation	• Agriculturalist • Trained teacher	• Supply of seeds and seedlings • Avail and prepare plots • Education on plot preparation, crop diversification, cropping/planting, seed selection/nutrition sensitive agroecology factors, irrigation, • Take home /Homestead gardening
		• Cooking demonstration (for primary 2nd cycle)	• Diet planning • Healthy cooking demonstration • Food safety	• Recipe book • Cooking utensils • Charts and tables for RDA demonstration • Biogas • Solar energy • Food items • Iodized salt taste kit		• Preparation or availing of cooking demonstration material • Link with WASH activates
		• Micronutrient Supplementation (Vit A, Zinc, Iron folate, calcium)	• Home based diet diversification • Fortification of products with micronutrient • Promotion of iodized salt utilization	• National micronutrient guide line • Registration • Nutrition supply (Vit A, zinc, iron, folic acid, calcium)		• Age and case identification • Supply management
3	Water sanitation and hygiene (WASH)	• Personal hygiene promotion	• IEC/BCC materials • Software application • Mini media • Quizzes	• Infrastructures of toilets and Urinals (isolated for male and female)		• Promotion hands washing with soap or substitute. (every critical time) • Personal hygiene monitoring program

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			Conversations • Role playing • Dancing • Drawing or painting • Life skill training	• Mosquito nets for boarding schools		• Regular washing of body and hair, • Combing hair, cutting nails, brushing teeth, face washing , neatness of dress and wearing shoes or slippers) • Computer/Mobile game Application (WASH snake and ladders board with dice or other games) • Hand washing day celebration • Fully integrated life skill education focusing on key hygiene behaviors and using participatory teaching techniques • Established different WASH clubs from model students • Awareness creation on Mosquito nets utilization
		• Promotion of appropriate utilization and management of latrine	• IEC/BCC materials • Role playing • SLTSH approach			• Provision of improved latrine • Awareness creation of the safe use of toilets and urinals • Awareness creation and promotion of appropriate Anal cleansing material • SLTSH (school lead total sanitation and hygiene) approach • Construction of model latrine for demonstration • Toilet day celebration
		• Water supply	• IEC/BCC materials • Demonstration water treatment chemical utilization	• Clean and adequate supply of water • Water treatment chemical		• Provision of safe drinking water • Awareness creation drinking water, handling, storage and utilization • Awareness creation on water treatment chemical utilization
		• Food hygiene	• IEC/BCC materials			• Children know how to store food appropriately and recognize common

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			• Role playing			signs of spoiled food • Medical checkup of food handlers (depend on type of School)
		• MHM service	• Role playing • Quizzes Conversations • Focus group dissection	• Fully equipped MHM room		• Awareness creation for menstrual hygiene management (MHM) • Promotion of sanitary pads preparation using local material • Fully equipped with necessary material
		• Solid and liquid waste management • Greenery of the school environment • Compound sanitation	• IEC/BCC materials	• Manuals of waste management • Infrastructures of Waste disposal depend on the area (sewerages lines, composting areas, pits) • Standard design of class room • Plants to be planted • Cleaning materials including detergents, disinfectants		• Waste disposal site preparation • Facilitate collection and disposal of solid and liquid waste management (putting dust pin in front of classes, library, office) • Sanitation campaign • Construction and ready waste management sewerage lines, composting areas and pits • Inspection of each classroom cleanliness every day • Avail plants for school area greenery • Avail PPE for the school community and educate about how to utilized and importance • Elimination of breeding places of mosquitoes
		• Ventilation of class rooms/ safe class rooms	• IEC/BCC materials			• Routine follow up of class rooms • Awareness creation of communicable disease (influenza, TB)
4	Management of common infections, infestations	• Diagnosis of common outpatient diseases	• Enhance school mini media for education. • Provide IEC materials for	• First aid kit (Plaster, gauze, cotton, iodine, alcohol, scissor, sutures)	• Teachers • Health worker • Health	• Focused training of health workers on the common diseases and care • Supportive supervision from health offices

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
	and disorders	• Treatment of scabies/ skin diseases (fungal and bacterial infections); and intestinal parasitosis • Prevention, diagnosis and management of malaria • Management of minor wounds and splint • Provide care on eye, ear and upper respiratory tract infections • Provide dental care • Referral services • School based mass deworming	common diseases and promote WASH • Educate teachers and students on prevention of the common diseases and early detection of signs and symptoms • Utilize appropriate models to demonstrate care • ITN • Strengthen interpersonal communication during student encounters • Education on Hand and face washing • Education on WHO 5 key rules of food safety • Linkage with WASH	• Snellen's chart • Oral and teeth model for demonstration of teeth brushing • Otoscope • Essential equipment and drug list (Annex) • Broad spectrum Anti-helminths (Mebendazole, Albendazole and prazequantel)	extension workers	• Recording and reporting of routine and supplemental vaccination services • Avail disease distribution dossier • Avail anti-helminthic drugs • Train and educate health workers and teachers • Monitor and evaluate implementation
5	Routine and catch up vaccination and immunization	• Routine screening for vaccination status, especially during enrollment • Provision of vaccination services: HPV vaccination for	• Enhance school mini media for education. • Educate on target diseases for vaccination in Ethiopia • Debating on vaccines and target	• Cold chain boxes • Safety boxes • EPI monitoring chart • Tally sheets, registration books and reporting formats • Student health	• Teachers • Health worker • Additional health worker, HEWs and teachers for supplemental immunization	• Train health workers on immunization in practice • Appropriate venues for vaccination sessions in schools; Session plan for vaccination; • Supportive supervision from health offices • Recording and reporting of routine

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		adolescent girls, • school Tetanus and diphtheria (Td) • Vaccinate based on the child's vaccination status for routine immunization • Hepatitis B Vaccinations • Measles Rubella vaccines • Supplemental Immunizations as recommended by MoH	diseases among students • Educate on vaccines available for routine and supplemental immunization • Strengthen interpersonal communication on vaccine schedule, appointment and adverse events following immunization	profile sheets	activities	and supplemental vaccination services
6	Sexual and reproductive health services	• Reproductive health counseling and education (5-8 grade students) • Age appropriate SRH information should be (for 1st cycle E.g. About their body parts, gender related roles, etc.) • HPV vaccine • Support on educating on prevention of HTPs like child	• Adolescence, body and emotional changes Menstruation, abstinence, • HTP (early marriage, FGM violence, early sexual debut) • Comprehensive sexuality education • Age appropriate sexual education to help them delay sexual activity	• Posters, booklet, leaflets, sanitary pads, teaching aids • Mini media • Visual teaching aids • Story telling on SRH issues • Registries and formats • Thermometer • BP apparatus • Weight scale • Test kit • Drugs	• Teachers, peer educators nurses	• Develop tailored SBCC materials and messages • Providing sanitary pads and how to use it • Establishment of different clubs and engage them in open discussion about sexuality, • Counseling regarding to all matters related to SRH including developmental changes • Dx and Rx of menstrual disorders, • Technical capacity building of service providers • Referral for further consultation, treatment and care • Regular meetings with parents or

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		marriage				guardian on SRH issues • Developing guideline about consent issues for provision of SRH services for those under 18 years of age • Provide legal support to prevent child marriage like certification
7	HIV/STI	• Provider initiated HIV counseling and tasting • Referral for STI Dx and Rx by using syndromic approach • Referral to VMMC, if desired • Refer and facilitate timely entry to pre ART and ART service • Mini media service • Student clubs • Psychosocial support • Provide IT supported information • Counseling on delay sexual debut , proper and consistent use of condoms	• Awareness creation on HIV and STI for the target groups and community at large	• Registries and formats • Thermometer • BP apparatus, • Weight scale • VCT room • Test kit • Drugs • Age appropriate Audio visual and printed BCC materials • Mini media and Club materials • ICT equipment	• Nurse	• Provide clinical care activities • Create referral linkage • Monitor referrals • Develop tailored age appropriate IEC/ BCC materials (music, game playing materials, models, pictures, etc.) • Organize awareness creation events like WAD • Generate and transmit HIV/STI prevention information through mini-medias, clubs SRH SMS message • Provide tailored Psychosocial support activities

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
8	Mental, neurological and substance use disorders	• Screening of mental illness, disorders and risk factors • Screen students for mental illness and disorders at school entry annually • Identifying students with risk factors (social, economic, behavioral problems) in the class by teachers • Linking students with the school health centers for further assessment and actions • Periodic screening for illness and disorders integrated with other health screening program • Referral for further psychiatric	• Advocate to prohibiting licensing business companies in regarding to substances near to schools compound. • Prohibit tobacco and alcohol advertising in all school premises	• Data collection tools, reporting formats and referral forms • Job aids	• Trained Nurse • Psychologist	• Develop policy/rules/code of conduct on substance use, violence • Training materials/job aids/guideline • Conduct training for Health care providers/teachers • Orientation for students/family/care givers • Advocacy to enforce the code/religious/community leaders/government officials • Prepare content of information and design mobile applications • Design web sites for key message dissemination

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		treatment and/or social supports • Prevention of physical punishment, bullying, harassment and violence • Follow up and management of substance use (use of psychoactive substances, khat, alcohol, and tobacco) and violence in school premises and during all school-sponsored activities				
9	Prevention of NCDs and injuries	• Adoption of healthy dietary habits	• Advocate on policies that support healthy diets at school and limit the availability of products high in salt, sugar and fats • Prohibition of promotions on soft drinks, sweets and foods which are risk factors for obesity • Healthy dieting	• Weight scale • Height scale • Checklist for diet diary • Pictures (Healthy food versus unhealthy food)	• Nurse • Home room teacher and assistant	• Weight, Height and BMI assessment • Dietary habit assessment • Advise and counseling on healthy diet to parents • Check lunch boxes for hygiene, quantity, quality and variety of foods and drinks • Educating students about what is good and bad food and drink

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			(balanced calorie, nutrient and fiber consumption; water consumption, physical exercise, Energy balance) • Importance of consuming variety of food items			
		• Promote Physical activity and recreational activities • Develop physical exercise and fitness	• Support Schools to provide students with daily physical education and should be equipped with appropriate facilities and equipment	• Safe Field for playing • Locally available recreational facilities	• Home room teacher • Sport Teacher	• Encourage children to have at least 15-20 minutes of moderate to intensive physical exercise for 3-5 days per week at flag ceremony • Physical exercise and fitness according to the growth and development status of the students
		• Injury prevention and care	• Health education on Injury prevention and control • Awareness raising activities to school community , students and parents on injury prevention strategies • Advocacy for policies and legislations on injury prevention and control	• Appropriate SBCC materials • Training manuals	• Teachers • Guards • Health workers • Psychologist • Community	• Awareness raising of school community and parents on injury prevention • Advocacy for Legislation and regulation and enforcement---seat belt, helmet, zebra crossings • Conduct health education sessions • Capacity building for school community on injury prevention and control • Ensure safe school environment, play grounds etc. • Safe school buses, taxis, and disciplined drivers

PRIMARY EDUCATION [1st CYCLE (GRADE 1-4) & 2nd CYCLE (GRADE 5-8)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Treating minor Injuries • Referral linkage, • Rehabilitation/ follow up • Providing training for health workers		• First aid kit, minor injury treatment tools	• Nurse • Teachers Assistants	• Treating minor Injuries • Referral linkage , and Rehabilitation/follow up • Providing training for health workers
		• Care of Children and adolescents with major NCDs (with DM, Heart disease, Epilepsy, Cancer, Asthma)	• Diabetes education, counseling and care • Asthma education, counseling and care • Epilepsy education, counseling and care • Cancer education, counseling and care • Heart disease education, counseling and care			
10	School health preparedness and readiness in education during emergency	• Provide micro nutrient supplement • Provide emergency food supplies • Sensitize children on emergency situations	• Create awareness about possible emergencies	• Micronutrients • Foods • Drugs • Anti-pains	• Nurse, HEWs or teacher	• Awareness raising of school community and parents on emergency preparedness and readiness • Establish emergency team with the school community • Screen for malnutrition and dehydration link with nearby HC • Provision of micronutrient supplements (such as vitamin A, iron and iodine) • Provide psychosocial support

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
1	SBCC and life skills	• Social Behavioral Change Communication • Skills of Knowing and living with one self • Skill of knowing and living with others • Skills for making effective decision • Skills as a tool for making good leaders • Application of life skills in the world of work	• School Community Conversation • Peer health Education • Youth Dialogue, • Guidance and Counseling, • Mentoring • Mini media and club establishment • Voluntary services • Promotion of health life style practices • Modeling/health ambassador students • Self-awareness, • Assertiveness, Coping with emotions, self-esteem, coping with stress • Empathy, effective communication, nonviolent conflict resolution, negotiation, relating with others, managing peer relation ship • Creative thinking, critical thinking, problem solving, decision making	• Manuals, activity guides • Teaching aids, audio visual and printed materials • Speaker (for bigger events) • Age appropriate SBCC materials (flyers, audio visual materials) that teaches on topics of • Youth friendly magazines •	• Teachers • Health Workers • Psychologist •	• Develop / adapt life skill training manual for teacher, facilitators and club members to implement • Prepare age appropriate and engaging life skill activity guide for teacher, facilitators and club members to implement • Trainers (TOT) on life skill facilitation • Train and supervise the facilitators and different club leaders • Conduct life skill sessions • Follow-up and monitor sessions • Build skills on communication, critical thinking, managing emotions, negotiation, decision making, value clarification, peer pressure resistance, • Assist students and club leaders on periodic forums (where experienced speakers & role models invited), Ted like conferences, festivals on different health topics for larger community •

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
2	Nutrition services	• Food and nutrition Education and counseling	• Education/ promotion on diversity, balanced diet, healthy dieting, food safety (best before, optimum heat, storage/ preservation)	• Charts, • Food groups • Food pyramid		• Education and counseling on diversity, balanced diet, healthy dieting, food safety (food item selection, processing, cooking and preservation/ storage) • Supporting nutrition club • Parental counseling • Calibration of national nutrition day
		• Nutritional support for Acute malnourished (Supplements, prescription and counseling)	• Awareness creation on prevention of malnutrition Benefits of balanced diet, diversification and fortification	• Supplementary foods, therapeutic foods (RUTF), and multivitamins • Nutrition supply (Vit A, zinc, iron, folic acid, calcium) • Antibiotic • Case management guide line		• Nutritional status assessment and linkage with health center • Case management • Supply management • Parental education and counseling • Recording and reporting
		• School feeding program	• Promotion on healthy diet planning • Food substitution for diversification • Promotion on Home Grown School Feeding (HGSF)	• School feeding guide lines • Food items • Kitchen and utensils (room for store, plates, cups), • Improved stoves • Water, electricity/ Buta gas), serving place		• Assessment of eligibility of school / students for school feeding program • Supply of food items (selection) • Food preparation and cooking • Cleaning • Food serving • Link small holder farming • WASH linkage
		• School gardening	• Education on plot preparation, crop diversification, cropping/planting,	• Vegetable seed • Fruit seedlings • Plot for fruits and vegetables		• Supply of seeds and seedlings • Avail plots • Take home /Homestead gardening

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			seed selection/nutrition sensitive agroecology factors, irrigation, use of waste for fertilization/soil fertility, natural resource management, economical use of vegetable plot (Urban agri), pest control, • Promotion on homestead gardening	• Water facility for irrigation		
3	Water sanitation and hygiene (WASH)	• Personal hygiene	• IEC/BCC materials • Software application • Mini media • Quizzes Conversations • Role playing and Dancing • Drawing or painting • Life skill training	• Infrastructures of toilets and Urinals (isolated for male and female)	• Environmental Health • Public Health Officer	• Promotion hands washing with soap or substitute. (every critical time) • Hand-washing points • Mobile game application (WASH snake and ladders board with dice or other games) • Hand washing day celebration • Fully integrated life skill education focusing on key hygiene behaviors and using participatory teaching techniques • Established different clubs from model students (Eye health, Menstrual hygiene management) • Awareness creation of Mosquito nets utilization for boarding schools

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Promotion of appropriate utilization and management of latrine	• IEC/BCC materials • Role playing • SLTSH approach			• Provision of Improved latrine • Awareness creation of the safe use of toilets and urinals, • Awareness creation and promotion of appropriate Anal cleansing material • SLTSH (School Lead Total Sanitation and Hygiene) approach • Toilet day celebration
		• Water supply	• IEC/BCC materials	• Clean and adequate supply of water • Water treatment chemical		• Provision of safe drinking water • Awareness creation Drinking Water Handling, Storage and • Utilization
		• Food hygiene				• Students know how to store food appropriately and recognize common signs of spoiled food • Medical checkup of food handlers (depend on type of School)
		• MHM service	• Role playing • Quizzes Conversations • Focus group dissection	• Fully equipped MHM room		• Awareness creation Menstrual hygiene management (MHM) • Promotion of sanitary pad preparation using local material • Fully equipped Menstrual hygiene management room with necessary material
		• Solid and Liquid waste management • Greenery of the school environment • Compound sanitation	• IEC/BCC materials	• Manuals of waste management • Infrastructures of waste disposal depend on the area (sewerages lines, composting areas, pits) • Standard design of		• Waste Disposal site preparation • Facilitate collection and disposal of solid and liquid waste management (putting dust pin in front of classes, library, office …) • Sanitation campaign • Construction and ready waste management sewerage lines,

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
				class room • Plants to be planted • Cleaning materials including detergents, disinfectants		composting areas and pits • Inspection of each Classroom cleanliness every day • Avail plants for school area greenery • Avail PPE for the school community and educate about how to utilized and importance • Elimination of breeding places of mosquitoes and other insects
		• Hazardous waste management / laboratory settings		• Personal protective equipment		• Awareness creation about hazardous waste • Chemicals • Electronics waste
		• Ventilation of class rooms/ safe class rooms				• Routine follow up of class rooms • Awareness creation of communicable disease (influenza, TB,)
5	Management of common infections, infestations and disorders	• Diagnosis of common outpatient diseases • Treatment of scabies/ skin diseases; and intestinal parasitosis • Management of minor wounds and splint; • Provide care on eye, ear and upper respiratory tract infections	• Enhance school mini media for education. • Provide IEC materials • Educate on prevention of the common diseases and early detection of signs and symptoms • Utilize appropriate models to demonstrate care • Strengthen interpersonal	• First aid kit (Plaster, gauze, cotton, iodine, alcohol, scissor, sutures) • Snellen's chart • Oral and teeth model for demonstration of teeth brushing • Otoscope • Student health profile sheet • Essential equipment and drug list (annex) • Broad spectrum Anti-helminths (Mebendazole,	• Teachers, HEWs, Nurses • School Health worker	• Focused training of health workers on the common diseases and care • Supportive supervision from health offices • Recording and reporting of routine vaccination services • Avail disease distribution dossier • Avail anti-helminthic drugs • Train and educate health worker and teachers • Monitor and evaluate implementation

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Provide dental care • Referral services • Deworming/ provision of anti-helminthic drugs based on respective helminth prevalence	communication during student encounters • Education on Hand and face washing • Education and skill on WHO 5 key rules of food safety) (WASH linkage)	Albendazole and prazequantel) -		
5	Routine catch up vaccination and immunization	• Routine screening for vaccination Status, especially for Tetanus vaccination in girls • TT vaccination for prevention of Tetanus in girls • Vaccinate for hepatitis B virus and other supplemental immunizations as recommended by MoH	• Enhance school mini media for education. • Educate on target diseases for vaccination in Ethiopia • Educate on vaccines available for routine and supplemental immunization • Strengthen interpersonal communication on vaccine schedule, appointment and adverse events following immunization	• Sharp safety box • Cold chain boxes • EPI monitoring chart • Tally sheets, registration books and reporting formats	• School health care provider	• Train health workers on immunization in practice • Appropriate venues for vaccination sessions in schools; Session plan for vaccination; • Supportive supervision from health offices • Recording, reporting performed activities
6	Sexual and reproductive health services	• Counseling on prevention of unwanted pregnancy, dual	• Awareness creation on SRH issues, human rights and values, gender	• IEC materials, testing kits, contraceptive supplies	• HO/nurse • Part time doctors • psychologist	• Provide clinical assessment treatment, linkage and referral of sexual and reproductive health cases to Adolescent and Youth Friendly

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		protection and contraception methods, Offering HCG test. • Menstrual cycle management • Management of dysmenorrhea • Counseling and referral for sexual violence and cervical cancer • Establishment and strengthening of girls club on SRH issues	norms through mini media • Availability of school based health service • Peer education and debating on SRH issues	• Consent form • Female and male condom • Drugs depending on the standard • Clearly prepared implementation guideline • Recording documentation and reporting		services • Counseling and avail contraceptives • OCPs • Inject able • Implants • IUCD • Emergency contraceptives • Condoms (female and male) • Pregnancy test (urine HCG test) • Counseling and referral for rape survivors
7	HIV/STI	• Providing HIV counseling, testing and referral services, • PICT • STI prevention, diagnosis treatment and referral (treatment using syndromic approach) • Referral to VMMC, if desired, • Prevention of unintended pregnancy (dual	• Awareness Creation on HIV and STI • Peer Education • Debating • Life Skill • Youth Dialogue • School community conversation • Training on the use of male and female condom • Comprehensive Sexuality Education (CSE)	• Clearly defined implementation guideline • Registries and formats • Thermometer • BP apparatus, • Weight scale • Test kit • Drugs • Job aids • Guiding manuals for PE,LS,YD, SCC • ICE/BCC materials • Mini media and club materials • Audio visual	• HO • Nurses • Psychologist • Nutritionist (part time)	• Provide clinical care and treatment activities • Create referral linkage • Monitor referrals • Develop tailored ICE/BCC materials (posters, fliers, brochures, billboards and visual instructional Medias like plasma etc.) • Organize awareness creation events like WAD • Adopt guiding manuals for PE, LS, YD, SCC • Select and train peer educators • Conduct and monitor PE, LS, YD sessions • Establish and run clubs, resource centers and mini-media activities

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		protection) • Refer and facilitate timely entry to pre ART and ART service • Guidance and Counseling • Psychosocial support • School clubs • Mini-media service • Health resource centers supported whit IT		equipment materials • ITC equipment		• Generate and transmit HIV/STI prevention information through mini-medias, radio, • Provide tailored guidance and counseling activities • Provide tailored Psychosocial support activities
8	Mental health, substance use, violence and psychosocial support	• Screening of mental illness, disorders and risk factors • Screen students for mental illness and disorders at school entry annually • Identifying students with risk factors (social, economic, behavioral problems) in the class by teachers • Linking students with the school	• Advocate to prohibiting licensing business companies in regarding to substances near to schools compound. • Prohibit tobacco and alcohol advertising in all school premises	• Data collection tools, reporting formats and referral forms • Job aids	• Trained Nurse • Psychologist	• Develop policy/rules/code of conduct on substance use, violence • Training materials/job aids/guideline • Conduct training for health care providers/teachers • Orientation for students/family/care givers • Advocacy to enforce the code/religious/community leaders/government officials • Prepare content of information and design mobile applications • Design web sites for key message dissemination

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		health centers for further assessment and actions • Periodic screening for illness and disorders integrated with other health screening program. • Referral for further psychiatric treatment and/or social supports • Prevention of physical punishment, bullying, harassment and violence. • Follow up and management of substance use (use of psychoactive substances, khat, alcohol, and tobacco) and violence in school premises and during all school-sponsored: prohibiting use of psychoactive				

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		substances, khat, alcohol, and tobacco, shisha by students and by faculty and staff on all school premises and during all school-sponsored activities.				
9	Prevention of NCDs and injuries	• NCD, injuries and risk factors prevention and control	• Advocate on policies that support healthy diets at school and limit the availability of products high in salt, sugar and fats • Prohibition of promotions on soft drinks, sweet and foods which are risk factors for obesity • Healthy dieting (balanced calorie, nutrient and fiber consumption; water consumption, physical exercise, Energy balance) • Importance of consumption of a variety of food items	• Weight scale • Height scale • Checklist for diet diary Pictures (Healthy food versus unhealthy food)	• Nurse • Home room teacher and assistant	
		• Promote Physical	• Support schools to	• Safe field for playing	• Home room	• Encourage students to have at least

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		activity and recreational activities, • Physical exercise and fitness	provide students with daily physical education and should be equipped with appropriate facilities and equipment	• Locally available recreational facilities • Adult supervisor • First aid kits • Training manuals • Lesson plan	teacher • Sport Teacher	25-30 minutes of moderate to intensity physical activity 3-5 days per week at flag ceremony • Physical exercise and fitness according to growth and devt, health status of students.
		• Injury prevention and care	• Health education on Injury prevention and control • Awareness raising activities to school community, students and parents on injury prevention strategies • Advocacy to ensure policies and legislations are in place on injury prevention and control • Treating minor Injuries, • Referral linkage, and Rehabilitation/follow up Providing training for health workers	• Appropriate SBCC materials • Training manuals • First aid kit, minor injury treatment tools	• Teachers, Guards • Health workers • Psychologist • Community • Assistants	• Awareness raising of school community and parents on injury prevention • Advocacy for legislation and regulation and enforcement---seat belt, helmet, zebra crossings • Conduct health education sessions • Capacity building for school community on injury prevention and control • Ensure safe school environment, play grounds etc. • Safe school buses, taxis, and disciplined drivers
		• Care of NCDs in children with DM, Heart disease,	• Diabetes education, counseling and care • Asthma education,			

SECONDARY EDUCATION [1st CYCLE (GRADE 9-10) & 2nd cycle (GRADE 11 -12)]						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		Epilepsy, Cancer, Asthma	counseling and care • Epilepsy education, counseling and care • Cancer education, counseling and care • Heart disease education, counseling and care			
10	School health preparedness and readiness in education during emergency	• Aware school community about possible emergency types	• Education on flood, fire, conflict, drought, etc.	• Fire extinguisher, • Emergency foods • Addresses of organization ready to reposes during emergency	• Nurse	• Awareness raising of school community and parents on emergency preparedness and readiness • Establish emergency team with the school community • Screen for malnutrition and dehydration link with nearby health facility • Provision of micronutrient supplements (such as vitamin A, iron and iodine) • Provide psychosocial support

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
1	SBCC and life skills	SBCC • Peer health Education, • Guidance and Counseling • Youth dialogue • School community conversation • Promotion of health life style • Promotion of voluntary services /volunteerism		• Guiding manuals • Age appropriate SBCC materials (flyers, audio visual materials)	• Health workers • Teachers • Psychologist	• Developing psychosocial guidance • Providing guidance and counseling service that maintains confidentiality, privacy • Adapt training curricula to train ToTs and (PEs) • ToT for peer health educators • Conduct, monitor and support the peer education • Establish and strengthen school health clubs • Establish mini-media and edutainment committee • Conducting an Effective Dialogue with students (debate, panel discussion etc.) • Strengthen 1 to 5 student linkage • Develop/standardize health education and promotion messages, different SBCC materials (posters, leaflets, banners, billboards etc. • Education on adolescence, biological and behavioral changes related with age, self-control & emotional acts • Periodic forum for larger

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
						community • Establishment of different clubs of music, drama, art and dance clubs that promote healthy life styles. • Design health message with web page. • Mobile applications, mobile text messages • Establish information resource center • Strengthen existing library service through provision of life skill • Pre service training for teachers at each level • Strengthen Voluntary services (e.g., blood donation) • Promotion of healthy lifestyle including prevention of communicable and non-communicable disease
		• Life skill • Skills of knowing and living with one self • Skill of knowing and living with others • Skills for making effective decision • Skills as a tool for making good leaders	• Self-awareness • Assertiveness, coping with emotions, self-esteem, coping with stress • Empathy, effective communication, nonviolent conflict resolution,	• Manuals, activity guides • Teaching aids, audio visual and printed materials • Speaker (for bigger events)	• Teachers • Health Workers • Psychologist	• Develop / adapt life skill training manual for teacher, facilitators and club members to implement • Prepare age appropriate and engaging life skill activity guide for teacher, facilitators and club

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Application of life skills in the world of work	negotiation, relating with others, managing peer relation ship • Creative thinking, critical thinking, problem solving, • Decision making • Life skill as a tool for identifying alternatives of earning a living • Life skill as a tool for making successful entrepreneurs			members to implement • Trainers (TOT) on life skill facilitation • Train and supervise the facilitators and different club leaders • Conduct life skill sessions • Follow-up and monitor sessions • Build skills on communication, critical thinking, managing emotions, negotiation, decision making, value clarification, peer pressure resistance • Assist students and club leaders on periodic forums (where experienced speakers & role models invited), Ted like conferences, festivals on different health topics for larger community

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
2	Nutrition services	• Food and Nutrition Education and counseling	• Education/ promotion on diversity, balanced diet, healthy dieting, food safety • Mobile app on healthy diet	• ICE/BCC • Food groups, food pyramid, • Nutrition canteen menu		• Education and counseling on diversity, balanced diet, healthy dieting, food safety (food item selection, processing, cooking and preservation/ storage • Establish nutrition club • Parental counseling • Celebration of national nutrition day
		• Nutritional support for malnourished	• Awareness creation on prevention of malnutrition • Benefits of balanced diet, diversification and fortification	• Case management guide line • Antibiotic		• Nutritional status assessment and linkage for Supplements
		• School gardening for teaching easy method of food diversification for TVET	• Education on plot preparation, crop diversification, cropping/ planting, seed selection/ nutrition sensitive agroecology factors, irrigation, use of waste for fertilization/soil fertility, natural resource management, economical use of vegetable plot (Urban agri), pest control • Promotion on	• Vegetable seed • Fruit seedlings • Plot for fruits and vegetables • Water facility for irrigation	• Agriculturalist, trained teacher	• Supply of seeds and seedlings • Avail plots • Take home /Homestead gardening

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			Homestead gardening			
		• Supplementation (Iron folate,)	• Home based diet diversification • Fortification of products with micronutrient (industrial and home fortification)	• Nutrition supply (iron, folic acid)		
3	Water sanitation and hygiene (WASH)	• Personal hygiene • Health education and promotion on topics of personal hygiene and utilization of toilets	• IEC/BCC materials • Software application • Mini media	• Infrastructures of toilets and urinals (isolated for male and female) • Hand-washing points	• Environmental Health • Or public Health officer	• Promotion of hands washing with soap or substitute. (every critical time • Regular washing of body hair and Combing hair, cutting nails, • Brushing teeth, • Eye health, neatness of dress and wearing • Mobile game Application (WASH snake and ladders board with dice or other games) • Hand washing day celebration • Fully integrated life skill education focusing on key hygiene behaviors and using participatory teaching techniques • Awareness creation of Mosquito nets utilization for boarding schools

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Promotion of appropriate utilization and management of latrine				• Provision of improved latrine within standard • Awareness creation of the safe use of toilets and urinals • Awareness creation and promotion of appropriate Anal cleansing material • Toilet day celebration
		• Water supply	• Demonstration water treatment chemical utilization			• Provision of safe drinking water • Awareness creation Drinking Water handling, storage and utilization • Bathing areas
		• Food hygiene				• Students know how to store food appropriately and recognize common signs of spoiled food • Medical checkup of food handlers (depends on type of school) • Inspection of food storage and preparation areas
		• MHM service	• Quizzes Conversations • Focus group dissection			• Awareness creation Menstrual hygiene management (MHM) • Promotion of sanitary pad preparation using local material • Fully equipped menstrual hygiene management room with necessary material

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Occupational health	• IEC/BCC materials • Awareness creation using local media • Danger sign indicator poster	• Different PPE		• Awareness creation of occupational health hazard and safety rule • Risk area identification • Risk minimization method • Avail PPE for the school community and educate about how to utilized and importance • Follow up of PPE utilization • Considering all infrastructures considered disabled student
		• Solid and Liquid waste management • Greenery of the school environment • Compound sanitation	• IEC/BCC materials			• Waste disposal site preparation • Facilitate collection and disposal of solid and liquid waste management (putting dust pin in front of classes, library, office) • Sanitation campaign • Construction and ready waste management sewerage lines, composting areas and pits • Inspection of each Classroom, workshops areas and dormitory room /areas cleanliness every time • Avail plants for school area greenery

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
						• Elimination of breeding places of mosquitoes and other insects
		• Hazardous waste management/laboratory settings/	• IEC/BCC materials			• Awareness creation about hazardous waste • Chemicals • E-waste
		• Ventilation of class rooms	• Awareness creation of communicable disease (influenza, TB, etc.)			• Monitoring the ventilation states of class rooms, meeting hall and dormitory area
4	Management of common diseases and disorders	• Diagnosis of common outpatient diseases • Management of minor wounds and splint; • Provide care on eye, ear and upper respiratory tract infections • Provide dental care • Referral services	• Educate on • prevention of the common diseases and early detection of signs and symptoms • Utilize appropriate models to demonstrate care • Strengthen interpersonal communication during encounters	• First aid kit (Plaster, gauze, cotton, iodine, alcohol, scissor, sutures) • Snellen's chart • Oral and teeth model for demonstration of teeth brushing • Otoscope • Essential equipment and drug list (Annex)	• Teachers, Nurses • Health officer • Part time physician	• Focused training of health workers on the common diseases and care • Supportive supervision from health offices • Recording and reporting of routine services

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
5	Routine catch up and Immunization Program	• Routine screening for vaccination status, especially for Tetanus • Vaccinate for hepatitis B virus • And other supplemental Immunizations as recommended by MoH	• Educate on target diseases for vaccination in Ethiopia • Educate on vaccines available for routine and supplemental immunization • Strengthen interpersonal communication on vaccine schedule, appointment and adverse events following immunization	• Vaccine carrier as available. • Cold boxes • Safety boxes • EPI monitoring chart • Tally sheets, registration books and reporting formats	• Teachers and HWs	• Train health workers on immunization in practice • Supportive supervision from health offices • Recording and reporting of routine and supplemental vaccination services
6	Sexual and reproductive health services	• Counseling and provision of services for prevention of unwanted pregnancy, on the use dual protection and contraception options including long acting methods, Offering HCG test • Menstrual cycle management • Management of dysmenorrhea • cervical cancer screening, treatment and referral • Establishment and	• Awareness creation about SRH issues • Promote abstinence • Education on safe sex practice • Condom promotion (female and male) • Education on unsafe abortion, HTP • Create a plat form for young people to enable them change agents in the service provision. (e.g., debate, m-health, social media, m-health)	• Implementation guideline • IEC materials, testing kits, contraceptive (OCP, ECs, implants, IUD including condoms and LARCs) supplies • Vaccines • Documentation & recording materials	• HO/nurse, lab tech • Doctor • Psychologist • Nutritionist	• Develop tailored SBCC materials • Offer counsel and avail contraceptives • OCPs • Injectable • Implants and IUDs • Emergency contraceptives • Condoms (male and female) • Pregnancy test (urine HCG test) • Diagnosis and treatment of STIs (genital ulcer, virginal and urethral discharges, inguinal bubo, scrotal swelling and PID

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		strengthening of girls club on SRH issues • Diagnosis and treatment • Comprehensive abortion care • ANC counseling and referral • Cervical cancer screening and referral • Provide comprehensive abortion care and referral linkage • Sexual violence Dx, Rx and referral • Mentoring and coaching using peer to peer approach newly enrolled students	• CSE			• Dx and Rx of menstrual disorders, • comprehensive abortion care service • Counseling and management of rape survivors
7	HIV/STI	• Providing HIV counseling and testing services, • PICT • STI/HIV prevention, diagnosis and treatment (Syndromic Approach), • Referral to VMMC, if desired, • Prevention of unintended pregnancy (Dual Protection) • Refer and facilitate timely entry to pre ART and ART service and	• Peer education • Life skill • Youth dialogue • School community conversation • Awareness creation on HIV and STI	• For Services • Registries and formats • Thermometer • BP apparatus, • Weight scale • VCT room • Test kit • Drugs • Job aids • For SBCC • Guiding manuals for PE,LS,YD, SCC		• Provide clinical care and treatment activities • Create referral linkage • Monitor referrals • Develop tailored ICE/BCC materials (posters, fliers, brochures, billboards etc.) • Organize awareness creation events • Adopt guiding manuals for PE, LS, YD, SCC • Select and train peer educators • Conduct and monitor PE,LS,YD sessions

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Health Resource Centers supported with IT • Referral and linkage for ART service to the nearby Health center		• ICE/BCC materials • ITC equipment • M- Health • Audio-visual learning materials • CSE (age cultural appropriate)		• Generate and transmit HIV/STI prevention information through mini-medias, radio, mobile phone, internet • Provide tailored guidance and counseling service • Train mentors and provide coaching activities • Train providers on Adolescent/youth friendly service
8	Mental health, substance use, violence and psychosocial support	• Screening of mental illness, disorders and risk factors • Screen students for mental illness and disorders at school entry annually • Identifying students with risk factors (social, economic, behavioral problems) in the class by teachers • linking students with the school health centers for further assessment and actions • Periodic screening for illness and disorders integrated with other health-screening program	• Advocate to prohibiting licensing business companies in regarding to substances near to schools compound • Prohibit tobacco and alcohol advertising in all school premises	• Data collection tools, reporting formats and referral forms • Job aids	• Trained nurse • Psychiatric /psychologist	• Develop policy/rules/code of conduct on substance use, violence • Training materials/job aids/guideline • Conduct training for Health care providers/teachers • Orientation for students/family/care givers • Advocacy to enforce the code/religious/community leaders/government officials • Prepare content of information and design mobile applications • Design web sites for key message dissemination

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Referral for further psychiatric treatment and/or social supports • Prevention of physical punishment, bullying, harassment and violence • Follow up and management of substance use (use of psychoactive substances, khat, alcohol, and tobacco) and violence in school premises and during all school-sponsored activities				
9	Prevention of NCDs and injuries	• Adoption of healthy dietary habits	• Advocate on policies that support healthy diets at school and limit the availability of products high in salt, sugar and fats • prohibition of promotions on soft drinks, sweet and foods which are risk factors for obesity • Healthy dieting (balanced calorie, nutrient and fiber consumption; water consumption, physical exercise, Energy balance)	• Weight scale • Height scale • Checklist for diet diary • BP apparatus • Pictures (Healthy food versus unhealthy food)	• Nurse • Home room teacher and assistant	• Weight, Height and BMI assessment • Blood pressure screening • Dietary habit assessment • Advise and counseling on healthy diet • Check lunch boxes for hygiene, quantity, quality and variety of foods and drinks • Educating students about what is good and bad food and drink • Screening for Tobacco, alcohol and khat use • Brief interventions for those who use alcohol or tobacco

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
			• Importance of consumption of a variety of food items			
		• Promote physical activity and recreational activities to do • Physical exercise and fitness	• Schools are encouraged to provide students with daily physical education and should be equipped with appropriate facilities and equipment	• Safe field for playing • Locally available recreational facilities and tools • First aid kit • Training manuals • Lesson plans	• Home room teacher • Sport Teacher • Nurse supports	• Encourage children to have at least 30-40 minutes of moderate to intensity physical activity 3-5 days per week at in off academics periods • Physical exercise and fitness according to growth and devt, health status of students.
		• Injury prevention and care	• Health education on Injury prevention and control • awareness raising activities to school community , students and parents on injury prevention strategies • Advocacy to Ensure policies and legislations are in place on injury prevention and control	• Appropriate SBCC materials • Training manuals	• Teachers • Guards • Health workers • Psychologist • Community	• Awareness raising of school community and parents on injury prevention • Advocacy for Legislation and regulation and enforcement---seat belt, helmet, zebra crossings • Conduct health education sessions • Capacity building for school community on injury prevention and control • Ensure safe school environment, play grounds • Safe school buses, taxis, and disciplined drivers

TERTIARY LEVEL (TVET, College, and Universities)						
S. No	**Packages**	**Type of School Health Service**	**Health Promotion and Communication**	**Material Resources**	**Human Resources**	**Activities**
		• Care of NCDs (Children and adolescents NCDs (with DM, Heart disease, Epilepsy, Cancer, Asthma)	• Diabetes education, Counseling and care • Asthma education, counseling and care • Epilepsy education, counseling and care • Cancer education, counseling and care • Heart disease education, counseling and care			
10	School health preparedness, response and recovery in education during emergency	• Aware school community about possible emergency types	• Education on flood, fire, conflict, drought, etc.	• Fire extinguisher, • Emergency foods • Addresses of organization ready to reposes during emergency	• Nurse/ HO/ physician.	• Awareness raising of school community and parents on ways and means of protecting themselves during emergency • Establish emergency team with the school community • Screen for malnutrition and dehydration link with nearby health facility • Provision of micronutrient supplements (such as vitamin A, iron and iodine) • Provide psychosocial support

Annex VI: M & E Indicators for SHP

Indicator	Indicator definition	Indicator calculation		Source of information	Data collection frequency	Remark
		Numerator	Denominator			
Percentage of schools with minimum school health packages	Proportion of all schools with minimum package of school health package. Minimum package means providing 10 school health packages	Schools with minimum school health package	All schools	EIMS/HMIS	Annually	Disaggregated by level (primary, secondary, tertiary)
Percentage of students who received deworming drug	Proportion of students who received the deworming drug	Number of students who received deworming drug	Total number of eligible students for deworming	EIMS/HMIS	Biannually	Disaggregated by school level (preschool and primary school)
Percentage of school students who obtained visual screening	Proportion of school students who obtained visual screening at the beginning of the school year	Number of students who received annual visual screening	Total number of students	EIMS/HMIS	Annually	Disaggregated by school
Percentage of school students who obtained hearing defect screening.	Proportion of school students who obtained hearing screening at the beginning of the school year	Number of students who received annual hearing screening	Total number of students enrolled per grade	EIMS/HMIS	Annually	Disaggregated by school
Percentage of students who correctly demonstrate proper tooth brushing.	Proportion of students who correctly demonstrate proper tooth brushing.	Number of students who correctly demonstrate proper tooth brushing.	Total number of students	Survey	Every three years	Disaggregated by grade of enrollment
Percent of students sleeping under an ITN the previous night	The proportion of students who were sleeping under an ITN the previous night of the assessment.	Number of students who were sleeping under an ITN	Total number of students	Survey	Every three years	Disaggregated by school

Percentage of schools implementing screening vaccination status of students at enrollment	Proportion of schools implementing screening vaccination status of students at enrollment	Number of schools implementing screening vaccination status of students at enrollment	Total number of schools	Survey	Annually	
Percentage of fully immunized preschool students	Proportion of fully immunized preschool students	Number of fully immunized preschool students	Total number of preschool students	Survey	Annually	Disaggregated by grade
Percentage of students screened for malnutrition	Proportion students screened for malnutrition	Number of students screened for malnutrition	Total students screened for malnutrition	HMIS/EMIS	Quarterly	Disaggregated by age
Percentage of malnourished students managed	Proportion of malnourished students managed	Number of malnourished students managed	Total number of students screened			Disaggregated by age
Percentage of schools providing nutritional counseling services	Proportion of schools providing nutritional counseling services	Number of schools providing nutritional counseling services	Total Number of schools	HMIS/EMIS	Quarterly	
Percentage of students who reported having improved their diet and life style	Proportion of students who reported having improved their diet and life style	Number of students who reported having improved their diet and life style	Total number of students	Survey	Annually	
Percentage of schools with school gardening service	Proportion of schools with school gardening service	Number of schools with school gardening service	Total number of schools	EMIS	Quarterly	
Percentage of schools with school cooking demonstration session	Proportion of schools with school cooking demonstration session	Number of schools with school cooking demonstration session	Total number of schools	EMIS	Quarterly	

Percentage of students supplemented with Vitamin A	Proportion of students supplemented with Vitamin A	Number of students supplemented with Vitamin A	Total number of students eligible for Vit A	HMIS/EMIS	Bi annually	
Percentage of students screened for MNS risk factors	Proportion of students screened for MNS risk factors	Number of students screened for MNS risk factors	Total number of students	HMIS/EMIS	Annually	
Percentage of schools with safe school environment	Proportion of schools with safe school environment	Number of schools with safe school environment	Total number of schools	Admin	Annually	Inspection
Percentage of students taught about injury prevention and safety	Proportion of students taught about injury prevention and safety	Number of students taught about injury prevention and safety	Total number of students	Survey	Annually	
Percentage of young people aged 15 to 24 years, who have had sexual intercourse before the age of 15 years.	Proportion of students aged 15 to 24 years, who have had sexual intercourse before the age of 15 years.	Number of students 15 to 24 years, who have had sexual intercourse before the age of 15 years.	Total number of students aged 15 to 24	Survey	Every 3 year	
Percentage of students who used a condom the last time they had intercourse.	Proportion of students who used a condom the last time they had intercourse.	Number of students who used a condom the last time they had intercourse.	Total number of sexually active students	Survey	Every 3 years	
Percentage of students who are using contraceptive	Proportion of students who used modern contraception	Number of students who are using contraceptive	Total number of sexually active students	Survey		
Percentage of schools with functional school health club	Proportion of schools with functional school health clubs (definition to be defined)	Number of schools with functional school health club	Total number of in the schools	Assessment		

Percentage of students with a specific attitude (favorable/unfavorable) towards a recommended behavior	Proportion of students with a specific attitude (favorable/unfavorable) towards a recommended behavior	Number of students with a specific attitude(favorable/unfavorable) towards a recommended behavior	Total number of students			Disaggregated by package
Percentage of students participated in school community conversation sessions.	Proportion of students participated in school community conversation sessions.	Number of students participated in school community conversation sessions.	Total number of students	HMIS	Quarterly	
Percentage of model students on health	Proportion of model students according to model student criteria	Number of model students	Total number of students	HMIS	Quarterly	
Percentage of students who received health messages	Proportion of students who received health messages	Number of students who received health messages	Total number of students	Survey		Disaggregated by source
Percentage of schools participated on community outreach activity	Proportion of schools participated on community outreach activity	Number of schools participated on community outreach activity	Total number of schools		Annually	
Percentage of students who received training on life skills	Proportion of students who received training in life skill sessions	Number of Students who received training in life skill	Total number of students	HMIS/EMIS	Quarterly	Disaggregated by level (primary, secondary, tertiary)
Percentage of teachers who received training of trainer on life skills	Proportion of teachers who received training of trainer in life skill sessions	Number of teachers who received training of trainer in life skill	Total number of teachers	HMIS/EMIS	Quarterly	Disaggregated by level (primary, secondary, tertiary)

Percentage of students who mentioned at least three essential life skills	Proportion of students who mentioned at least three essential life skills	Number of students who mentioned at least three essential life skills	Total number of skills	Survey	Every three years	
Percentage of schools with functional hand washing facilities	Proportion of schools with functional hand washing facilities	Number of schools with functional hand washing facilities	Total number of schools	Admin report	Quarterly	
Percentage of school with functional latrine facility as per the national standard	Proportion of school with functional latrine facility as per the national standard (functional to be defined)	Number of school with access to functional latrine facility as per the national standard	Total number of schools	HMIS/EMIS	Annually	
Percentage of schools with safe drinking water as per the national standard	Proportion of schools with safe drinking water as per the national standard	Number of schools with safe drinking water as per the national standard	Total number of schools	Admin report	Annually	
Percentage of students who demonstrated good hygiene practices (including MHM)	Proportion of students who demonstrated good hygiene practices	Number of students who demonstrated good hygiene practices	Total number of students	Survey	Every three years	
Percentage of schools with proper solid waste disposal facility	Percentage of schools with proper solid waste disposal facility	Number of schools with proper solid waste disposal facility	Total number of schools	Survey	Annually	

Annex VII: Stakeholder Analysis

Stakeholders	Behaviors Desired	Their Needs	Their Influence	Institutional response
Students	• Active participation and utilize the services • Be a change agent • Peer educator • Healthy behaviors and actions	• Quality health service • Friendly service • Safe and conducive environment • Better protected from health risks • Confidential service • Entertainment	High	• Engaging students from planning to implementation • Conduct student need assessment • Friendly service • Quality improvement and quality assurance • Train service providers on • Develop code of conduct • Respect local values and beliefs
Woreda admin	• Ownership of the program • Resource allocation • Monitor, support and follow up • Community mobilization	• Positive result from the program • Available and functional service • Quality health service • Behavioral change from students	High	• Strong advocacy • Engagement
Teachers and admin staff	• Cooperative and participatory • Ownership of the program • To be champions of the program	• Smooth teaching-learning process • Well performing students • Behavioral change from students • To get health service from the students' health center • Safe and conducive environment	High	• Engaging teachers from planning to implementation • Awareness creation on the impact of the program on students' performance • Design the service to include the needs of teachers • Align the students' health program with the learning-teaching process of the school.
Parents/Care takers	• Cooperative and participatory • Positive attitude to the program • Good parenting • Support family activity (labor demand)	• Well performing students • Safe school environment • Healthy behaviors and actions • Healthy development	High	• Awareness creation about the program • Involving parents • Create platforms for regular discussion with parents

Students' health center staff	• Respectful, compassionate and caring • Competent • To be confidential • Proactive	• Continuous training • Career development • Incentives • Supportive supervision • Regular follow up • Conducive working environment • Job aids/ guidelines/manuals/reporting formats	High	• Design incentive packages • Orientation and training • Develop code of conduct • Conduct regular supervision • Avail essential equipment and supplies as per standard
Local health facility (Hospital, Health center, HEWs)	• Smooth referral linkage • Technical and logistics and supply support • Provide outreach service • Train students' health center staff	• Smooth referral linkage • Report for the students' health center • Supportive supervision • Regular follow up • Training • Job aids	High	• Orientation and consensus building to clarify the objective of the program and the role of the health facility • Training • Regular follow up and supervision • Avail job aids
NGOs/FBOs	• Harmonization • Technical and financial support	• Involvement • Evidence based interventions	Medium	• Engaging NGOs • Conduct partners mapping • Plan aliment
Education sector	• Ownership • Collaboration • Resource allocation	• Smooth teaching-learning process • Well performing students • Behavioral change from students • Safe and conducive learning environment	High	• Advocate for ownership of the program by the education sector • Work with MOE from program design to evaluation
Water sector	• Collaboration • Improved access to safe water in schools • Resource allocation	• Improved access to safe water • Collaboration	High	• Advocate for ownership of the program by the education sector • Work with MOE from program design to evaluation

Annex VIII: Detail program costs

TABLE 6 SHP COSTS BY CATEGORY

	Year 1	Year 2	Year 3	Year 4+*	Total
Total (ETB)	**2,239,876,809**	**3,067,055,466**	**4,027,589,562**	**2,374,543,080**	**11,709,064,915**
Administrative	7,000,000	2,146,000	2,302,658	2,470,752	13,919,410
Equipment	226,550,517	243,559,859	261,845,278	1,627,361	733,583,015
Supplies	288,147,748	617,651,602	993,727,479	1,065,449,102	2,964,975,932
Drugs	30,348,936	65,128,818	104,824,832	112,477,045	312,779,631
Training + Salary	356,582,392	710,140,925	1,132,185,791	1,192,518,820	3,391,427,928
Infrastructure	1,331,247,215	1,428,428,261	1,532,703,524	-	4,292,379,000

TABLE 7 SHP COSTS BY SCHOOL LEVEL AND TYPE

	Year 1	Year 2	Year 3	Year 4+*	Total
Total (ETB)	**2,239,876,809**	**3,067,055,466**	**4,027,589,562**	**2,374,543,080**	**11,709,064,915**
Total Fixed	1,597,387,661	1,691,141,733	1,814,595,079	-	5,103,124,472
Total Recurrent	642,489,148	1,375,913,733	2,212,994,482	2,374,543,080	6,605,940,443
Total National Level	**7,686,895**	**2,867,153**	**3,076,455**	**3,301,036**	**16,931,538**
Fixed	5,014,805	-	-	-	5,014,805
Recurrent	2,672,090	2,867,153	3,076,455	3,301,036	11,916,733
Total Regional Level	**16,286,270**	**826**	**887**	**951**	**16,288,934**
Fixed	16,285,500	-	-	-	16,285,500
Recurrent	770	826	887	951	3,434
Total Pre-schools	**113,473,370**	**193,424,481**	**284,443,754**	**247,538,801**	**838,880,406**
Fixed	46,681,614	50,089,372	53,745,896	-	150,516,883
Recurrent	66,791,756	143,335,109	230,697,857	247,538,801	688,363,523
Total Primary Schools	**1,870,446,134**	**2,508,160,631**	**3,229,013,836**	**1,731,041,327**	**9,338,661,928**
Fixed	1,403,370,711	1,505,816,773	1,615,741,398	-	4,524,928,883
Recurrent	467,075,423	1,002,343,857	1,613,272,439	1,731,041,327	4,813,733,046
Total Secondary Schools	**173,621,649**	**246,815,938**	**329,771,364**	**209,034,979**	**959,243,930**
Fixed	117,219,124	125,776,121	134,957,777	-	377,953,022
Recurrent	56,402,525	121,039,818	194,813,587	209,034,979	581,290,908
Total Tertiary Level	**58,362,490**	**115,786,437**	**181,283,266**	**183,625,986**	**539,058,179**
Fixed	8,815,905	9,459,467	10,150,008	-	28,425,380
Recurrent	49,546,584	106,326,970	171,133,258	183,625,986	510,632,799

*Year 4 costs represent the yearly recurrent cost of the SHP following full roll out

TABLE 8 SHP AVERAGE COST OF SERVICE PER SCHOOL AND PER STUDENT BY COST CATEGORY (ETB)

	Pre-primary		Primary		Secondary		Tertiary	
Cost Category	Per School	Per Student	Per School	Per Student	Per School	Per Student	Per School	Per Student
Shared Cost	328,396	378.55	418,396	709.30	438,697	533.41	145,740	118.01
1. SBCC	6,522	7.52	5,015	8.50	21,736	26.43	-	-
2. Nutrition	9,286	10.70	7,474	12.67	1,840	2.24	497	0.40
3. WASH	4,655	5.37	4,477	7.59	4,826	5.87	-	-
4. Common Diseases	5,766	6.65	2,735	4.64	4,304	5.23	4,773	3.87
5. Vaccination	1,511	1.74	1,455	2.47	1,502	1.83	1,584	1.28
6. SRH	-	-	2,683	4.55	184	0.22	1,622	1.31
7. HIV&STI	-	-	884	1.50	880	1.07	1,404	1.14
8. MNS Disorders	170	0.20	170	0.29	170	0.21	170	0.14
9. NCDs	1,753	2.02	1,614	2.74	1,731	2.10	2,437	1.97
10. Emergency Preparedness	-		-	-	438,697	-	-	-
Total	**358,062**	**412.74**	**444,909**	**754.25**	**475,874**	**578.61**	**158,230**	**128.12**