

Health Extension Program Evaluation: Rural Ethiopia

Part - IV

Support and Management of HEP



CNHDE, 2011



EVALUATION OF HEP

**Implementation process and effect on health
outcomes**

**VOLUME IV:
SUPPORT AND MANAGEMENT OF HEP**

RURAL ETHIOPIA, 2010

The Ethiopia Health Extension Program Evaluation Study (2010) was undertaken by the Center for National Health Development in Ethiopia, Columbia University (CNHDE, CU) in collaboration with FMOH, UNICEF and WHO as a follow-up to similar studies carried out in 2005 and 2007. UNICEF and WHO – Ethiopia country offices and the Earth Institute at Columbia University funded the 2010 evaluation study.

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PREFACE

The Center for National Health Development in Ethiopia (CNHDE), The Earth Institute at Columbia University in collaboration with Federal Ministry of Health (FMOH), UNICEF and WHO is pleased to present an Evaluation Survey Report of the Ethiopia Health Extension Program. The CNHDE has been providing an independent evaluation of HEP to supplement the regular monitoring and evaluation activities undertaken by the FMOH. The goal of the evaluation survey is to generate critical information for policy-makers and program managers working in health. The main objectives were to assess the implementation process of HEP and determine the effect of HEP on health outcome measures. This report provides the findings of the survey, which was conducted in 2010 in rural kebeles sampled from all regions of the country. Moreover, the report provides the trend over time (2005, 2007 and 2010) on selected indicators based on data collected from three regions (Amhara, Oromia and SNNP). The evaluation report is prepared to inform the FMOH and Regional Health Bureaus (RHBs) and stakeholders on the implementation process of HEP and its impact in terms of achieving the goals and objectives of the HEP and identify challenges in the implementation of HEP.

The evaluation report attempts to supplement the existing monitoring and evaluation programs of the FMOH and other surveys such as Demographic Health Survey (DHS). Although, the routine health management information system (HMIS) of the FMOH and RHBs provide critical information, it is not sufficient in providing wide ranges of data to monitor the implementation process of HEP and to evaluate the impact of HEP. Household health surveys such as the DHS, provide important information on demographic and health indicators including child and maternal mortality rates for overall assessment of the health situation of the country, however, they do not provide information on the implementation process of HEP. Issues related to health post performance, health extension workers (HEWs) performance and the support and management of HEP, which are critical in addressing challenges and constraints in the implementation of HEP, are not covered by any survey and the existing health management information system. Moreover, the range of topics and indicators covered by other household surveys are not comprehensive enough to cover the 16 health service packages of HEP.

In this report, we provide result of household survey, health provider (HEWs) survey, health facility (health post and health center) survey, model-family and voluntary community health promoters surveys, supervisors survey, and district health management survey that address all the 16 HEP service packages. Based on the results of the survey, we provide some recommendations intended to stimulate discussions and debate among all stakeholders for eventual improvement of the program.

The report is divided into four volumes,

- Volume I** Household survey
- Volume II** Health Post performance, HEWs performance, and Community perception survey
- Volume III** Model family implementation – HEWs and household level surveys, and Voluntary Community Health Promoters survey
- Volume IV** Support and Management aspect of HEP survey

Lastly, we hope that the survey results facilitate the improvement of the problems highlighted in the survey. The data generated will contribute to the ongoing efforts of the FMOH, RHBs and other stakeholders of HEP including non-governmental organizations and international agencies in supporting and formulating effective measures to address challenges for the benefit of the health and well-being of the rural communities in Ethiopia.

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infection
APH	Ante-partal Hemorrhage
CNHDE, CU	Center for National Health Development in Ethiopia, Columbia University
DHO	District Health Office
DHS	Demographic Health Survey
EPI	Expanded program on Immunization
EHCP	Essential Health Care Package
EmOC	Emergency Obstetric Care
FMOH	Federal Ministry of Health
HCs	Health Centers
HEP	Health Extension Program
HPs	Health Posts
HEWs	Health Extension Workers
HMIS	Health Management Information System
HIV	Human Immunodeficiency Virus
HSDP	Health Sector Development Program
MDGs	Millennium Development Goals
NGOs	Non-Governmental Organizations
PNC	Postnatal Care
PPH	Post-partal Hemorrhage
PHCU	Primary Health Care Unit
RHBs	Regional Health Bureaus
SNNP	Southern Nations Nationalities and Peoples
STI	Sexually Transmitted Infection
TB	Tuberculosis
vCHPs	Voluntary Community Health Promoters
WHMs	Woreda Health Managements
WHO	World Health Organization
WAs	Woreda Administrations
WoHOs	Woreda Health Offices

EXECUTIVE SUMMARY

In 2004, Ethiopia launched Health Extension Program (HEP) to expand the national health program to include community based health interventions as a primary component of the HSDP. HEP is “a package of basic and essential promotive, preventive and curative health services targeting households in a community, based on the principle of Primary Health Care (PHC) to improve the families’ health status with their full participation”. The overall goal of HEP is to create a healthy society and reduce maternal and child morbidity and mortality rates. HEP services are organized along geographic lines (kebeles - lowest administrative government unit): construction of a comprehensive network of “primary health care units (PHCU)” throughout the country with one health post in every rural kebele of 5000 people linked to referral health center.

Unlike many PHC programs which are run by NGOs, HEP is fully owned by the community and the government, and, thus, managed in accordance with the decentralized structures of the country. The management and support of HEP corresponds with the overall government-decentralized policy. The health center within a primary health care unit serves as first-level referral for health posts, provides higher-level curative care, and provides technical support to HEWs stationed in the respective health posts.

Each PHCU is managed and supervised by the woreda health office presiding over its district and serves as the lead-point for the HEP. The functions of the woreda health office include: preparation and implementation of operational plan at the district level; recruitment of female high school graduates for training; supervision of all HEP activities; training of district level trainers, supervisors; distribution and monitoring of drugs and other supplies to the health centers and health posts; and HMIS data collation and program reporting. The cadre of HEW-supervisors has been

developed to provide supervisory support to the HEWs on a regular basis. The HEW-supervisors are based at the district health office or health centers. The performance of HEWs is closely monitored through the field supervisors. The HEW-supervisors received training on supervision techniques and HEP. Their main functions include: provision of support and guidance, ensuring adequate performance of HEWs, assessing the level of community participation and involvement in support of HEWs and HEP, and carrying out corrective measures to improve the performance of HEWs as per given guidelines.

The success of HEP in achieving its set goals and objectives could be affected by a number of complex factors. The quality of HEP services depends on the support and management system. Although supervision and support is a key for success of a program, supervisors are often poorly resourced and lack supervision techniques leading to none systematic supervision, which may affect quality of services and job satisfaction. Assessment of the supportive management environment – the district health office and nearest health centers in terms of their capacity and level of support they provide to the health posts is necessary to identify problems in the implementation of the program.

The HEP study was designed to have two components linked to each other by design: (1) assessment of the implementation process of HEP; and (2) household survey to estimate the effect of HEP on health outcome measures. The assessment of HEP implementation processes included the assessment of the support and management system of HEP - health centers, HEW-supervisors, woreda health office, and woreda administration. Thus, 135 health centers, 113 HEW-supervisors, and 71 district health offices and district administrations responsible for the supervision and management of health

posts in kebeles where households were sampled were automatically included for the assessment of the implementation process. Data collection was undertaken through interviews and in some cases through observations in February 2010. A summary of findings is given below:

HEALTH CENTER SURVEY

Technical support to Health Posts

A total of 135 health centers were studied from ten regions in Ethiopia. Overall 82.5% of health centers provided technical support to health posts, and on average each health center supported about 6 health posts. Majorities (80.9%) of health centers were providing supportive supervision and 54.6% provided feedback and technical information, which was mainly verbal. Over half (57.2%) of the health centers provided outreach service support. Half (49.7%) of the health centers collected and compiled data from health posts, and 31.5% were involved in training of HEWs.

Majority (84.2%) of the health centers claimed to have supervision plan, which was confirmed in only 36.3% of the health centers. Similarly, majority of the HCs reported to have supervision guideline, but it was confirmed only in about a third of the HCs. Majority (90.4%) of the health centers had HEP supervisors. Majority (80.2%) of health centers stated that HEWs submit monthly report to health center, and 46.2% had regular meeting with HEWs.

Logistic support to Health Posts

About 85% of the health centers reported that they were responsible for distribution of supplies to health posts in their catchment area. Among the health centers that reported responsibility for logistic support, 75.5% had adequate stocks of drugs, vaccines and supplies meant for health posts. About 60% and 52% of these health centers had distribution and redistribution plan for supplies, respectively. More than half (58.8%) of the health centers reported that they had adequate and secure storage place.

Referral and Feedback

The leading reason for referral from health post to health center was reproductive health related problems and the average number of clients referred from health posts to the health centers during the month prior to the survey was 10 cases per health center. Majority (83.9%) of health centers reported that they gave priority for such clients but only 38% provided feedback to the referring health post. One in ten health centers reported to have transport service for emergency cases, and 42.9% reported there was no easy communication with the health posts.

Availability of emergency obstetric care

Majority of the health centers performed each of the various basic EmOC functions: manual removal of the placenta (82.5%), parenteral antibiotic (79.4%), parenteral oxytocic drugs (60.6%), assisted delivery using vacuum or forceps (52%) and parenteral diazepam or magnesium sulphate (46.1%). However, the percent of health centers that performed all functions of the basic EmOC was low (23.7%).

Concerning supplies, drugs and equipment for delivery services, 76.4% had forceps, 80.2% had injectable antibiotic, 58.3% had injectable ergometrine, 47.8% had injectable oxytocin, 5.2% had incubator and 15.4% had magnesium sulphate.

HEW – SUPERVISOR SURVEY

Background characteristics of supervisors

Across all regions, 113 health workers who were working as supervisors of HEWs were included in the supervisors' survey. The numbers of supervisors surveyed were 46, 18, 11, 11, 7, and 6 in Oromia, Amhara, SNNP, Gambela, Benshangul Gumuz and Tigray, respectively.

Majority of the supervisors were environmental health professionals (38.3%) or clinical nurses (32.9%). Only about half of the respondents had received orientation training on HEP, supervision techniques or induction course prior to their assignment as

supervisors. Majority (75%) of the supervisors had been working as supervisors of HEWs for less than one year preceding the survey.

Quality of supervision

Half of the supervisors had claimed that they have other responsibilities besides supervising HEWs. Majority of the supervisors were responsible for the supervision of five to eight health posts.

The majority of the supervisors had guideline/tool for supervision (73.2%). The usual mode of transport used by majority (59.8%) of supervisors during supervision to health posts was walking. About a third (32.9%) reported that motorcycle was the usual mode of transport.

Majority (86.8%) of the supervisors had plan/schedules for the supervision of HEWs, and about two-third of these supervisors undertook their supervision according to their supervision plan. Lack of transport was the most frequently stated constraint for those who did not supervise according to their supervision plan.

Although, only 7.5% of the supervisors reported that they had budget for supervision, 90% had supervised at least three health posts in the month preceding the survey. The most commonly used supervision mechanisms reported by supervisors were using checklist (36.2%), providing technical support (27.5%), performance evaluation (23.5%), document observation (18.9%), discussion (13.8%), contact with community (12%), and house to house visits (11.4%).

The top five areas most frequently addressed during supportive supervision were construction and maintenance of sanitary latrines (80%), vaccination services (66%), family planning (62%), model-family (61%), and control of insects, rodents (59%). On the other hand, the areas that were least frequently addressed during supportive supervision were adolescent reproductive health (23%), first aid (28%), HIV/AIDS

prevention and control (34%), nutrition (36%) and registration of vital statistics (36%).

Perception of supervisors

The main technical constraint of HEWs stated by more than 50% of the supervisors was lack of delivery skill, while absence from work places and lack of commitment were among the weaknesses of HEWs according to the supervisors.

Suggested measures put forward by supervisors to improve HEP were refresher training of HEWs (59%), provision of incentives and salary increment awards to best performing HEWs (34%), increasing salary of HEWs (22%), provision of adequate drugs and equipments (22%), and provision of means of transportation to HEWs (18%).

WOREDA HEALTH MANAGEMENT SURVEY

Managers of woreda health offices in 64 woreda administrations sampled from all regions were surveyed as part of the HEP evaluation. The distribution of the sample woredas by region is: 18 from Oromia, 15 from Amhara, 10 from SNNP, 7 from Gambella, 4 from Tigray and Benshangul-Gumuz each, 3 from Somali, and 1 from Afar, Dire Dawa, and Harari each. Data was collected on the human resource capacity of the woreda health office, availability of supervisors, performance of supervision, monitoring the progress of HEP and performance of HEWs, attrition of HEWs and the reasons, availability of medical supplies for health posts, current practice of administration and technical support in HEP implementation, and their perception on HEP implementation.

Woreda health office capacity and support to HEP

Woreda health offices only in 20 woredas were reported to have filled all the positions based on the organizational structure of the woreda health office.

All woreda health offices had HEW-supervisors. In majority (35) of the woredas

the HEW-supervisors performed solely supervision of HEP activities, whereas the supervisors in the remaining 28 woredas were also assigned to perform other duties in addition to the HEP supervision.

HEW-supervisors in majority of the woreda health offices had received induction course on HEP (in 52 woredas) and/or refresher training on HEP.

In 37 of the woredas, supervision targets were not achieved as planned. The main reasons stated were: lack of time due to workload, unexpected work/interference, and lack of transportation.

Majority of the woreda health offices use coverage of latrine, immunization, antenatal care, family planning, and delivery service to monitor the performance of HEP.

Recruitment and attrition of HEWs

The woreda health offices reported that the major challenges they had faced during recruitment of candidates for HEW training were: shortage of female high school graduates and recruitment from outside the targeted kebeles.

Out of the total 3,241 HEWs deployed in the 64 woredas since HEP implementation, which varies between one to 6 years of implementation in the sample woredas, a total of 212 HEWs left their HEP work with overall attrition rate of 6.5%. The main reasons for leaving their HEP work in the woreda were: changed field of work (71 HEWs), due to personal reasons such as marriage and illness (68 HEWs), and due to uncomfortable work environment such as remoteness of kebeles, high workload, and low remuneration (31 HEWs).

Drug supply to health posts

Overall only 12 (18.7%) woreda health offices indicated the availability of adequate supply of drugs for all health posts within their respective woredas. The other problems stated in relation to drug supply include shortage of budget and transportation.

Current practice in management and support of HEP

The majority (40) of woreda health offices stated that kebele council was responsible for administrative issues of HEWs and health posts. Moreover, majority thought that this administrative arrangement would be the best arrangement.

Out of the 64 woredas, 44 reported that the woreda health office was currently responsible for technical support and supply management issues of HEWs & HPs. The remaining woreda health offices on the other hand stated that the nearest health center was responsible for technical support and supply management. Majority of the woreda health offices thought that the woreda health office as a responsible body for technical support would be the best arrangement.

Perception of woreda health office managers on HEP

More than 92% of woreda health office managers stated that one of the HEWs in each kebele were members of Kebele council. Majority of woreda health offices thought that membership of HEWs in kebele council has more advantages than disadvantages. The advantages stated included: HEWs can raise problems that they face during their daily activities and get solution easily, HEWs get access to decision making process, HEWs can plan HEP activities together with other decision making members of the kebele, facilitates implementation of HEP, and increases HEWs acceptance by the community. Some woreda health offices thought that the membership of HEWs in kebele council could lead to loss of working time and increased workload.

Majority of the woreda health offices were not satisfied by the level of support in the implementation of HEP they received from the woreda administration.

According to the woreda health office managers, the complaints about HEP most frequently heard from the community were

lack of curative service, absenteeism of HEWs from their working area, and shortage of drug supplies.

WOREDA ADMINISTRATION SURVEY

Engagement in HEP implementation

Almost all of the WAs have supervised at least one health post and discussed about HEP with HEWs in the year preceding the survey.

Majority of the woreda administrators reported that they usually communicate with the woreda health office regarding the observation of their visit to the health posts whenever they make such supervisory visits. Moreover, majority of the woreda administrations undertake regular meeting at least once a month with the woreda health office to discuss about HEP.

The woreda administrators reported that the specific support provided by the woreda administration to ensure the successful implementation of HEP included provision of transportation, advice and moral support, provision of housing for HEWs, and monitoring of HEP implementation.

The activities/indicators used by majority of the woreda administration to monitor the progress of HEP included overall achievement of the plan, mosquito net utilization rate, level of community participation, and EPI coverage. Number of graduated model-family households was also used by some woreda administrations to monitor the progress of HEP.

Current practice in support and management of HEP

According to majority (45) of the woreda administrators, the kebele councils were responsible for the provision of administrative support to health posts and HEWs, while 19 of the WAs reported that the woreda health office were the responsible body for administrative support. The woreda administrators stated that kebele council as responsible body for administrative support

was the best approach and has more advantages such as ensuring close supervision and monitoring, facilitate the work of HEWs, and easy management and fast decision-making.

Majority (52) of woreda administrators have reported that the woreda health office was the responsible body for providing technical supports for the HEP, while only 12 woreda administrators reported that health centers were serving as the responsible body for technical support.

Perception on HEP

About two-third of the 66-woreda administrators thought that HEWs had received adequate pre-service training on the 16 interventions package of HEP.

According to majority of woreda administrators, the main effects of HEP implementation were: increased latrine coverage, graduation of model-family, decreased burden of HIV and malaria, and high EPI coverage.

The main operational problems of HEP stated by woreda administrators were: shortage of drugs and supplies, low community awareness, shortage of budget, and lack of HEWs' skills. The most frequently stated solutions to operational problems of HEP implementation were: provision of adequate drugs and supplies, allocation of adequate budget, and building the capacity of HEWs.

RECOMMENDATIONS

Ensuring a strong and systematized supportive supervisors

Adequate number of supervisor should be recruited and uniformly stationed at health centers as per the new HEP supervision guideline, which would strengthen the link between health posts and health centers. However, the district health office should also provide support, in particular until the targeted number of health centers is functional and well staffed.

Due attention should be given to the background profession of health workers when selected to serve as supervisors. Among the critical areas where HEWs lack the skills and knowledge to provide quality services and the areas where the uptake of the services by the community has been consistently low include delivery service, newborn care and PNC, on the job training on these areas during supportive supervision can only be provided by clinical nurses or midwives.

Since additional responsibilities could compromise their ability to discharge responsibilities as HEP supervisors, supervision should be the sole responsibility of supervisors.

Improve quality of supervision through systematic approach, which should include:

- Equip supervisors with the tools for supportive supervision – supervision guideline and check list to be used during supervision. Although such guideline is already developed, it should be distributed to all supervisors and supervisors should receive familiarization orientation on the tools.
- Equip supervisors with the skills for supportive supervision – induction and refresher training. They should be trained on supervision techniques as well as on HEP packages so that they would be able to provide on the job training for HEWs, particularly on delivery, newborn care and PNC.
- Develop a proper supervision action plan at health center and individual supervisor levels to ensure regular and supportive supervision.
- Institute a working norm of providing written feedback and following up of the implementation of the action points in the feedback.
- Provide sustainable and proper means of transportation for supervision activities.

Establish mechanism to ensure a sustainable motivation system to HEW-supervisors including acknowledgement and performance award, continued education, provision of transportation, etc.

There should be a common understanding about the newly proposed ‘health development army’ approach replacing vCHPs by all stakeholders - woreda health office, health centers, HEWs, woreda administration and kebele council to ensure standardized implementation and support.

Strengthen administrative and logistics supports to HEP

The responsible body for administrative issue of the health posts and HEWs should be clearly defined. Uniformity of responsible body providing administrative supports would be very helpful to facilitate the provision of these supports to HPs and HEWs effectively and adequately. This will avoid confusion and diffusion of responsibilities between the woreda health bureau and Kebele Councils.

Due attention and timely corrective measures and mechanism to ensure all HEWs are available at their duty stations.

Woreda administrations should take into consideration the financial and logistic constraints in relation to HEP implementation and increase the allocation of budget for health sector.

Ensure the provision of medical and non-medical supplies, and medical equipments to equip all health posts as per the HEP standard.

Strengthening the referral system and the linkage with health centers

Health centers should have the institutional capacity to provide basic emergency obstetric care, thus ensure the availability of essential drugs and supplies:

- **Drugs:** priority should be given to injectable ergometrine, injectable

diazepam/magnesium sulfate, and injectable amoxicillin.

- **Supplies/equipments:** incubator; vacuum extractor and forceps for assisted delivery and manual vacuum extractor for abortion.

Have well trained staff capable of using and operating equipments, and performing all the components of basic emergency obstetric care

Improve feedback provision from the health centers to the referring health posts.

Seek for appropriate means of transporting obstetric emergency referral cases from health posts to health centers. Bajaj ambulance, which is being piloted currently in the country, could be one of the best means of transporting patients to health centers.

Support from stakeholder to HEP

The woreda administration should support and regularly assess the performance of the woreda health office, health center and kebele council in the implementation of HEP, and include some key outcome measure of HEP as performance indicators of the health sector and Kebele Council.

1. BACKGROUND AND SURVEY METHODOLOGY

1.1. HEALTH EXTENSION PROGRAM

Ethiopia established a Health Sector Development Program (HSDP), in 1997/8. Although, the overall performance of the health sector had improved under HSDP, in particular in urban areas, the success to reach essential services to the people at the grass roots level through HSDP had been quite limited. The major challenges of the health system included low access to health care services, widespread poverty, inadequate access to clean water and sanitation facilities, and low health service utilization. The higher cost associated with expansion of standard health services, and the long time lag between production and deployment of higher-level health professionals such as doctors continued to be the main challenges to address the health problems of rural and marginalized communities with the existing socio-economic situation of the country. The challenges were overwhelming, and the standard health system through the HSDP model could not address the major challenges. As a result, overall levels of disease burden, and child and maternal mortality appeared hardly to have shifted significantly in the six years that followed. For this reason, maternal and child mortality as well as the incidence of the major killers such as HIV/AIDs and malaria continued to be one of the highest in the world.

In 2004, Ethiopia launched Health Extension Program (HEP) to expand the national health program to include community based health interventions as a primary component of the HSDP. HEP is “a package of basic and essential promotive, preventive and curative health services targeting households in a community, based on the principle of Primary Health Care (PHC) to improve the families’ health status with their full participation”.

1.1.1. Goals and Objectives of HEP

Rapid expansion of HEP services is a core component of the broader health system, and it is one of the strategies adopted with a view to achieving universal coverage of primary health care to the rural population by 2009, in a context of limited resources. The overall goal of HEP is to create a healthy society and reduce maternal and child morbidity and mortality rates. The specific objectives include:

- Reduce morbidity and mortality of children and mothers
- Reduce morbidity and mortality from HIV/AIDS, tuberculosis and malaria through development of community skills and knowledge
- Prevent diseases caused by malnutrition, poor personal hygiene and contaminated food
- Prevent accidents and emergency illnesses, and administer first-aid to the injured and sick
- Develop community awareness, knowledge and skills to prevent contamination from common sources including human excreta, animal wastes and pesticides

1.1.2. HEP implementation strategies

The government of Ethiopia recognizes that HEP will not be sustainable if infrastructures and health systems including human resources, management and support needed are not addressed. To ensure effective function of the HEP program, expansion of primary health care units, strengthening the health system and procurement of drugs and supplies have been emphasized in the design and implementation of HEP.

Primary health care unit

HEP services are organized along geographic lines (kebeles - lowest administrative government unit): construction of a comprehensive network of “primary health care units (PHCU)” throughout the country with one health post in every rural kebele of 5000 people linked to referral health center. A health post is a two-room structure of most peripheral health care unit and the first level for the provision of healthcare for the community, emphasizing preventive and promotive care. They serve as the operational centre for HEP. A total of about 15,000 health posts were built and equipped to cover all rural villages in the country.

HEP services are provided by two Health Extension Workers (HEWs) deployed in each Kebele and stationed at the health post. In a country that has more than 80 ethnic groups, languages and cultures, essential services need to be delivered with community participation in ways acceptable and appropriate to each community. To address this complex situation and ensure local ownership of the program, the community is involved in the recruitment of HEW candidates for training. One of the distinctive strategies in the implementation of HEP is the recruitment of female high school graduates from their respective villages. After recruitment from their respective villages, the female high school graduates received one year intensive theoretical and practical training on 16 health service packages. A total of about 30,000 HEWs were trained and deployed in about 15,000 villages. The HEWs become employee of the government with regular monthly salaries and other benefits.

Management and support is critical in the implementation of HEP to ensure interventions are well coordinated; technical support is provided; inputs are provided in a timely and cost-efficient manner; resources are appropriately managed; effective monitoring and progress reporting is carried out; and challenges are identified and addressed in a timely manner. Unlike many PHC programs which are run by NGOs, HEP is fully owned by the community and the government, and, thus, managed in accordance with the decentralized structures of the country. The management and support of HEP corresponds with the overall government-decentralized policy.

Delivery of healthcare follows a four-tiered model. The Primary Health Care Unit (PHCU) forms the foundation of the health care system. Each health center and health post is provided with an Essential Health Care Package (EHCP) designed for the level of care provided at the facility. Each EHCP contains relevant medical equipment, health care consumables, literature, and other supplies. The health center within a primary health care unit provides higher-level curative care for a variety of common diseases including emergency obstetric care. Health centers serve as first-level referral for health posts and provide technical support to HEWs stationed in the respective health posts.

Woreda health office

Each PHCU is managed and supervised by the woreda health office presiding over its district and serves as the lead-point for the Health Extension Program. The functions of the woreda health office include: preparation and implementation of operational plan at the district level; recruitment of female high school graduates for training; supervision of all HEP activities; training of district level trainers, supervisors; distribution and monitoring of drugs and other supplies to the health centers and health posts; and HMIS data collation and program reporting.

Supervision

Adequate supervision is one of the key components for a successful community based primary health program. The cadre of HEW-supervisors has been developed to provide supervisory support to the HEWs on a regular basis. The HEW-supervisors are based at the district health office or

health centers. The quality of support received by HEWs forms an important dimension of the successful implementation of HEP. The performance of HEWs is closely monitored through the field supervisors. The HEW-supervisors received training on supervision techniques and HEP. Their main functions include: provision of support and guidance, ensuring adequate performance of HEWs, assessing the level of community participation and involvement in support of HEWs and HEP, and carrying out corrective measures to improve the performance of HEWs as per given guidelines.

1.1.3. HEP services

The services provided under HEP include 16 essential health packages under four major program areas.

1. *Hygiene and environmental sanitation*: This area deal with seven of the sixteen packages. These are: a) proper and safe excreta disposal system; b) proper and safe solid and liquid waste management; c) water supply safety measures; d) food hygiene and safety measures; e) healthy home environment; f) arthropods and rodent control; and g) personal hygiene.
2. *Disease prevention and control*: This area deals with four of the sixteen packages. These are: a) HIV/AIDS prevention and control; b) TB prevention and control; c) Malaria prevention and control; and d) first aid.
3. *Family health services*: This area deal with five of the sixteen packages. These are: a) maternal and child health; b) family planning; c) immunization; d) adolescent reproductive health; and e) nutrition.
4. *Health Education and Communication*: Cross cutting

1.1.4. Challenges

The success of HEP in achieving its set goals and objectives could be affected by a number of complex factors. The quality of HEP services depends on the human resource capacity; ownership, access to infrastructure, utilities and other services; availability of medical equipments, drugs, and other supplies; availability of client friendly health service infrastructure; and strength of health systems. Combined with community generated demand and utilization for the services provided, these are all critical factors that can affect the successful implementation of the program.

The impact of such a large number of new health professionals will be a challenge to the capacities of the already understaffed and under-budgeted health system, in particular to the woreda health office. Although supervision and support is a key for success of a program, supervisors are often poorly resourced and lack supervision techniques leading to none systematic supervision, which may affect quality of services and job satisfaction. The consensual participation of supportive health staff at the management and health center level is critical for successful implementation of health programs. Assessment of the supportive management environment – the district health office and nearest health centers in terms of their capacity and level of support they provide to the health posts is necessary to identify problems in the implementation of the program.

HSDP implementation was decentralized to the regions. Regional variation in implementation capacity may lead to differences in achieving a fully functioning HEP. Based on anecdotal evidence, the implementation of HEP in pastoralist areas in Afar, Benishangul-Gumuz, Gambella and Somali has been less satisfactory compared the rest of Ethiopia. This is partially due to the fact that HEP started almost two years later in these regions compared to the larger regions, the overall health system is weaker and there are limited trained human resources.

The implementation of nation-wide HEP, which is considered the most important institutional framework for achieving the Millennium Development Goals (MDGs), should be accompanied by monitoring and evaluation studies to demonstrate that the goals and objectives are achieved and to document factors that affect the success of the program.

1.2. EVALUATION METHODS AND DESIGN

1.2.1. Objectives of the HEP survey

The study population for the HEP evaluation comprised all people residing in rural areas of the country including pastoralist communities. The regions include Tigray, Afar, Amhara, Oromia, SNNR, Harare, Dire Dawa, Somalia, Gambella and Benshangul-Gumuz. The overall objectives of the HEP evaluation study were: 1) to assess the implementation process and status of HEP in the different regional states, and 2) to determine the effect of HEP on health outcome measures. The specific objectives of the 2010 HEP survey in relation to support and management of HEP were:

(a) HEW supervisors' performance survey

- To assess perception and satisfaction of supervisors' working conditions;
- To assess the performance, supervisory skills and technical capacity of HEW-supervisors in the various HEP components;
- To assess the frequency and quality of supervisory visits by HEW-supervisors;

(b) Health center

- To assess the involvement of health centers in technical support and supervision of HEWs
- To assess the involvement of health centers in provision of supplies to the health posts
- To assess the linkage of health centers with health posts in the management of referred patients

(c) Management and support (District)

- To assess the human resource capacity of the district health office;
- To assess the performance management system of the district health office;
- To assess the current practice in management and support of HEP;
- To identify best practices in the implementation and management of HEP.

1.2.2. Study design

The evaluation aims to assess the implementation process and effect of HEP on health outcome measures in rural Ethiopia. To achieve the overall objectives of the evaluation, the study was designed to have two components linked to each other by design: (1) program management, health facility and health provider surveys to assess the implementation process of HEP; and (2) household survey to estimate the effect of HEP on health outcome measures.

The assessment of the HEP implementation process was undertaken at different levels of the health system serving the communities where sample households were selected for health outcome determination. The assessment of HEP implementation processes included the assessment of the support and management system of HEP - health centers, HEW-supervisors, woreda health office, and woreda administration. Thus, respective referral health centers, respective HEW-supervisors and district health offices responsible for the supervision and management of HEP were automatically included for the assessment of the implementation process. The assessment of HEP implementation would enable us to compare the implementation process between the different regions. Moreover, the information on the HEP implementation process would be used to determine the influence of the HEP implementation environment on the effect of HEP on health outcome measures.

1.2.3. Sample size and sampling design

The country level sample size for the assessment of health outcome measures was estimated to be 7128 households. A detailed description of the stratified multi-stage cluster sampling procedure used to sample the required households is presented in Volume – I of the HEP evaluation report. A multi-stage cluster sampling method with kebele as the cluster unit was used to select sample households. Following this sampling procedure, the number of primary sampling units (districts) was determined to be 71 districts, and the number of secondary sampling units (clusters) was determined to be 312 clusters (kebeles). The 71 woredas were considered to be included in the assessment of the support and management of HEP. Thus, the head of the woreda health office and the chairman of the woreda administration in the 71 woredas were targeted for the woreda health management and woreda administration surveys, respectively. Moreover, the health centers which serve as the referral health facilities for the health posts found in the 312 kebeles were targeted for the health center survey, while HEW-supervisors responsible for the support and supervision of the sample health posts were targeted for the HEW-supervisor survey. The distribution of districts and the number of health centers and HEW-supervisors surveyed by region is shown in the table.

Table 1.1: Number of sample districts, health centers and HEW-supervisors by region, rural Ethiopia 2010

Region	Number of districts	Number of health centers	Number of HEW-supervisors
Tigray	7	26	6
Afar	2	1	2
Amhara	15	33	18
Oromia	18	26	46
SNNP	12	3	7
Gambella	7	30	11
Benshangul	4	5	11
Harar	1	3	4
DireDawa	1	3	4
Somali	4	5	4
Total	71	135	113

1.2.4. Study procedure

Data collection was undertaken through personal interviews using structured questionnaires and in some cases through observation. Health center, HEW-supervisor, District Health Office, and District Administration questionnaires were used for the assessment of the management and support systems to HEP.

Survey field supervisors, who were hired to supervise four interviewers in each district, administered the health center and HEW-supervisor questionnaires in their respective districts. Regional coordinators were hired for two month to help during the recruitment and training of the interviewers and supervisors as well as to coordinate and support the data collection process. In addition to coordinating the fieldwork, the 14 regional coordinators administered the woreda health office and woreda administration questionnaires. All field workers received adequate training on HEP, objectives of the survey, as well as the survey tools, instruments and methodology. During both phases of training, each participant completed two sets of questionnaires in non-sample districts as part of the training. A verbatim type training manual was prepared and issued to all the data collectors so that they could consult it for any problems they may face during field activities. Moreover, all personnel received training on non-coercion in study enrollment, the avoidance of

prompting, and how to be attentive to subject's reactions to sensitive questions. There was presentation on Human Subjects. The data collection was undertaken in February 2010.

1.2.5. Data processing

Upon completion of the data collection and editing, data entry clerks having competency and experience were hired and trained. The survey data was entered in CSPro. To ensure quality of data, double data entry was done. Data was cleaned and analyzed in STATA. Key indicators assessed include:

Health center survey

- Percent of health centers that provide technical and logistic support to HEP
- Average number of health posts supported by each health center
- Type of illness frequently referred to health centers from health posts
- Number of referred patients from health posts managed at health center
- Percent of health centers that provide basic emergency obstetric care
- Percent of health centers equipped with essential drugs and supplies

HEW-supervisor survey

- Average number of health posts assigned to each HEW-supervisor
- Percent of HEW-supervisors who received supervisory training
- Percent of HEW-supervisors equipped with supervision guidelines
- Percent of HEW-supervisors who have access to means transportation
- Percent of HEW-supervisors who have supervision plan and report
- Percent of HEW-supervisors who supervised the HEWs according to their plan
- HEP packages most frequently addressed during supervision
- Percent of HEWs supervisors who are satisfied with working conditions

Management and support

- Percent of district health offices staffed as per the standard to support the HEP
- Percent of HEWs supervisors who received training on supervision techniques
- Percent of HEWs supervisors equipped with necessary skills and supplies for supervision
- Percent of district health offices that monitor the progress of HEP
- Percent of woreda health offices with adequate amount of drugs and supplies for health posts
- Attrition rate of HEWs
- Percent of district health offices that provide technical and logistic support to health posts
- Percent of district health offices that provide administrative support to health posts

2. HEALTH CENTER SURVEY

A total of 135 health centers were surveyed from ten regions in Ethiopia. Majority of the health centers (HCs) were sampled from the bigger regions – Amhara (33 HCs), SNNP (30 HCs), Oromia (26 HCs) and Tigray (26 HCs). Gambela and Somali regions contributed five health centers each. Information on technical and logistic support provided to health posts (HPs), and on the availability of essential health services in support of HEP was collected.

2.1. SUPPORT TO HEP

2.1.1. Technical support

Overall 82.5% of health centers provided technical support to health posts. About 45% of HCs provided technical support to 5-10 HPs, while 16.7% were responsible for more than 10 HPs each. On average, each HC provided technical support to 5.7 health posts and 11.2 HEWs. Among the bigger regions, all health centers in Tigray provided support to health posts.

Table 2.1: Percent of HCs that provided technical support and their distribution by the number of HPs, Ethiopia 2010

Region	Percent of HCs providing support	Number of HPs supported by a HC				Average no of HPs	Average no. of HEWs	No. of HCs
		0	1-4	5-10	>10			
Tigray	100.0	0.0	54.1	45.9	0.0	4.2	7.5	26
Afar	100.0	0.0	0.0	100.0	0.0	8.0	19.0	1
Amhara	77.7	22.3	48.2	29.5	0.0	3.3	6.9	33
Oromia	85.1	14.9	13.5	51.2	20.4	6.0	12.1	26
Benshangul	36.6	63.4	0.0	36.6	0.0	1.8	3.3	3
SNNP	82.7	17.3	12.9	45.4	24.4	7.3	13.2	30
Gambela	45.3	54.7	17.9	0.0	27.4	4.0	10.4	5
Dire Dawa	100.0	0.0	100.0	0.0	0.0	3.3	6.7	3
Harar	33.3	66.7	33.3	0.0	0.0	0.3	0.7	3
Somali	37.9	62.1	0.0	29.7	8.2	3.8	7.5	5
Total	82.7	17.3	20.8	45.1	16.7	5.7	11.2	135

Among the health centers that provided technical support, majority (80.9%) was providing supportive supervision. Over half of the health centers reported that they provided feedback and technical information (54.6%) and supported outreach service (57.2%). Half (49.7%) of the health centers involved in collection and compilation of HEW service report, while 38.4% conducted disease surveillance. Nearly a third of the health centers were involved in training of HEWs. The involvement of health centers in the support of HEP was relatively higher in Tigray.

Table 2.2: Percent of health centers that stated the type of technical support they provided to health posts, Ethiopia 2010

Region	Supportive supervision	Feedback and information	Outreach service	Collect & compile HEW report	Disease surveillance	Training of HEWs	No. of HCs
Tigray	91.4	67.4	69.8	69.0	69.2	35.0	26
Afar	100.0	0.0	0.0	100.0	0.0	100.0	1
Amhara	78.8	49.4	55.3	61.3	38.9	14.2	25
Oromia	81.0	57.4	56.9	42.6	26.6	41.4	23
Benshangul	100.0	100.0	100.0	0.0	100.0	100.0	1
SNNP	80.7	53.2	59.3	51.5	58.2	23.5	25
Gambela	70.5	0.0	29.5	39.5	0.0	0.0	3
Dire Dawa	66.7	33.3	0.0	66.7	0.0	0.0	3
Harar	0.0	0.0	0.0	100.0	100.0	0.0	1
Somali	78.4	0.0	21.7	100.0	0.0	0.0	2
Total	80.9	54.6	57.2	49.7	38.4	31.5	110

Supportive Supervision

Among the health centers that provided technical support, majority (84.2%) reported that they had supervision plan but it was confirmed only in 36.3% of HCs. Similarly, majority of the HCs reported to have supervision guideline, but it was confirmed only in about a third of the HCs.

Table 2.3: Percent of health centers that had supervision plan and guideline by region, rural Ethiopia 2010

Region	Supervision plan		Supervision guidelines		Number of HCs
	Seen	Not seen	Seen	Not seen	
Tigray	58.5	28.7	61.6	24.9	26
Afar	0.0	100.0	0.0	100.0	1
Amhara	11.9	56.8	23.8	34.9	25
Oromia	40.1	52.4	38.1	42.4	23
Benshangul	0.0	100.0	100.0	0.0	1
SNNP	44.8	33.5	43.8	20.6	25
Gambela	0.0	31.0	0.0	31.0	3
Dire Dawa	33.3	66.7	0.0	0.0	3
Harar	100.0	0.0	100.0	0.0	1
Somali	0.0	100.0	0.0	21.7	2
Total	36.3	47.9	37.3	34.7	110

Majority (90.4%) of the health centers had HEP supervisors, and most of the health centers had either one (62.5%) or two (17.2%) supervisors each. Among the bigger regions, 25% of health centers in Amhara and 14.6% health centers in SNNP didn't have HEW supervisors.

Table 2.4: Percent distribution of health centers by number of HEW-supervisors by region, rural Ethiopia 2010

Region	Number of HEW Supervisors					No. of HCs
	None	1	2	3	>3	
Tigray	0.0	71.3	25.4	0.0	3.3	26
Afar	0.0	0.0	100.0	0.0	0.0	1
Amhara	25.0	65.9	3.2	0.0	5.9	25
Oromia	2.1	74.6	23.3	0.0	0.0	23
Benshangul	0.0	100.0	0.0	0.0	0.0	1
SNNP	14.6	37.1	13.3	12.4	22.6	25
Gambela	29.5	0.0	70.5	0.0	0.0	3
Dire Dawa	66.7	33.3	0.0	0.0	0.0	3
Harar	0.0	0.0	100.0	0.0	0.0	1
Somali	0.0	78.4	0.0	0.0	21.7	2
Total	9.6	62.5	17.2	3.3	7.4	110

Majority of HCs planned to conduct 1-10 (50.3%) and 11-20 (23.1%) supervisory visits during the quarter prior to the survey, and majority had achieved their plan either fully (37.3%) or partially (49.8%). Among the larger regions, higher percent of HCs in Tigray achieved their supervision plan.

Table 2.5: Percent distribution of HCs by supervisory visits planned and achieved in the previous quarter, Ethiopia 2010

Region	Number of supervisory visits planned				Achievement of plan			No. of HCs
	None	1-10	11-20	>20	Fully achieved	Partially	Not at all	
Tigray	3.3	57.7	28.2	10.8	67.4	28.3	4.3	26
Afar	0.0	100.0	0.0	0.0	100.0	0.0	0.0	1
Amhara	6.4	78.7	3.6	11.3	30.3	52.3	17.5	25
Oromia	0.0	48.4	27.8	23.8	45.0	48.4	0.0	23
Benshangul	0.0	100.0	0.0	0.0	0.0	100.0	0.0	1
SNNP	21.8	31.7	27.8	18.9	23.5	54.9	14.7	25
Gambela	29.5	39.5	31.0	0.0	0.0	31.0	69.0	3
Dire Dawa	33.3	66.7	0.0	0.0	66.7	33.3	0.0	3
Harar	0.0	100.0	0.0	0.0	100.0	0.0	0.0	1
Somali	0.0	100.0	0.0	0.0	21.7	0.0	78.4	2
Total	7.1	50.3	23.1	19.5	37.3	49.8	7.8	110

Feedbacks and follow-up

Following the supervisory visits, majority of the health centers reported that they provided either written (55.4%) or verbal (76.8%) feedback. Majority (83.7%) of health centers claimed to take action and/or follow issues and gaps identified during supervision. Overall 70.7% of the health center reported that they reviewed the progress of the HEP with the Woreda health office.

Table 2.6: Percent of health centers that provided feedback and took action following supervisory visits by region, rural Ethiopia 2010

Region	Type of feedback		Percent of HCs that took action	Percent of HCs that reviewed progress of HEP with WHO	Number of Health Centers
	Verbal discussion	Written feedback			
Tigray	67.2	76.3	85.2	91.4	26
Afar	100.0	100.0	100.0	100.0	1
Amhara	88.6	41.0	71.6	76.1	25
Oromia	78.7	55.2	92.9	65.1	23
Benshangul	100.0	100.0	100.0	100.0	1
SNNP	65.8	63.1	75.3	76.1	25
Gambela	70.5	0.0	31.0	0.0	3
Dire Dawa	100.0	66.7	100.0	100.0	3
Harari	0.0	100.0	100.0	100.0	1
Somali	78.4	21.7	21.7	21.7	2
Total	76.8	55.4	83.7	70.7	110

2.1.2. Review of HEWs' report and provision of feedback

On the average 80.2% of health centers reported that the HEWs in their catchment area submitted monthly and progress reports to their health center and 82.4% of them used it for decision making. From the bigger regions, higher proportion of health centers, which received report from HEWs was observed in Tigray (100%) while higher proportion of report use for decision making was observed in SNNP (100%).

Regular meeting is essential to review progress and plan the way forward. Less than half (46.2%) of the health centers held regular meeting with HEWs and 24.1% with community health workers including voluntary health promoters. From the bigger regions, most health centers in Tigray had held regular meetings with HEWs and vCHPs (85.2% and 69% respectively).

Table 2.7: Percent of health centers which received monthly progress report from health posts and used it for decision by region, rural Ethiopia 2010

Region	Proportion of Health Centers that:		Number of Health Centers
	Received report	Used report for decision	
Tigray	100.0	91.4	26
Afar	100.0	100.0	1
Amhara	75.6	80.4	33
Oromia	85.1	83.4	26
Benshangul Gumuz	0.0	80.5	3
SNNP	76.5	100.0	30
Gambela	0.0	100.0	5
Dire Dawa	100.0	100.0	3
Harar	33.3	82.4	3
Somali	8.2	91.4	5
Total	80.2	100.0	135

Table 2.8: Percent of health centers that conducted regular meeting with HEWs and CHWs/vCHPs by region, Ethiopia 2010

Region	Percent of HCs conducting regular meeting with:		Number of Health Centers
	HEWs	CHWs/vCHPs	
Tigray	85.2	69.0	26
Afar	0.0	0.0	1
Amhara	47.4	27.2	33
Oromia	49.0	14.5	26
Benshangul Gumuz	0.0	0.0	3
SNNP	39.5	36.7	30
Gambela	0.0	0.0	5
Dire Dawa	66.7	0.0	3
Harar	66.7	66.7	3
Somali	8.2	8.2	5
Total	46.2	24.1	135

2.1.3. Logistic support to health posts

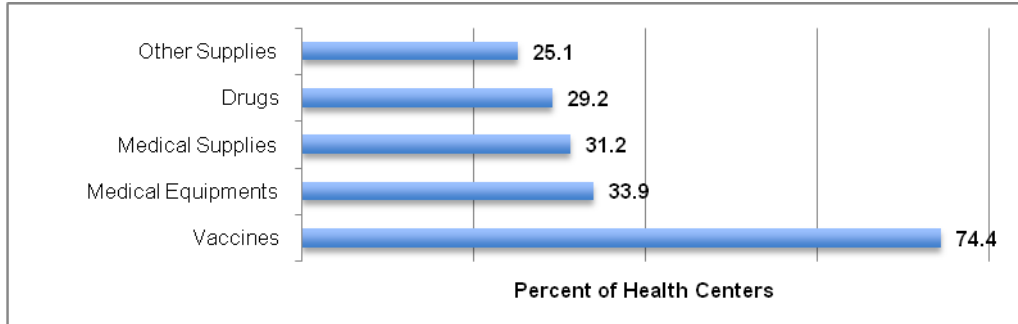
Overall 85.3% of health centers reported that they were responsible for supplies to the health posts in their catchment kebeles. This figure was 100% in Tigray region. Among the health centers that were responsible in provision of supplies to health posts, most (75.5%) had stocks of drugs, vaccines and other supplies. 59.6% of the health centers had distribution plan for essential drugs, vaccine and supplies. The health centers were asked about redistribution plan for supplies that were not needed immediately or about to expire, and about half (51.5%) had such a plan. Concerning adequate and secure place for storage of drugs and medical supplies, 58.8% of health centers had such facility.

Table 2.9: Percent of health centers responsible for logistic support to health posts by region, rural Ethiopia 2010

Region	Among all health centers		Among HCs that provide supplies to HPs, percent that have				
	% responsible for provision of supplies to HPs	No. of HCs	Stocks of supplies for HPs	Distribution plan of supplies to HPs	Redistribution plan of supplies to HPs	Adequate storage facility	No. of HCs
Tigray	100.0	26	96.6	67.6	80.2	85.8	26
Afar	100.0	1	100.0	100.0	0.0	100.0	1
Amhara	84.0	33	88.6	54.2	54.4	56.1	28
Oromia	88.6	26	75.7	61.8	49.5	54.3	23
Benshangul	36.6	3	100.0	100.0	0.0	0.0	1
SNNP	81.9	30	63.6	57.0	51.9	66.9	26
Gambela	0.0	5	-	-	-	-	-
Dire Dawa	100.0	3	100.0	100.0	66.7	33.3	3
Harar	66.7	3	100.0	100.0	100.0	100.0	2
Somali	23.0	5	0.0	100.0	0.0	0.0	1
Total	85.3	135	75.5	59.6	51.5	58.8	111

The health centers that reported that they were responsible for logistic supply to health posts were asked about adequacy of drugs, vaccines, medical supplies, medical equipment and other supplies. Majority (74.4%) of health centers had adequate vaccines; however, adequate supplies of drugs, medical equipment, medical and other supplies were reported in about a third or less of the health centers.

Figure 2.1: Percent of HCs that had adequate supplies for distribution to health posts, rural Ethiopia 2010



2.2. REFERRAL AND FEEDBACK LINK WITH HEALTH POSTS

2.2.1. Type of illnesses referred by health posts

Health centers were asked to state the type of illnesses that were commonly referred to the health centers from health posts in their catchment kebeles. The leading causes mentioned as reason for referral from health posts to health centers were reproductive health problems. These include women in labor (56.3%), complicated delivery (42%), APH/PPH (25.2%), puerperal sepsis (24.9%), abortion (24.8%) and eclampsia (17%). Significant proportion of health centers also mentioned other non-reproductive health problems including ARI/pneumonia (55.4%), diarrhea (47.5%), malaria (42.5%), accidents (29.7%) and severe anemia (25.3%). On average, 10 referred patients were received in the month prior to the survey. Most health centers (75%) reported that 1-15 referred patients were received during the indicated period.

Majority (83.9%) of the health centers reported that they gave priority for patients referred from health posts. Only 38% of the health centers sent the patients back with feedback to the referring health posts. Less than half (44.3%) of health centers sent some patients that required follow up back to the health post.

Table 2.10: Percent of health centers that stated the most commonly referred type of illnesses from health posts to health centers by region, Ethiopia 2010

Regions	Reproductive health problems						Other health problems					Number of Health centers
	Women in labor	Complicated delivery	APH/PPH (vaginal bleeding)	Puerperal sepsis- fever after delivery	Abortion	Eclampsia	ARI/ pneumonia	Diarrhea	Malaria	Accidental cases	Severe anemia	
Tigray	56.4	46.1	33.6	36.2	40.5	30.3	77.9	67.0	57.5	52.0	44.9	26
Afar	100.0	0.0	100.0	0.0	100.0	0.0	100.0	100.0	0.0	100.0	0.0	1
Amhara	70.5	57.3	26.9	22.5	20.1	24.3	70.7	70.0	40.2	45.4	31.6	33
Oromia	53.5	35.4	15.6	17.2	12.5	8.7	38.4	35.0	25.7	6.4	18.5	26
Benshangul	26.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.8	0.0	3
SNNP	52.4	45.0	41.3	41.6	48.0	26.6	73.0	51.9	76.6	58.9	32.2	30
Gambela	57.5	31.9	31.9	0.0	31.9	57.5	17.9	17.9	70.8	57.5	57.5	5
Dire Dawa	0.0	33.3	0.0	33.3	0.0	0.0	66.7	33.3	0.0	0.0	0.0	3
Harar	0.0	66.7	0.0	66.7	0.0	0.0	33.3	0.0	0.0	0.0	0.0	3
Somali	16.2	8.2	0.0	0.0	39.2	0.0	62.1	54.1	0.0	16.2	23.0	5
Total	56.3	42.0	25.2	24.9	24.8	17.0	55.4	47.5	42.5	29.7	25.3	135

Table 2.11: Percent distribution of health centers by number of referred patients received in a month prior to the survey, Ethiopia 2010

Region	Number of patients received				Mean	Number of Health Centers
	None	1-15	16-30	>30		
Tigray	3.3	82.5	14.2	0.0	8	26
Afar	0.0	0.0	0.0	100.0	90	1
Amhara	7.7	78.7	9.6	4.0	7	33
Oromia	0.0	72.2	27.9	0.0	10	26
Benshangul	73.2	26.8	0.0	0.0	2	3
SNNP	5.7	78.4	10.9	5.0	11	30
Gambela	15.1	84.9	0.0	0.0	7	5
Dire Dawa	33.3	66.7	0.0	0.0	4	3
Harar	0.0	100.0	0.0	0.0	7	3
Somali	0.0	68.8	8.2	23.0	14	5
Total	3.2	75.0	19.0	2.8	10	135

Table 2.12: Percent of health centers that properly handle referred patients at health centers by region, Ethiopia 2010

Region	Proportion of Health Centers that			Number of Health Centers
	Give priority to referred patients	Provided feedback to Health Posts	Sent patients back to HP for follow up	
Tigray	91.4	46.2	49.9	26
Afar	100.0	0.0	0.0	1
Amhara	70.3	28.5	40.4	33
Oromia	89.6	39.4	50.8	26
Benshangul	0.0	0.0	36.6	3
SNNP	83.5	42.6	37.1	30
Gambela	45.3	0.0	27.4	5
Dire Dawa	66.7	0.0	66.7	3
Harar	100.0	33.3	100.0	3
Somali	77.0	31.2	8.2	5
Total	83.9	38.0	44.3	135

2.2.2. Transfer of emergency cases from health posts

Only 10.2% of the health centers had transport service for emergency cases and 13.1% support health posts in arranging transportation for referred cases. From the bigger regions, Tigray had higher proportion of health centers with transport service for emergency cases and supporting health posts in transport (29.1% and 24.7%, respectively). The Health Centers were asked if the health posts can communicate easily with them. 42.9% said none of the health posts had easy communication while 52.6% said there were 1-10 health posts with easy communication. The mean number of health posts with easy communication was 3. From the bigger regions, SNNP had higher mean number of health centers that communicate with health posts easily (4.8).

Table 2.13: Percent of health centers that support health posts with transport service for emergency cases, Ethiopia 2010

Region	Proportion of Health Centers		Number of Health Centers
	With transport service for emergency cases	Support Health Posts to Arrange Transport	
Tigray	29.1	24.7	26
Afar	0.0	0.0	1
Amhara	7.8	10.4	33
Oromia	8.8	14.4	26
Benshangul	0.0	0.0	3
SNNP	11.1	10.9	30
Gambela	0.0	0.0	5
Dire Dawa	33.3	66.7	3
Harar	100.0	66.7	3
Somali	54.1	31.2	5
Total	10.2	13.1	135

Table 2.14: Percent distribution of HCs by number of HPs with easy communication to HCs by region, Ethiopia 2010

Region	No. of HPs with communication access to HC:					Total
	NONE	1-10	11-20	>20	Mean	
Tigray	19.3	80.7	0.0	0.0	2.7	26
Afar	100.0	0.0	0.0	0.0	0.0	1
Amhara	47.6	52.5	0.0	0.0	1.4	33
Oromia	39.1	60.9	0.0	0.0	2.8	26
Benshangul	100.0	0.0	0.0	0.0	0.0	3
SNNP	45.8	37.4	14.6	2.1	4.8	30
Gambela	72.6	27.4	0.0	0.0	0.4	5
Dire Dawa	33.3	66.7	0.0	0.0	1.7	3
Harar	66.7	33.3	0.0	0.0	0.3	3
Somali	75.6	24.4	0.0	0.0	0.9	5
Total	42.9	52.6	3.9	0.6	3.0	135

2.3. AVAILABILITY OF BASIC EMERGENCY OBSTETRIC CARE

Health centers are the front-line referral health facilities serving five health posts each. Health centers are expected to provide basic EmOC to prevent the majority of obstetric complications progressing to the stage of emergency. A facility is said to provide basic emergency obstetric care if it provides parenteral antibiotics, parenteral oxytocic drugs, parenteral diazepam or magnesium sulphate, manual removal of the placenta and assisted delivery using vacuum or forceps. Thus, health centers should be well equipped with the necessary equipments, drugs, and supplies as well as skilled human resources who can provide quality basic essential obstetric care, decreasing maternal deaths. In order to assess the availability of basic EmOC in the health centers serving the sample health posts, data was collected on the availability of the following components of basic EmOC: IV/IM antibiotics, IV/IM oxytoxics, IV/IM anticonvulsants, manual removal of placenta (and retained products), and assisted vaginal delivery.

2.3.1. Performance of signal functions

Majority of the health centers performed each of the various basic EmOC functions: manual removal of the placenta (82.5%), parenteral antibiotic (79.4%), parenteral oxytocic drugs (60.6%), assisted delivery using vacuum or forceps (52%) and parenteral diazepam or magnesium sulphate (46.1%). However, the percent of health centers that performed all functions of the basic EmOC was low (23.7%).

Twenty four hour service is essential to deal with emergencies like those encountered during labor and delivery. Of the 135 health centers surveyed, 88.2% reported to provide 24-hour service for emergency cases including delivery. From the bigger regions, Oromia had higher proportion of health centers that provided 24 hours service for emergency cases.

Table 2.15: Percent of HCs that provided components of basic emergency obstetric care by region, Ethiopia 2010

Region	Parentral antibiotic	Parentral oxytocic drugs	Parentral diazepam/magnesium sulfate	Manual removal of placenta/retained products	Assist delivery using forceps/vacuum extractor	Perform all functions of Basic EmOC	No. of HCs
Tigray	82.9	91.4	78.5	95.7	67.9	34.6	26
Afar	100.0	100.0	100.0	100.0	100.0	100	1
Amhara	83.3	55.5	42.2	92.0	57.1	12.1	33
Oromia	73.1	57.9	30.7	79.4	43.2	15.4	26
Benshangul	100.0	100.0	100.0	100.0	73.2	33.3	3
SNNP	86.6	66.7	73.0	78.9	64.8	36.7	30
Gambela	82.1	68.8	67.0	68.8	14.0	0	5
Dire Dawa	100.0	66.7	66.7	100.0	33.3	0	3
Harar	66.7	100.0	66.7	100.0	100.0	66.7	3
Somali	100.0	37.9	54.1	100.0	0.0	0	5
Total	79.4	60.6	46.1	82.5	52.0	23.7	135

2.3.2. Availability of essential drugs and supplies

The health centers were assessed for availability of essential drugs and supplies for basic emergency obstetric care. High proportions of health centers had forceps for assisted delivery (76.4%), injectable gentamycin (80.2%), infusion set (90.2%), IV solution (90.9%), and procaine penicillin (91.6%). Health centers which had injectable ergometrine and oxytocin were 58.3% and 47.8% respectively. Limited proportions of health centers had incubator (5.2%), magnesium sulphate (15.4%) and diazepam (26.7%). Vacuum extractor for assisted delivery and manual vacuum extractor for abortion were available in 55.9% and 33.1% of the health centers, respectively.

Table 2.16: Percent of health centers with drugs and supplies essential for Basic EmOC by region, Ethiopia 2010

Region	Injectable ergometrine	Injectable oxytocin	Injectable diazepam	Injectable magnesium sulfate	Injectable amoxicillin	Injectable gentamicin	Procaine penicillin injection	Intravenous infusion set	IV solution	Incubator	Forceps for assisted delivery	Vacuum extractor for assisted delivery	Manual vacuum extractor for abortion	No. of Health Centers
Tigray	86.0	73.6	28.5	6.8	13.5	76.9	91.8	96.1	100.0	7.7	69.8	37.3	41.5	26
Afar	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	1
Amhara	64.2	46.0	17.1	14.3	13.9	75.3	96.4	88.0	91.0	11.2	76.5	40.2	26.5	33
Oromia	62.8	54.0	26.5	11.8	21.4	86.5	87.1	86.7	89.2	0.0	80.1	64.4	32.4	26
Benshangul	36.6	63.4	26.8	0.0	36.6	100.0	100.0	100.0	100.0	0.0	36.6	0.0	36.6	3
SNNP	43.0	35.1	31.5	22.2	28.7	72.1	96.8	97.1	93.6	9.6	70.1	55.8	39.2	30
Gambela	57.5	72.6	52.9	17.9	39.6	52.9	53.6	82.1	100.0	0.0	29.2	53.6	33.0	5
Dire Dawa	0.0	66.7	66.7	0.0	0.0	66.7	100.0	100.0	100.0	0.0	100.0	100.0	100.0	3
Harar	66.7	33.3	33.3	0.0	0.0	66.7	100.0	100.0	100.0	0.0	66.7	33.3	66.7	3
Somali	54.1	37.9	54.1	23.0	0.0	83.8	83.8	100.0	77.0	16.2	77.0	0.0	0.0	5
Total	58.3	47.8	26.7	15.4	21.4	80.2	91.6	90.2	90.9	5.2	76.4	55.9	33.1	135

2.3.3. Availability of other Services

Other services like treatment of pneumonia, voluntary counseling and testing for HIV, and diagnosis and treatment of STI were assessed. Majority (93.9%) of the health centers treated pneumonia in children, 85.8% diagnosed and treated STI, while 77.6% provided voluntary counseling and testing for HIV.

Table 2.17: Percent of health centers that provided various essential services by region, Ethiopia 2010

Region	Percent of Health Centers that provided:			Number of Health Centers
	Diagnosis & treatment of STI	HIV voluntary counseling and testing	Treatment of children with ARI	
Tigray	91.4	96.8	95.7	26
Afar	100.0	100.0	100.0	1
Amhara	98.1	97.5	98.1	33
Oromia	78.7	62.0	91.8	26
Benshangul	100.0	100.0	100.0	3
SNNP	89.4	89.4	95.1	30
Gambela	100.0	86.7	82.1	5
Dire Dawa	100.0	66.7	100.0	3
Harar	100.0	100.0	100.0	3
Somali	77.0	83.8	83.8	5
Total	85.8	77.6	93.9	135

2.4. CONCLUSIONS

- A total of 135 health centers were studied from ten regions in Ethiopia.
- Overall 82.5% of health centers provided technical support to health posts, and on average each health center supported 6 health posts. Majorities (80.9%) of health centers were providing supportive supervision and 54.6% provided feedback and technical information, mainly verbal.
- Majority (84.2%) of the health centers claimed to have supervision plan, which was confirmed in only 36.3% of the health centers. Similarly, majority of the HCs reported to have supervision guideline, but it was confirmed only in about a third of the HCs. Majority (90.4%) of the health centers had HEP supervisors.
- About 85% of the health centers reported that they were responsible for distribution of supplies to health posts in their catchment area.
- Among the health centers that reported responsibility for logistic support, 75.5% had adequate stocks of drugs, vaccines and supplies meant for health posts. More than half (58.8%) of the health centers reported that they had adequate and secure storage place.
- The leading reason for referral from health post to health center was reproductive health related problems and the average number of clients referred from health posts to the health centers during the month prior to the survey was 10 cases per health center.
- One in ten health centers reported to have transport service for emergency cases, and 42.9% reported there was no easy communication with the health posts.
- Majority of the health centers performed the various basic EmOC functions: manual removal of the placenta (82.5%), parenteral antibiotic (79.4%), parenteral oxytocic drugs (60.6%), assisted delivery using vacuum or forceps (52%) and parenteral diazepam or magnesium sulphate (46.1%). However, the percent of health centers that performed all functions of basic EmOC was low (23.7%).
- Concerning supplies, drugs and equipment for delivery services, 76.4% had forceps, 80.2% had injectable antibiotic, 58.3% had injectable ergometrine, 47.8% had injectable oxytocin, 5.2% had incubator and 15.4% had magnesium sulphate.

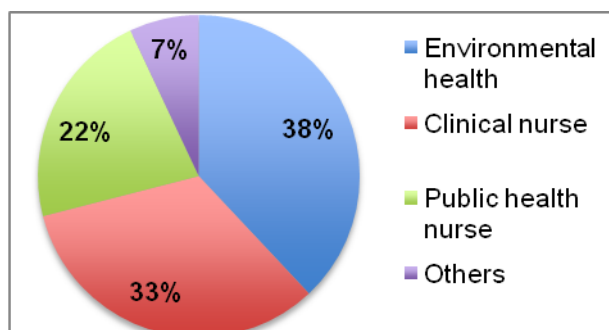
3. HEW-SUPERVISORS

3.1. BACKGROUND CHARACTERISTICS OF SUPERVISORS

Educational background of supervisors

Majority of supervisors were environmental health professionals (38.3%), clinical nurses (32.9%) or public health nurses (22.3%). In Harari all of the supervisors were clinical nurses while in Dire Dawa all supervisors were environmental health professionals.

Figure 3.1: Percent distribution of supervisors by educational background, rural Ethiopia 2010



Length of service as a supervisor

The majority of the supervisors had been supervising HEWs for 1-6 months (41.6%) and 7-12 months (33.8%). Only 5.5% of the supervisors had been supervising for more than two years. About a quarter of the supervisors had been supervising for more than one year, but for Tigray region the maximum duration of work of the supervisors was 7-12 months.

Half of the supervisors stated that they have other responsibilities besides supervising the HEWs. In Afar, Dire Dawa, Harrari and Somali all of the supervisors had other responsibilities.

Table 3.1: Percent distribution of supervisors by number of months serving as supervisors and percent who had other responsibilities in addition to supervision, rural Ethiopia 2010

Region	Number of months working as supervisor				Percent with additional responsibility	Total
	1-6	7-12	13-24	25+		
Tigray	37.3	62.7	0.0	0.0	67.1	6
Afar	0.0	0.0	100.0	0.0	100.0	2
Amhara	16.3	9.4	38.0	36.3	50.4	18
Oromia	50.2	33.4	14.9	1.5	51.8	46
Beneshangul	23.8	16.5	59.7	0.0	68.4	7
SNNP	11.5	63.9	24.7	0.0	21.6	11
Gambela	20.3	57.2	14.3	8.2	77.3	11
Dire Dawa	0.0	25.0	75.0	0.0	100.0	4
Harari	0.0	0.0	25.0	75.0	100.0	4
Somali	29.8	59.6	10.6	0.0	100.0	4
Total	41.6	33.8	19.2	5.5	49.5	113

In-service training of supervisors

Less than half of the supervisors had received in-service training on HEP prior or during their service as supervisors. It is only in Tigray, Afar, Dire Dawa, Harari and Somali where all of the supervisors were trained on HEP prior or during their service as supervisor. Compared to other regions, the proportion of supervisors who had received in-service training on HEP in Oromia was small (40.49%). Training of supervisors on HEP is crucial and it has to be well addressed.

Among the supervisors who had not received in-service training on HEP, 33.9% and 13.3% had received in-service training on supervision techniques and induction courses, respectively. Training on supervision technique should be provided to all the supervisors to keep the quality of supervision in all regions. Induction courses should also be provided for all supervisors by the time of assignment as supervisors and this gap has to be improved.

Table 3.2: Percent of supervisors who received training on HEP by region, rural Ethiopia, 2010

Region	Among all supervisors		Among supervisors who were not trained on HEP		
	% who received training	No. of supervisors	% who were trained on supervision technique	Percent who received induction course	No. of supervisors
Tigray	100	6	-	-	0
Afar	100	2	-	-	0
Amhara	59.51	18	46.9	0.0	8
Oromia	40.49	46	29.2	12.6	24
Beneshangul	83.5	7	0.0	0.0	1
SNNP	53.25	11	59.7	35.6	6
Gambela	62.4	11	66.7	48.2	4
Dire Dawa	100	4	-	-	0
Harari	100	4	-	-	0
Somali	100	4	-	-	0
Total	45.39	113	33.9	13.3	43

3.2. IMPLEMENTATION OF SUPERVISION

3.2.1. Number of health posts assigned per supervisor

The majority (71.7%) of the supervisors reported that 5-8 health posts have been assigned to them, whereas 12.4% of the supervisors reported that they were assigned 9 or more health posts. There was some variability between the regions, where more than half of the supervisors in Amhara and Gambela were supervising 9 or more health posts, while all supervisors in Afar were assigned 1-4 health posts only.

Majority (65.6%) of the supervisors reported that there were between 9-16 HEWs under their supervision. About 13% reported that they supervised 17 or more HEWs. In Amhara and Gambela, more than 50% of supervisors were responsible for supervision of 17 or more HEWs. In Afar, both supervisors were responsible for only 2-8 HEWs.

Table 3.3: Percent distribution of supervisors by number of HPs and HEWs assigned, rural Ethiopia 2010

Region	No. of HPs assigned per supervisor			No. of HEWs per supervisor			No. of supervisors
	1-4	5-8	9+	2-8	9-16	17+	
Tigray	57.8	42.2	0.0	57.8	42.2	-	6
Afar	100.0	0.0	0.0	100.0	-	-	2
Amhara	6.6	41.5	51.9	11.6	30.4	57.9	18
Oromia	17.5	75.1	7.4	23.9	68.2	7.9	46
Beneshangul	16.5	72.9	10.5	21.7	64.5	13.8	7
SNNP	8.3	86.2	5.4	8.8	91.2	-	11
Gambela	14.6	28.5	56.9	29.8	13.4	56.9	11
Dire Dawa	25.0	75.0	0.0	66.7	33.3	-	4
Harari	50.0	50.0	0.0	50.0	50.0	-	4
Somali	0.0	89.4	10.6	21.1	68.3	10.6	4
Total	15.9	71.7	12.4	21.7	65.6	12.7	113

3.2.2. Distance to health posts (kebeles)

Majority (41.8%) of supervisors reported that the distance to the farthest kebele in their catchment area was 11-20 km, whereas only 7.7% reported that the distance to the farthest kebele was 50 km or more. It was only in Tigray region where all the supervisors reported that the distances to the farthest kebele was within 1-10 km. Farthest kebele with distances of 50 km and above were mainly seen in Somali and Afar (70.2% and 49.5%, respectively).

Half (49.7%) of the supervisors reported that the distance to the nearest kebele under their supervision was within 1 km, and 28.9% of supervisors reported that the distance to the nearest kebele was 2-5 km. Unlike the other regions, none of the supervisors in Tigray and Benishangul reported that the distance to the nearest kebele was within a kilometer. In Amhara, Beneshangul-Gumuz, and Somali regions, majority of supervisors reported that the distance to the nearest kebele was 6-9 km.

Table 3.4: Percent distribution of supervisors by distance to farthest and nearest kebeles, rural Ethiopia 2010

Region	Distance to the farthest kebele (km)					Distance to nearest kebele (km)			No. of supervisors
	1-10	11-20	21-30	31-50	50+	<=1	2-5	6-9	
Tigray	100.0	0.0	0.0	0	0.0	0	81.2	18.9	6
Afar	0.0	50.5	0.0	0	49.5	49.5	50.5	0	2
Amhara	3.9	37.1	3.9	29.12	26.1	15	40.9	44.3	18
Oromia	21.3	42.5	16.5	17.12	2.6	60.7	23.6	15.5	46
Beneshangul	0.0	34.4	31.6	16.53	17.5	0	21.1	78.9	7
SNNP	36.0	47.7	0.0	0	16.4	22.6	49.1	28.3	11
Gambela	14.6	21.6	6.1	23.29	34.4	58.7	34.4	6.9	11
Dire Dawa	0.0	25.0	25.0	50	0.0	50	50	0	4
Harari	25.0	75.0	0.0	0	0.0	50	50	0	4
Somali	0.0	0.0	29.8	0	70.2	21.1	0	78.9	4
Total	20.7	41.8	13.3	16.47	7.7	49.7	28.9	21.4	113

3.2.3. Supervision guideline/tool

Majority (73.2%) of supervisors had guideline/tool for supervision. All supervisors in Afar did not have guideline/tool for supervision, and in Gambela, only 18.1% had guideline/tool for supervision. In SNNP, Benishangul-Gumuz, and Tigray more than 80% of the supervisors had guideline/tool for supervision.

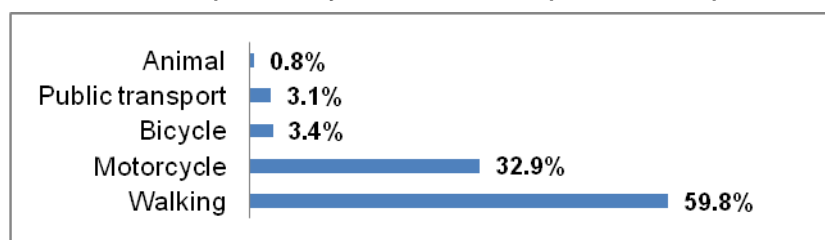
Table 3.5: Percent of supervisors that use guideline on supervision, rural Ethiopia 2010

Region	Percent	Total
Tigray	81.1	6
Afar	0.0	2
Amhara	44.0	18
Oromia	77.1	46
Beneshangul-Gumuz	83.5	7
SNNP	85.4	11
Gambela	18.1	11
Dire Dawa	100.0	4
Harari	75.0	4
Somali	50.9	4
Total	73.2	113

3.2.4. Usual mode of transport during supervision

The usual mode of transport used by majority (59.8%) of supervisors during supervision to health posts was walking. About a third (32.9%) of the supervisors reported that the usual mode of transport for supervision was motorcycle. There was some variation between the regions. Walking was most common in Beneshangul-Gumuz (82.5%), while use of motorcycle was most common in Dire Dawa and Harari. The use of motorcycles and bicycles by supervisors in some regions is encouraging, and it will be critical to provide such means of transportation to all supervisors.

Figure 3.2: Percent distribution of supervisors by usual mode of transport used for supervision, rural Ethiopia 2010



3.3. PERFORMANCE OF SUPERVISORS

3.3.1. Supervision plan/schedule, performance and challenges

Majority (86.8%) of the supervisors had plan/schedules for the supervision of HEWs. All supervisors in Tigray, SNNP, Dire Dawa and Harari had supervision plan/schedule. On the other hand, relatively small proportion of supervisors in Somali and Gambela (29.8% and 33.6%, respectively) had supervision plan/schedule.

Among the supervisors who had schedules for supervision, 67.3% supervised as per the schedule. The achievement of targeted supervisory visits was better in Amhara (92%), Tigray (71%), Benishangul (71.5%) and Harari (75%). The least performing supervisors relative to the schedule were from Dire Dawa and Gambela.

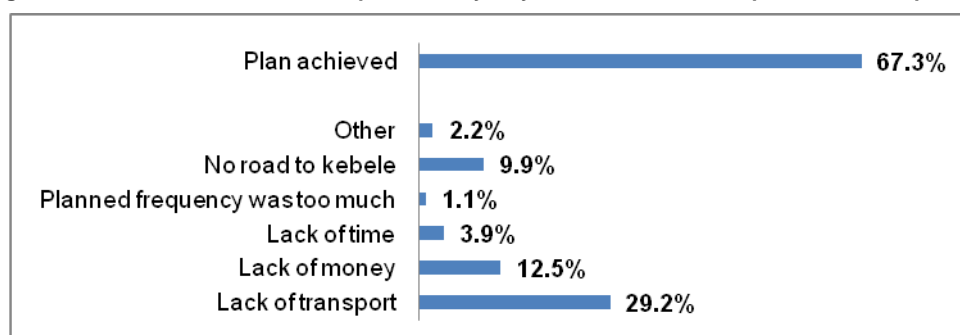
Table 3.6: Percent of supervisors who have schedule for supervision and supervised as per schedule, rural Ethiopia 2010

Region	Among all supervisors		Among those who have schedule	
	% who had schedule	Number	% who achieved plan	Number
Tigray	100.0	6	71.0	6
Afar	50.5	2	0.0	1
Amhara	80.4	18	92.2	14
Oromia	87.1	46	64.8	43
Beneshangul	83.4	7	71.5	6
SNNP	100.0	11	57.8	11
Gambela	33.6	11	37.3	5
Dire Dawa	100.0	4	25.0	4
Harari	100.0	4	75.0	4
Somali	29.8	4	0.0	1
Total	86.8	113	67.3	95

Among the supervisors who had schedules for supervision, lack of transport as a constraint for supervision was reported by 29.2% of the supervisors, which was the most frequently reported constraint of achieving the supervision plan. Other main reasons include: lack of money or

budget for supervision (12.5%) and difficulty of roads or no roads to most villages for supervision (9.9%). These reported constraints have to be addressed by stakeholders to improve per schedule supervisions.

Figure 3.3: Percent distribution of supervisors by why did not achieve their plan, rural Ethiopia 2010



Only 7.5% of the supervisors reported that they had budget for supervision. Higher proportion of supervisors who reported that they had budget for supervision were observed in Dire Dawa and Somali regions (50% and 40.4%, respectively). On the other hand, all supervisors in Tigray, Afar, Amhara, Beneshangul-Gumuz, Gambela and Harari reported that they did not have any budget for supervision.

3.3.2. Frequency of supervisory visits undertaken

Among the supervisors who had schedule for supervision, the majority (43%) reported that they supervised each of the health posts assigned to them four times in a month, whereas 28.1% of the supervisors supervised each health post twice in a month. Overall, one visit per health post per month was reported by 16.8% of the supervisors, but this frequency was mainly observed among supervisors in Tigray and Amhara (61.9% and 60.9%, respectively).

Table 3.7: Percent distribution of supervisors by number of supervision visits, rural Ethiopia 2010

Region	Number of supervision visits per HP per month					Total
	1	2	3	4	Not Stated	
Tigray	61.9	38.1	0.0	0.0	0.0	6
Afar	0.0	100.0	0.0	0.0	0.0	1
Amhara	60.9	12.3	0.0	26.9	0.0	14
Oromia	7.5	25.7	15.5	49.8	2.9	43
Beneshangul- Gumuz	49.5	50.5	0.0	0.0	0.0	6
SNNP	31.3	48.1	0.0	20.7	0.0	11
Gambela	25.3	74.7	0.0	0.0	24.4	5
Dire-Dawa	0.0	25.0	25.0	50.0	0.0	4
Harari	0.0	25.0	0.0	75.0	0.0	4
Somali	0.0	100.0	0.0	0.0	0.0	1
Total	16.8	28.1	12.0	43.0	2.2	95

3.3.3. Health posts and HEWs supervised in the month preceding the survey

Majority (42.8%) of supervisors reported that they had visited three to four health posts in the month preceding the survey, and a similar percentage (40.6%) had visited five to six health posts during the same period. Seven percent of supervisors reported that they visited seven or more health posts in the month preceding the survey, exclusively from Amhara, Oromia, SNNP and Gambela regions. On the other hand, one in ten supervisors reported to have visited only one or two health posts during the same period, mainly from Tigray, Gambela and Harari regions. Majority (38.4%) of supervisors reported that they had supervised 9-12 HEWs in the month

preceding the survey, and a similar proportion (36.1%) of supervisors had visited 5-8 HEWs during the same period.

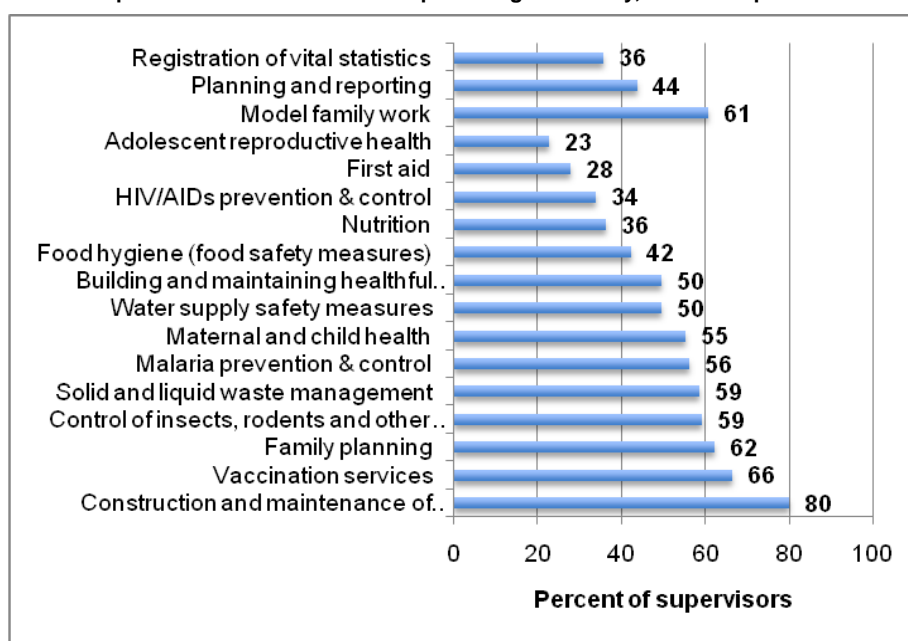
Table 3.8: Percent distribution of supervisors by the number of health posts and HEWs visited in the month preceding the survey, rural Ethiopia 2010

Region	Number of health posts visited				Number of HEWs supervised				No. of supervisors
	1-2	3-4	5-6	7+	1-4	5-8	9-12	13+	
Tigray	28.8	47.9	23.3	0.0	28.8	29.0	42.2	0.0	6
Afar	0.0	100.0	0.0	0.0	49.5	50.5	0.0	0.0	2
Amhara	3.9	67.2	25.6	3.3	13.3	24.4	23.2	39.2	18
Oromia	12.1	37.4	42.8	7.6	13.7	38.0	40.5	7.8	45
Beneshangul	10.5	89.5	0.0	0.0	27.1	72.9	0.0	0.0	7
SNNP	0.0	50.5	44.0	5.4	0.0	34.1	44.0	21.8	11
Gambela	20.5	45.7	25.4	8.5	20.5	48.1	9.0	22.4	7
Dire-Dawa	0.0	50.0	50.0	0.0	25.0	50.0	25.0	0.0	4
Harari	25.0	50.0	25.0	0.0	25.0	50.0	0.0	25.0	4
Somali	0.0	17.3	82.7	0.0	0.0	34.2	48.5	17.3	3
Total	9.9	42.8	40.6	6.7	12.5	36.1	38.4	12.9	107

3.3.4. Health Extension packages addressed during supervision

Among the HEP service packages, the top five areas that were most frequently addressed during supportive supervision by the supervisors in the three months preceding the survey, in order of frequency, were construction and maintenance of sanitary latrines (80%), vaccination services (66%), family planning (62%), model-family (61%), and control of insects, rodents (59%). On the other hand, the areas that were least frequently addressed during supportive supervision over the same time period were adolescent reproductive health (23%), first aid (28%), HIV/AIDS prevention and control (34%), nutrition (36%) and registration of vital statistics (36%).

Figure 3.4: Percent of supervisors who stated the specific HEP service area on which they provided supportive supervision in the three months preceding the survey, rural Ethiopia 2010



3.3.5. Mechanism of supervision

Using checklist/by schedule during the provision of supervision was reported by 36.2% of the supervisors, and providing technical support during supervision was reported by 27.5% of the supervisors. About a quarter (23.5%) of the supervisors employed performance evaluation during supervision. Document observation, discussion, contact with community and house to house visits were other mechanisms reported that were used during supervision. Majority of supervisors in Gambela (62.2%) and Somali (61.5%) regions reported to use checklist during supervision. Document observation for supervision was reported by majority of supervisors in SNNP (89.3%), while discussion with HEWs was reported by about half of the supervisors in SNNP and Dire Dawa.

Table 3.9: Percent of supervisors who stated the mechanism of supervision used, rural Ethiopia 2010

Region	Using checklist	Technical support	Performance evaluation	Document observation	Discussion	Contact with community	House to house visit	Total
Tigray	28.5	37.8	18.9	0	18.9	0	14.8	6
Afar	49.5	49.5	0	0	0	0	0	2
Amhara	44	20.4	3.9	6.3	40.4	28	15.5	18
Oromia	36.6	31.3	30.2	11.5	3.8	10.3	6	46
Beneshangul	17.5	0	16.5	0	23.8	0	0	7
SNNP	21.6	8.1	0	89.3	56.5	6.2	49.2	11
Gambela	62.2	8.2	16.3	6.1	12.5	0	0	11
Dire Dawa	50	0	25	25	50	0	0	4
Harari	25	0	50	0	0	0	0	4
Somali	61.5	0	0	49.1	38.5	29.8	0	4
Total	36.2	27.5	23.5	18.9	13.8	12	11.4	113

3.3.6. Availability of supervision report

Documented supervision reports were available with 89.9% of the supervisors. All supervisors in Afar, Beneshangul-Gumuz and SNNP had supervision reports. The least proportion of supervisors that had reports of supervision was observed in Somali region (61.5%). The majority (85.9%) of the supervisors reported that they shared the supervision report copies to the HEWs. Supervisors in Amhara, Oromia and SNNP regions performed above the average with regard to sharing the report of supervision. The least proportion of supervisors who shared copies of the supervision reports to the HEWs was observed in Somali and Gambela (29.8% and 39.2%, respectively). It is recommended that all supervision reports should be shared to the respective HEWs to improve the weaknesses and keep the strengths.

Table 3.10: Percent of supervisors who keep and share supervision reports, rural Ethiopia 2010

Region	% who kept supervision reports	% who share reports to HEWs	Total
Tigray	85.2	61.9	6
Afar	100.0	100.0	2
Amhara	88.9	88.9	18
Oromia	89.0	86.4	46
Beneshangul	100.0	68.4	7
SNNP	100.0	85.4	11
Gambela	86.6	39.2	11
Dire Dawa	75.0	50.0	4
Harari	75.0	75.0	4
Somali	61.5	29.8	4
Total	89.9	85.9	113

3.4. PERCEPTION OF SUPERVISORS TOWARDS HEP

3.4.1. Technical constraints of HEWs

Supervisors were asked to state what they perceived were the technical constraints of HEWs that affect the implementation of HEP based on their observation during their visit to the health posts. The most frequently stated constraint of HEWs, which was stated by 54.2% of supervisors, was lack of delivery skill. The other technical constraints of HEWs as perceived by the supervisors, in order of frequency, included: report recording (11.7%), lack of supplies (10%), lack of overall skills (9.4%), constraints on EPI service (7.4%), and lack of communication skill (6%). These technical constraints mentioned by the supervisors should be addressed timely to improve the quality of HEP services.

Table 3.11: Percent distribution of supervisors by the perceived technical constraints of HEWs, rural Ethiopia 2010

Region	Lack of delivery skill	Recording of reporting	Lack of supplies	Lack of skill	EPI service	Communication skill	Total
Tigray	56.7	0	14.5	0	0	0	6
Afar	0	0	0	0	0	0	2
Amhara	52.3	12.1	16	7.1	8.3	0	18
Oromia	56	8.8	10.2	9	8.3	8	46
Beneshangul	44.9	10.5	27.1	10.5	34.4	0	7
SNNP	48.6	35	0	14.3	0	0	11
Gambela	25.1	22.7	39.7	15.1	0	0	11
Dire Dawa	75	0	0	25	0	25	4
Harari	0	0	0	25	25	25	4
Somali	31.7	10.6	21.1	29.8	0	0	4
Total	54.2	11.7	10	9.4	7.4	6	113

3.4.2. Weaknesses and strengths of HEWs

Supervisors were asked to state what they perceived were the main weaknesses and strengths of HEWs. The most frequently stated weaknesses of HEWs were absence from working area (28.6%), lack of commitment (27.7%), documentation of reports (24.6%), and lack of skill and knowledge (18.9%). Other perceived weaknesses of HEWs included lack of communication and lack of schedule. There was variability on the primary weakness of HEWs identified by supervisors at regional level. Absence from working area was the primary weakness in Oromia and Benishangul-Gumuz regions. Lack of commitment was the main weakness of HEWs reported from SNNP region. Problem in documentation of reports was the main weakness reported from Amhara region. Majority of supervisors from Tigray, Gambela, and Somali reported that lack of skill and knowledge was the main weakness of HEWs.

Absence from work places and lack of commitment are very critical issues and due attention and timely feedback should be given. Weaknesses in record keeping and lack of knowledge and skill can be addressed through appropriate refresher trainings and onsite coaching by the supervisors.

Table 3.12: Percent of supervisors who stated the areas of weaknesses of HEWs, rural Ethiopia 2010

Region	Absence from work	Lack of commitment	Documentation of reporting	Lack of skill & knowledge	Lack of communication	No schedule	Total
Tigray	0	14.5	23.3	38.1	33.7	0	6
Afar	0	0	0	0	0	0	2
Amhara	9.6	21.7	31	25.8	7.7	7.1	18
Oromia	31	25.5	24.3	18.2	6.5	6.1	46
Beneshangul	72	10.5	51.9	68.4	10.5	0	7
SNNP	38.3	57.5	18.7	7.4	11.3	0	11
Gambela	8.2	21.6	13	34.9	8.2	6.1	11
Dire Dawa	0	25	0	0	25	0	4
Harari	0	0	0	50	25	0	4
Somali	0	0	49.1	100	0	0	4
Total	28.6	27.7	24.6	18.9	7.2	5.5	113

The most frequently mentioned strengths of HEWs by the supervisors were community mobilization (25.4%) and EPI activity (20.5%).

Table 3.13: Percent of supervisors who stated the areas of strength of HEWs, rural Ethiopia 2010

Region	Mobilize community	EPI activity	Health education	Home visit	Commitment	Family planning	Work on all package	Disease prevention	Total
Tigray	18.9	37.8	0	14.5	0	0	0	14.8	6
Afar	0	0	0	0	0	0	0	0	2
Amhara	12	34.9	0	3.9	0	0	6.1	3.9	18
Oromia	30.5	14.4	11.5	13.5	7.4	7.4	3.5	0	46
Beneshangul	0	0	34.4	16.5	10.5	10.5	21.1	0	7
SNNP	7.4	48.2	30.9	0	0	0	8.3	0	11
Gambela	6.9	16.4	34.6	0	0	0	0	0	11
Dire Dawa	25	25	0	0	0	0	50	0	4
Harari	25	25	0	0	0	0	0	0	4
Somali	0	50.9	100	10.6	0	0	0	0	4
Total	25.4	20.5	12.8	10.9	5.6	5.6	4.3	0.5	113

3.4.3. Perception of supervisors on community utilization of HEP services

The supervisors were asked to comment on what portion of the community utilizes the HEP services. Over three-quarters (77%) of the supervisors reported that majority of the people in the community utilized the HEP services, while 22.9% of the supervisors reported that all people in the community utilize the HEP services. The highest proportion of supervisors who mentioned that all the people in the community utilized HEP services was from SNNP (77.4%). Supervisors who mentioned that almost half the people utilized HEP services were only from Somali region.

Table 3.14: Percent distribution of supervisors by perceived rate of HEP utilization by the community, Ethiopia 2010

Region	All the people	Majority of the people	Almost half of the people	Total
Tigray	37.3	62.7	0.0	6
Afar	0.0	100.0	0.0	2
Amhara	10.3	89.7	0.0	18
Oromia	17.5	82.5	0.0	46
Beneshangul	31.6	68.4	0.0	7
SNNP	77.4	22.7	0.0	11
Gambela	31.5	68.5	0.0	11
Dire Dawa	0.0	100.0	0.0	4
Harari	0.0	100.0	0.0	4
Somali	38.5	31.7	29.8	4
Total	22.9	76.9	0.3	113

3.4.4. Complaints heard from staffs about HEP

Supervisors were asked to state complaints about HEP that they had heard from the staff. About 42% of supervisors said that they did not hear any complaints about HEP from the staff. The most frequently reported complaints about HEP from the staffs were lack of skill on curative services (15.5%), absence of educational carrier (14.2%), low salary (11.4%), and shortage of supplies (8.1%). Other complaints included lack of acceptance by the community, workload, and shortage of transportation.

The relatively most frequently reported complaints about HEP heard from staff by region were: lack of community acceptance in Tigray; low salary in Amhara; lack of skill on curative services in Oromia; workload in Benshangul-Gumuz; absence of educational carrier in SNNP, Gambela, and Somali regions. On the other hand, majority (54%) of supervisors in Oromia reported that they never heard complaints about HEP from staff.

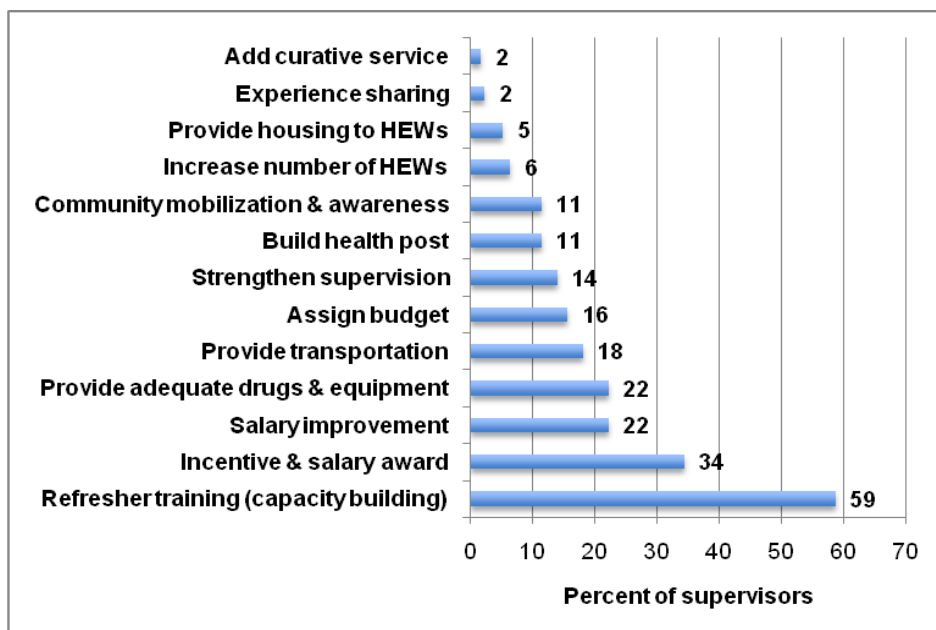
Table 3.15: Percent of supervisors who stated the complaints heard from staffs about HEP, rural Ethiopia 2010

	No compliant	Lack of skill on curative services	Absence of educational carrier	Low salary	Shortage of supplies	Lack of community acceptance	Work load	Shortage of transportation	Lack of budget	Total
Tigray	0	14	23.3	0	0	56.7	0	0	0	6
Afar	0	0	50.5	49.5	0	50.5	0	0	0	2
Amhara	3.9	5	55.6	57.6	5.4	13.4	10.4	8.2	0	18
Oromia	54.2	16.9	2.4	0	5.1	3	1.2	0	0	46
Beneshangul	0	23.8	16.5	0	0	0	27.1	0	21.1	7
SNNP	0	18.7	53.3	42.6	35.9	8.3	23.3	14.3	0	11
Gambela	0	31.5	33.3	0	24.2	6.9	0	9.9	0	11
Dire Dawa	75	0	0	0	0	25	0	0	0	4
Harari	25	0	0	0	0	75	0	0	0	4
Somali	0	10.6	0	0	0	10.6	0	0	0	4
Total	41.5	15.5	14.2	11.4	8.1	5.4	4.5	2.4	0.1	113

3.4.5. Suggestions made by supervisors to improve HEP services

Supervisors were asked to suggest measures to improve HEWs performance and HEP in general. The most frequently stated suggestions, in order of frequency, were refresher training of HEWs (59%), providing incentives and salary increment awards to best performing HEWs (34%), increasing salary of HEWs (22%), provision of adequate drugs and equipments (22%), and provision of means of transportation to HEWs (18%). Other suggestions stated by supervisors were assigning adequate budget, strengthen supportive supervision, and building health posts where none exists. Other suggestions are shown in the figure.

Figure 3.5: Percent of supervisors who suggested measures to improve HEP, rural Ethiopia 2010



3.5. CONCLUSION

- Some of the supervisors have other responsibilities besides the supervisory duty. Although majority of the supervisors have been assigned between five and eight health posts, there are supervisors who were assigned more health posts. These arrangements may affect the quality of supervision and the successful implementation of HEP.
- There was significant number of supervisors who did not receive orientation training on the HEP services and supervision techniques, or induction courses before they were assigned to work as supervisors. These have a negative implication on the quality of supervision.
- There were supervisors who should travel 30 km or more for supervision and due consideration and priority should be given for such supervisors in the provision of means of transportation to facilitate their work. The use of motorcycles and bicycles observed in some regions is encouraging, and it could be considered as an option to cover supervisors in all regions. Lack of transportation was the primary constraint for not achieving supervision plan.
- Although there was a trend in the use of supervision guidelines and the preparation of supervision plans by majority of supervisors, there were some who did not have guideline and supervision plan.
- According to majority of supervisors, the main technical constraint of HEWs was lack of delivery skill. This gap was also reported by the HEWs themselves. Similarly, according to majority of the supervisors, the primary weaknesses of HEWs were absence from work places and lack of commitment.
- Majority of the supervisors suggested refresher training and incentives for HEWs, and improving the logistic and transport system as important measures to improve the HEP.

4. WOREDA HEALTH MANAGEMENT SURVEY

4.1. WOREDA HEALTH OFFICE CAPACITY AND SUPPORT TO HEP

4.1.1. Human resource at the woreda health office

All positions based on the organizational structure of the woreda health office were not filled in majority of the woredas. Only 20 woredas stated that all positions at the woreda health office based on the organizational structure were filled. From regions, it was only in SNNP where most of the positions in the woreda health office were filled (8 woredas among the 10 surveyed woredas).

Table 4.1: Number of woredas where all the positions based on the organizational structure of the woreda health office was filled, Ethiopia 2010

Region	Positions filled	No. of respondents
Tigray	2	4
Afar	0	1
Amhara	5	15
Oromia	3	18
Beneshangul- Gumuz	1	4
SNNP	8	10
Gambela	1	7
Dire Dawa	0	1
Harari	0	1
Somali	0	3
Total	20	64

4.1.2. Supervision workforce and readiness to support HEP

Whether the HEW-supervisor had additional responsibility or not was assessed. The HEW-supervisors in majority of woredas (35 Woredas) were only responsible for supervision of HEP activities, while it was reported that they had additional responsibility in 28 of the woredas. In Tigray, Afar, Gambela and Harari, all the HEW supervisors had additional responsibilities.

Table 4.2: Number of Woredas by whether HEW supervisors have additional responsibility or not, rural Ethiopia 2010

Region	Only HEP	HEP and other activities	No. of respondents
Tigray	0	4	4
Afar	0	1	1
Amhara	11	4	15
Oromia	13	4	18
Beneshangul- Gumuz	2	2	4
SNNP	8	2	10
Gambela	0	7	7
Dire Dawa	0	1	1
Harari	0	1	1
Somali	1	2	3
Total	35	28	64

Majority of the woreda health offices (52 woredas) reported that most of the HEW-supervisors had received induction course on HEP before they became supervisors. Moreover, 38 woreda health offices reported that the supervisors had received refresher training after they became supervisors.

Majority (47 woredas) woreda health offices reported that HEW-supervisors had received supervision guidelines/tools for supervision of HEP. All surveyed woreda health offices in Tigray, Afar, SNNP, Dire Dawa and Harari reported that the supervisors had received supervision guideline/tools. Fifty-eight woredas reported that they had supervision plan/schedule for supervision of the HEP. All Woredas in Tigray, Beneshangul-Gumuz, SNNP, Dire Dawa and Harari had supervision plan/schedule to supervise the HEP.

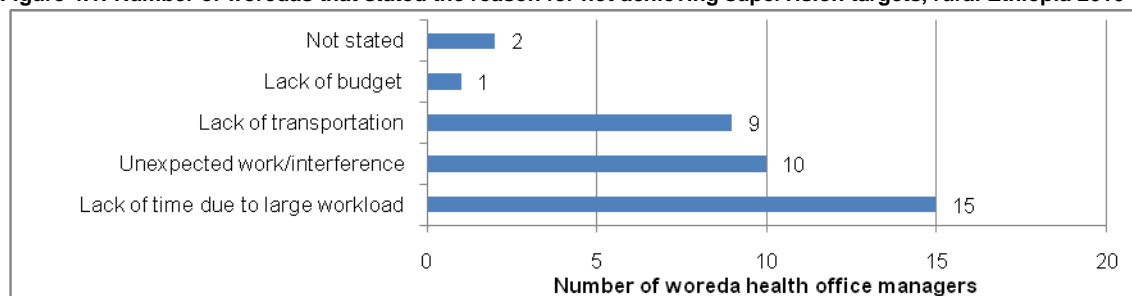
Table 4.3: Number of woreda health offices that stated supervisors received training, supervision guidelines, and had supervision plan by region, rural Ethiopia 2010

Region	Induction course	Refresher training	Received guidelines/tools	Had supervision plan/schedule	No. of respondents
Tigray	2	2	4	4	4
Afar	1	1	1	0	1
Amhara	12	8	8	13	15
Oromia	14	12	17	17	18
Beneshangul- Gumuz	4	3	3	4	4
SNNP	8	8	10	10	10
Gambela	6	1	2	7	7
Dire Dawa	1	1	1	1	1
Harari	1	0	1	1	1
Somali	1	2	0	2	3
Total	52	38	47	58	64

4.1.3. Performance of supervision and challenges

Among the woreda health offices that had supervision plan (58 woredas), 21 woredas undertook supervision as planned. While the remaining 37-woreda health offices did not achieve the supervision targets as planned. The main reasons mentioned for not achieving the planned target was lack of time/too much workload, followed by 'unexpected work/interference with other duties'. Other reasons mentioned included lack of transportation and budget for the supervision activities.

Figure 4.1: Number of woredas that stated the reason for not achieving supervision targets, rural Ethiopia 2010



Feedback mechanism and actions taken on identified gaps

Following supervisory activities the woreda health office and supervisors are expected to provide feedback and solve gaps identified during supervision. The woreda health offices in 51 woredas reported that they share the outcome of the supervision with HEWs through written correspondence (36 woredas) and verbal/discussion (25 woredas). Only three woredas reported that they didn't use any feedback mechanism to share the outcome of supervision with HEWs. Majority (59) Fifty-nine woreda health offices reported that they had taken actions on the gaps identified during supervision.

Figure 4.2: Number of Woredas that share outcomes of supervision with HEWs by the type of feedback mechanism, rural Ethiopia 2010

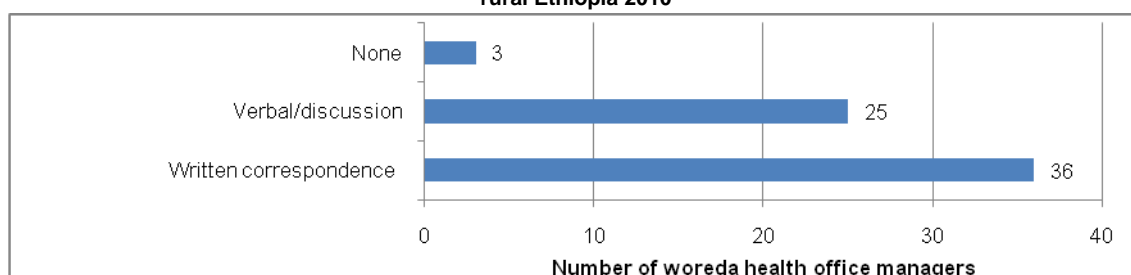


Table 4.4: Number of woredas that took action on the gaps identified during supervision by region, rural Ethiopia 2010

Region	Number of woredas	No. of respondents
Tigray	4	4
Afar	1	1
Amhara	14	15
Oromia	18	18
Beneshangul- Gumuz	4	4
SNNP	9	10
Gambela	4	7
Dire Dawa	1	1
Harari	1	1
Somali	3	3
Total	59	64

Areas where gaps identified and actions taken

The woreda health office staffs were asked about the different gaps identified and actions taken on these gaps in the past three months before the survey. The frequent actions taken areas were: documentation and data monitoring (in 18 Woredas), EPI coverage (in 15 Woredas), latrine construction (in 12 Woredas), model household graduation (in 11 Woredas) and other areas include: community conversation, delivery service, and absence of HEWs from work.

Table 4.5: Number of woredas that stated the areas where gaps were identified during supervision and actions taken in the three months prior to the survey by region, rural Ethiopia 2010

Region	Documentation and data monitoring	EPI coverage	Latrine construction	Model HH graduation	Delivery service	Community conversation	HEW absence from work	Others	No. of respondents
Tigray	4	1	1	1	0	0	0	0	4
Afar	0	0	0	0	0	0	0	0	1
Amhara	4	1	1	2	0	0	0	2	15
Oromia	5	2	4	5	1	1	2	1	18
Beneshangul	1	1	1	1	0	0	1	0	4
SNNP	3	5	1	2	2	3	1	1	10
Gambela	1	2	2	0	0	0	0	0	7
Dire Dawa	0	1	1	0	0	0	0	0	1
Harari	0	1	1	0	0	0	0	0	1
Somali	0	1	0	0	2	0	0	1	3
Total	18	15	12	11	5	4	4	5	64

4.1.4. Places where HEWs submit their activity report

The woreda health offices were asked where HEWs usually submit their activity report. The number of woreda health offices that stated HEWs submit their activity report to the woreda health office (31 woredas) and to the nearest health facility (32 woredas) were similar.

Table 4.6: Number of woredas by the place where HEWs submit their activity report by region, rural Ethiopia 2010

Region	Woreda health office	Nearest health facility	Other	No. of respondents
Tigray	1	3	0	4
Afar	0	0	1	1
Amhara	6	9	0	15
Oromia	6	12	0	18
Beneshangul-Gumuz	4	0	0	4
SNNP	2	8	0	10
Gambela	7	0	0	7
Dire-Dawa	1	0	0	1
Harari	1	0	0	1
Somali	3	0	0	3
Total	31	32	1	64

4.1.5. Monitoring progress of HEP and performance of HEWs

Areas of HEP that Woreda health office monitor to assess its performance

Majority of the woreda health offices monitor the performance of HEP. The most frequently stated areas of HEP used for monitoring of the performance of the health posts were environmental hygiene, immunization, antenatal care, family planning, and delivery service.

Table 4.7: Number of woredas that stated the areas of HEP used by woreda health offices to monitor the performance of health posts, rural Ethiopia 2010

Region	Environmental health and personal hygiene	Immunization	Antenatal care	Family planning	Delivery	Malaria case management	Postpartum care of mother	Postpartum new-born care	Community based management of childhood illnesses	Implementation of HEP strategy /plan	Inventories for equipment and supplies in the woreda
Tigray	4	4	4	4	4	3	4	3	3	4	3
Afar	0	0	0	0	0	0	0	0	0	0	0
Amhara	15	15	15	14	15	13	14	11	14	15	13
Oromia	17	18	17	18	16	17	14	13	13	17	13
Beneshangul	3	3	3	3	3	3	3	3	1	3	3
SNNP	10	10	10	10	10	10	10	10	4	9	9
Gambela	4	4	3	3	3	4	0	3	1	2	1
Dari-Dawa	1	1	1	1	1	1	1	1	1	1	0
Harari	1	1	1	1	0	1	1	1	1	1	1
Somali	3	2	2	1	2	2	2	2	2	1	3
Total	58	58	56	55	54	54	49	47	40	55	46

Sources of information to assess the performance of HEWs

Woreda health management offices used different mechanisms to assess the performance of HEWs. The majority of the Woredas (51 Woredas) used supervisors' assessment to assess the performance of HEWs. Staff assessment and client assessments were other sources of information to assess the performance of HEWs (10 Woredas and 1 Woreda, respectively).

Table 4.8: Number of woredas that stated the source of information to assess HEWs' performance, Ethiopia 2010

Region	Supervisor assessment	Staff assessment	Client assessment	Other	No. of respondents
Tigray	3	1	0	0	4
Afar	0	1	0	0	1
Amhara	9	6	0	0	15
Oromia	15	1	1	1	18
Beneshangul	3	0	0	1	4
SNNP	10	0	0	0	10
Gambela	6	1	0	0	7
Dari-Dawa	1	0	0	0	1
Harari	1	0	0	0	1
Somali	3	0	0	0	3
Total	51	10	1	2	64

Criteria used to assess the performance of HEWs

Woreda health management used different criteria to assess the performance of HEWs. The majority of the Woredas used report from HEP unit head and result oriented criteria to assess the performance of HEWs (31 and 15 Woredas, respectively). Twelve Woredas used ability to complete given task as performance assessment criteria, and other criteria used to assess the performance of HEWs include: discipline/conduct, competence/skill.

Table 4.9: Number of Woredas that stated the criteria used to assess performance of HEWs, rural Ethiopia 2010

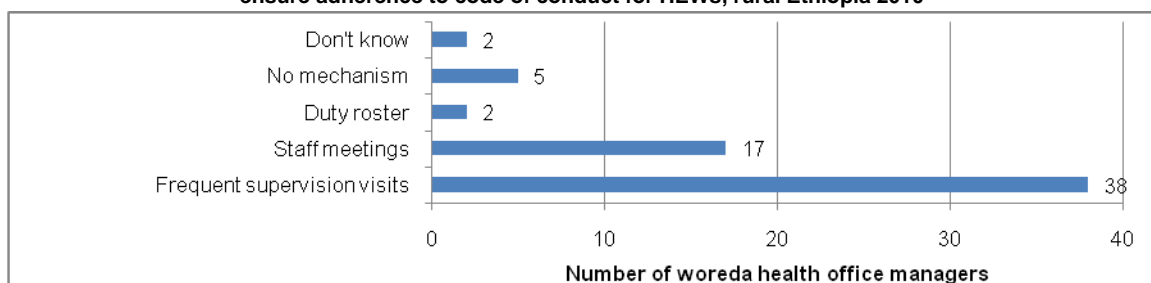
Region	Report from unit head	Results oriented	Ability to complete given task	Competence/ skills	Discipline/ conduct	Punctuality (behavior)	Not stated	Other	No. of respondents
Tigray	2	2	0	0	0	0	0	0	4
Afar	1	0	0	0	0	0	0	0	1
Amhara	8	3	3	0	0	0	1	0	15
Oromia	5	7	5	0	1	0	0	0	18
Beneshangul	0	0	2	0	0	1	0	1	4
SNNP	5	30	1	6	0	0	0	0	10
Gambela	7	0	0	0	0	0	0	0	7
Dari-Dawa	1	0	0	0	0	0	0	0	1
Harari	1	0	0	0	0	0	0	0	1
Somali	1	0	1	1	0	0	0	0	3
Total	31	15	12	2	1	1	1	1	64

Administrative mechanisms to ensure adherence to code of conduct for HEWs

The most frequently cited administrative mechanism that was put in place by Woredas to ensure adherence to code of conduct for HEWs was frequent supervision visits. Staff meeting was the second frequent response by WHMs as code of conduct for HEWs. Some WHMs have indicated that they did not have any mechanism in place to ensure adherence to

code of conduct for HEWs. The HEP implementation manual clearly states that one of the main activities of WHMs is to provide supportive follow up and supervision of HEWs and providing feedbacks for identified problems. And hence Woredas with no supervision mechanisms and woredas with very limited supervision activities should give the required consideration and concern for supervision of HEWs.

Figure 4.3: Number of woredas that stated administrative mechanisms put in place by woreda health office to ensure adherence to code of conduct for HEWs, rural Ethiopia 2010



Motivation of HEWs

Fifty-nine Woredas had arrangements or activities for motivating HEWs. It was only in three Woredas of Gambela and two Woredas of Oromia where there were not arrangements for motivating HEWs. Those Woredas that had arrangement to motivate HEWs used different mechanisms to motivate the HEWs. Twenty-five of the Woredas used reward/prize to motivate the activities of HEWs, while 15 Woredas used rewarding certificates for their achievements and 8 Woredas used provision of training as motivation for HEWs.

Table 4.10: Number of Woredas that stated the approaches used for motivating HEWs, rural Ethiopia 2010

Region	Reward/prize	Reward Certificate	Training	Other	No. of respondents
Tigray	2	2	0	0	4
Afar	0	0	0	1	1
Amhara	6	0	3	6	15
Oromia	8	4	0	5	17
Beneshangul- Gumuz	0	0	2	2	4
SNNP	7	3	0	0	10
Gambela	0	0	2	1	3
Dire Dawa	0	1	0	0	1
Harari	1	0	0	0	1
Somali	1	1	1	0	3
Total	25	11	8	15	59

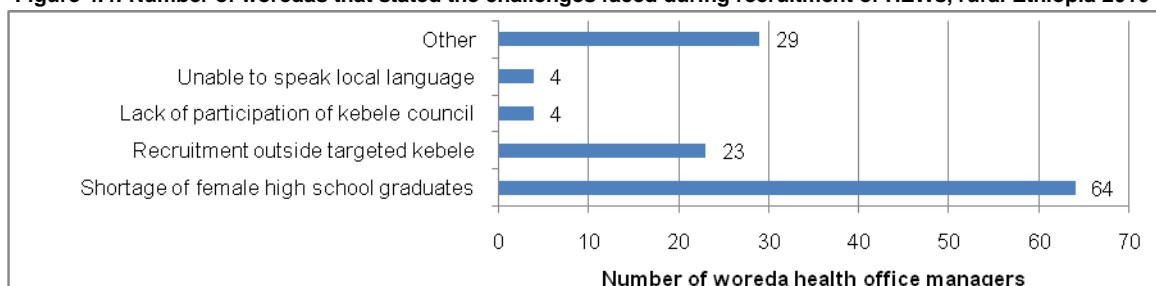
4.2. RECRUITMENT AND ATTRITION OF HEWS

4.2.1. Recruitment process of HEWs

The major challenge faced during recruitment of HEWs stated by all the interviewed woreda health offices was shortage of educated people (high school graduates) from the target kebeles. This forced the woreda health offices to recruit candidates outside targeted kebeles, which was reported by 23 woredas as a challenge during recruitment of HEWs. The other

challenges were lack of the participation of kebele council (4 woredas), and absence of people who can speak the local language (4 woredas). The measures taken by the woreda health office to solve the challenges included recruitment of additional candidates by selecting 2nd and 3rd batch for the training (14 woreda health offices), giving training for the community (12 woredas), and recruiting HEWs from other kebeles (23 woredas).

Figure 4.4: Number of woredas that stated the challenges faced during recruitment of HEWs, rural Ethiopia 2010



4.2.2. Attrition of HEWs

The total number of HEWs deployed since HEP was launched (one to five years of implementation period) in the 64 woredas surveyed was 3,241. The average number of HEWs deployed was 51 per woreda. Over the period of HEP implementation in the sample woredas, a total of 212 HEWs left their HEP work in the woreda with an average of 3 HEWs per woreda. The overall attrition rate was 6.5% over the program period. It should be noted that the average duration of implementation in Tigray and Dire Dawa is 5 years, and it is 4 years in Amhara and SNNP. In Oromia it is 2.7 years. Thus, the overall attrition rate of HEWs per year is about 2% (6.5% over 3.5 years).

Table 4.11: Number of HEWs who were deployed and left, and attrition rate, rural Ethiopia 2010

Region	Number of woredas	Number of HEWs deployed	Number of HEWs left HEP	Average number of HEWs who left work per Woreda	Percent of HEWs who left work	Duration of implementation (aver in years)
Tigray	4	85	10	2.5	11.8	5
Afar	1	19	0	0.0	0.0	-
Amhara	15	908	87	5.8	9.6	4
Oromia	18	1,146	50	2.8	4.4	2.7
Benishangul	4	59	7	1.8	11.9	1.1
SNNP	10	565	35	3.5	6.2	4
Gambela	7	274	3	0.4	1.1	2
Dire Dawa	1	15	1	1.0	6.7	5
Harari	1	15	5	5.0	33.3	3
Somali	3	155	14	4.7	9.0	2.3
Total	64	3,241	212	3.3	6.5	3.5

Reason for attrition of HEWs from woreda

Among the 212 HEWs who were reported to have left from assigned kebeles in their respective woreda, nearly a third (71 HEWs) left their kebele because they changed their field of work. An equivalent number (68) of HEWs left their job for personal reasons including marriage and medical reasons. The reason for some HEWs (31 HEWs) was reported to be

uncomfortable work environment such as remoteness of kebele, workload, and low remuneration. The other reasons were because they were transferred to another woreda and dismissed due to discipline reasons.

Table 4.12: Number of HEWs who left their job in the district by reason, rural Ethiopia 2010

Region	Changed field of work	Personal reason	Work environment	Transferred to another woreda	Discipline	Death	Not know	Total
Tigray	1	4	5	-	-	-	-	10
Amhara	43	14	20	4	2	4	-	87
Oromia	13	23	5	6	-	-	3	50
Benishangul	1	-	-	6	-	-	-	7
SNNP	5	19	-	3	4	1	3	35
Gambela	1	-	1	-	-	-	1	3
Dire Dawa	1	-	-	-	-	-	-	1
Harari	2	2	-	-	1	-	-	5
Somali	4	6	-	1	3	-	-	14
Total	71	68	31	20	10	5	7	212

4.3. LOGISTIC RESOURCES AVAILABLE FOR HEP

4.3.1. Drug supply to health posts

Overall only 12 out of the 64 (18.7%) WHMs have indicated the availability of adequate drugs for all health posts. SNNP was the only region with the highest number of WHMs (6 out of 10) who had indicated the availability of the necessary drugs for health posts.

41 out of the 64 (64%) WHMs indicated that Government budget was the main source of drugs supplied to the health posts. However, considerable number of WHMs (35.9%) had cited NGOs as source of drug supply for health posts. In Oromia, 50% of the interviewed WHMs indicated NGOs as source of drug supply for the HPs in their respective Kebeles. However, in Amhara out of 8 WHMs, 7 had indicated that government budget as source of drug supplies.

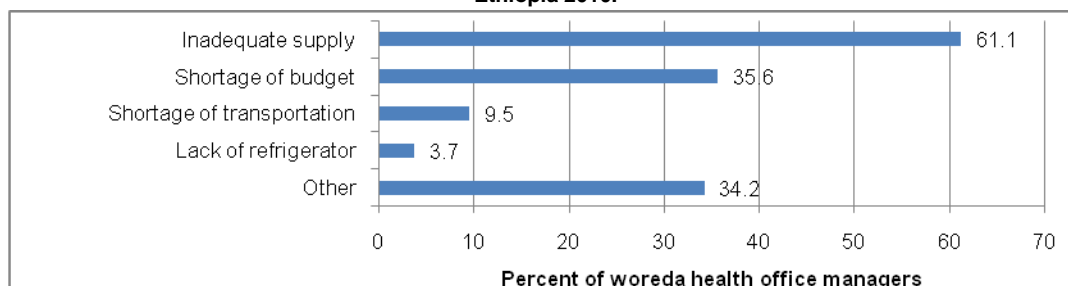
Table 4.13: Number of woredas with adequate drugs, and woredas that stated the source of drugs for health post use, rural Ethiopia 2010

Region	Adequate drugs available	Source of drugs		No. of respondents
		Government budget	NGOs	
Tigray	0	3	1	4
Afar	1	1	0	1
Amhara	1	7	8	15
Oromia	2	6	12	18
Beneshangul-Gumuz	0	4	0	4
SNNP	6	9	1	10
Gambela	0	7	0	7
Dari-Dawa	0	0	1	1
Harari	0	1	0	1
Somali	2	3	0	3
Total	12	41	23	64

Major problems in terms of drug supply

The majority of the WHMs have indicated that inadequate supply of drugs was the major problem in terms of drug supply to health posts (HPs). Shortage of budget was the second frequently cited reason as the major problem in drug supply to HPs while only few WHMs cited transportation and lack of refrigerator as major problems in drug supply.

Figure 4.5: Number of woredas that stated the major problems in terms of drug supply to health posts, rural Ethiopia 2010.



4.3.2. Non-medical supplies

The overall result indicated that from 64 WHMs, 52 of them cited the inadequacy of supplies such as stationery, cleaning materials, pictographs, registers that can be used as office and/or as teaching aid materials. 7 WHMs also expressed that there was no budgetary allocation for office and teaching aid materials. However, only 3 WHMs indicated the adequacy of supplies that can be used as office material and/or as teaching aid.

Table 4.14: Number of woredas that comment on the availability of non-medical supplies, rural Ethiopia 2010

Region	Adequate	Inadequate	No budgetary allocation	Don't know	Not Stated	No. of respondents
Tigray	0	1	2	0	1	4
Afar	0	0	0	1	0	1
Amhara	0	14	1	0	0	15
Oromia	1	17	0	0	0	18
Beneshangul-Gumuz	0	4	0	0	0	4
SNNP	1	8	1	0	0	10
Gambela	0	5	2	0	0	7
Dari-Dawa	0	0	1	0	0	1
Harari	0	1	0	0	0	1
Somali	1	2	0	0	0	3
Total	3	52	7	1	1	64

4.4. CURRENT PRACTICE IN SUPPORT AND MANAGEMENT OF HEP

4.4.1. Administrative issues of HEP

Responsible body for administrative issues

Majority of the woreda health office stated that kebele council was responsible for administrative issues of HEWs and health posts. However, some woreda health offices

stated that woreda health office (16 woredas) and nearest health facility (6 woredas) were responsible for administrative issues of HEWs and health posts. The Ethiopia HEP implementation manual also indicated that kebele administration should take the biggest share for most administrative, monitoring and evaluation activities.

Table 4.15: Number of woreda health offices that stated the responsible bodies for administrative issues of HEWs and health posts, rural Ethiopia 2010

Region	Kebele council	Woreda health office	Nearest health facility	Woreda administration	No. of respondents
Tigray	2	1	1	0	4
Afar	1	0	0	0	1
Amhara	6	5	4	0	15
Oromia	15	1	1	1	18
Beneshangul	2	2	0	0	4
SNNP	9	1	0	0	10
Gambela	4	3	0	0	7
Dire- Dawa	0	1	0	0	1
Harari	0	0	0	1	1
Somali	1	2	0	0	3
Total	40	16	6	2	64

Advantages and disadvantages of the current arrangements

Woreda health offices were asked to state the advantages and disadvantages of the current administrative arrangements.

Kebele council: Among the 40 woreda health offices that indicated kebele council was responsible for administrative issues of HEWs and health posts in their woreda, 22 woredas cited follow up and control and another 6 woredas cited getting solutions on time as advantages of having the kebele council as the responsible administrative body. Moreover, there were considerable numbers of woreda health offices that cited a range of advantages for having the kebele council as responsible body for administrative issues of HEWs and health posts. With regards to the disadvantages of having kebele council as responsible body for administrative issues, the number of woreda health offices that stated any disadvantage of the arrangement was very few. Lack of awareness of the kebele council (4 woredas), workload of the kebele council (3 woredas), and lack of technical support from kebele council (3 woredas) were among the disadvantages of the current administrative arrangement stated by the woreda health offices.

Woreda health office: Among the 16 woreda health offices that stated woreda health office was responsible body for administrative issues of HEWs and health posts in their woredas, 6 woredas stated that the advantage of the arrangement is for close follow up and control, and 2 stated it has advantage for timely solution of problems.

Furthermore, the woreda health offices were asked to cite the disadvantage of having woreda health office as responsible body for administrative issues of HEWs and health posts. Two woredas stated lack of budget and logistic and irregular follow up was stated by 2 woredas as disadvantage of having this arrangement.

Opinion about the current arrangement

Among the 40 woreda health offices that indicated that kebele council was responsible for administrative issues of HEWs and health posts in their woreda, 36 reported that having this administrative arrangement was the best arrangement. Oromia with 13 woreda health offices among the 18 woredas, and SNNP with 9 woreda health offices among the 10 woredas were the two regions with relatively higher proportion of woreda health offices that reported kebele council, as administrative body of HEWs or HPs was the best arrangement.

Among the 16 woreda health offices that indicated woreda health office was responsible for administrative issues of HEWs and health posts in their woreda, 8 reported that the current arrangement was the best arrangement for administrative.

4.4.2. Technical support and supply management

Responsible body

Among the 64 woreda health offices, 44 reported that the woreda health office was the responsible body for technical support and supply management of HEWs and health posts, whereas the other 20 woredas reported that the nearest health facility was the responsible body.

Table 4.16: Number of woreda health office that stated the responsible body for technical and supply management of HEWs and health posts, rural Ethiopia 2010

Region	Woreda health office	Nearest health facility	No. of respondents
Tigray	3	1	4
Afar	0	1	1
Amhara	8	7	15
Oromia	8	10	18
Beneshangul	4	0	4
SNNP	10	0	10
Gambela	7	0	7
Dire-Dawa	0	1	1
Harari	1	0	1
Somali	3	1	3
Total	44	20	64

Advantages of the existing arrangements

The woreda health offices were asked to state the advantages of having the current arrangement for technical support and supply management issues of HEWs and health posts.

Woreda health office: Among the woredas where the woreda health office was responsible for technical and supply management, majority stated that the existing arrangement provides a better opportunity for capacity building and improve access to supply and budget.

Nearest health facility: The woredas where the nearest health facility was responsible for technical and supply management stated that close follow-up and supervision, better access to supplies, and capacity building were the advantages with such arrangement.

Opinion about the best arrangement for technical and supply management

Among the 44 woredas that reported woreda health office was the responsible body for technical support and supply management of HEWs and health posts, 35 woreda health offices thought that the existing arrangement (woreda health office being responsible) was the best approach. Majority of woredas in SNNP (9 among the 10 woredas), Gambela (all 7 woredas in Gambela), and Oromia (7 among the 18 woredas) thought the existing arrangement was the best arrangement for their woredas. On the other hand, the remaining 9 woredas thought that provision of technical and supply management by the nearest health facility would be the best approach.

Among the 20 woredas that reported the nearest health facility was the responsible body for technical and supply management of HEWs and health posts, 13 woreda health offices thought that the existing arrangement (nearest health facility being responsible) was the best approach. On the other hand, the remaining 7 woreda health offices thought that provision of technical and supply management by the woreda health office would be the best approach rather than the nearest health facility.

Overall, among all surveyed woredas (64 woredas), 42 woredas thought that technical support and supply management of HEWs and health posts should be the responsibility of the woreda health offices.

4.5. PERCEPTION OF WOREDA HEALTH OFFICE MANAGERS

4.5.1. Membership of HEWs in Kebele council

Woreda health offices were asked if at least one of the two HEWs deployed in a kebele in their respective woredas were members of kebele council. More than 92% (59) of the woreda health offices reported that at least one HEW per kebele was a member of the respective kebele council.

Table 4.17: Number of woredas that reported HEWs were members of Kebele council, rural Ethiopia 2010

Region	Member of Kebele council	No. of respondents
Tigray	3	4
Afar	0	1
Amhara	15	15
Oromia	18	18
Beneshangul-Gumuz	1	4
SNNP	10	10
Gambela	7	7
Dire-Dawa	1	1
Harari	1	1
Somali	3	3
Total	59	64

The involvement of HEWs in the administrative council would enable the facilitation of HEP implementation. However, the time that HEWs spent attending frequent meetings including on non-health issues as members of the kebele council may compete with the duties and

responsibilities specific to HEP. Two HEWs are expected to provide services on the 16 HEP packages to a kebele of approximately one thousand households. The woreda health offices were asked for their opinion on the advantages and disadvantages of membership of HEWs in kebele council.

Majority of woreda health offices thought that membership of HEWs in kebele council has more advantages than disadvantages. The advantages stated included: HEWs can raise problems that they face during their daily activities and get solution easily (21 woredas), HEWs get access to decision making process (16 woredas), HEWs can plan HEP activities together with other decision making members of the kebele (7 woredas), facilitates implementation of HEP (6 woredas), and increases HEWs acceptance by the community (4 woredas).

Some woreda health offices thought that the membership of HEWs in kebele council leads to loss of working time (11 woredas) and increases their workload (10 woredas).

4.5.2. Support from stakeholders

Support from woreda council administration

Majority of the woreda health offices rated the support they got from the Woreda administration as unsatisfactory or very unsatisfied. Only 14 health offices rated the support as satisfactory. It has to be noted that the success of the HEP implementation could not be achieved without the support of the key stakeholders, particularly the woreda and kebele administration.

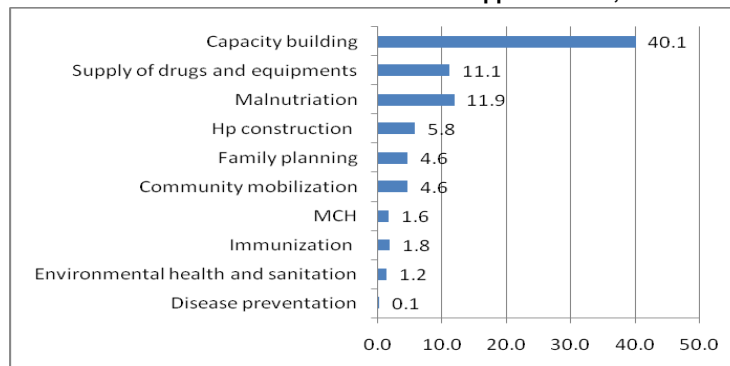
Table 4.18: Distribution of woreda health managements by the level of satisfaction on the support they get from woreda administration, rural Ethiopia 2010

Region	Satisfactory	Neutral	Unsatisfactory	Very unsatisfactory	No. of respondents
Tigray	2	0	2	0	4
Afar	0	1	0	0	1
Amhara	1	1	10	3	15
Oromia	6	1	10	1	18
Beneshangul-Gumuz	1	3	0	0	4
SNNP	3	1	6	0	10
Gambela	0	2	3	2	7
Dari-Dawa	0	0	0	1	1
Harari	0	0	1	0	1
Somali	1	1	1	0	3
Total	14	10	33	7	64

Support from NGOs

The majority of the woreda health offices expressed that NGOs provide support to HEP, particularly on capacity building, supply of drug and equipments and nutritional interventions. Health post construction, community mobilization and family planning activities were also among the supports received from NGOs.

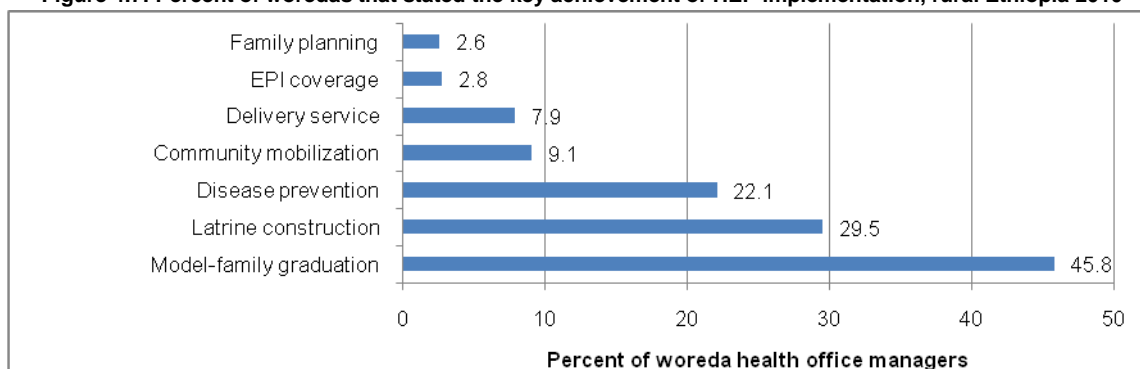
Figure 4.6: Percent of woredas that stated the NGO support to HEP, rural Ethiopia 2010



4.5.3. Achievement of HEP implementation

The most frequently stated best achievements of HEP implementation by the woreda health office managers were model-family graduation, environmental sanitation (latrine construction), and disease prevention. However, family planning and EPI coverage were less frequently stated as best achievements of HEP implementation.

Figure 4.7: Percent of woredas that stated the key achievement of HEP implementation, rural Ethiopia 2010



4.5.4. Complaints about the HEP from clients/community

Woreda health offices were asked to specify any complaints that they might have heard from the community with respect to HEP. Majority indicated that the main complaint of the community was lack of curative service/absence of skills to do curative services. The other two frequently stated complaints of the community indicated by the woreda health offices were absenteeism of HEWs from their working area and shortage of drug supplies.

4.6. CONCLUSIONS

Managers of woreda health offices in 64 woreda administrations sampled from all regions were surveyed as part of the HEP evaluation. The distribution of the sample woredas by region is: 18 from Oromia, 15 from Amhara, 10 from SNNP, 7 from Gambella, 4 from Tigray and Benshangul-Gumuz each, 3 from Somali, and 1 from Afar, Dire Dawa, and Harari each. Data was collected on the human resource capacity of the woreda health office, availability of supervisors, performance of supervision, monitoring the progress of HEP and

performance of HEWs, attrition of HEWs and the reasons, availability of medical supplies for health posts, current practice of administration and technical support in HEP implementation, and their perception on HEP implementation.

Woreda health office capacity and support to HEP

Woreda health offices only in 20 woredas were reported to have filled all the positions based on the organizational structure of the woreda health office.

All woreda health offices had HEW-supervisors. In majority (35) of the woredas the HEW-supervisors performed solely supervision of HEP activities, whereas the supervisors in the remaining 28 woredas were also assigned to perform other duties in addition to the HEP supervision.

HEW-supervisors in majority of the woreda health offices had received induction course on HEP (in 52 woredas) and/or refresher training on HEP.

In 37 of the woredas, supervision targets were not achieved as planned. The main reasons stated were: lack of time due to workload, unexpected work/interference, and lack of transportation.

Majority of the woreda health offices use coverage of latrine, immunization, antenatal care, family planning, and delivery service to monitor the performance of HEP.

Recruitment and attrition of HEWs

The woreda health offices reported that the major challenges they had faced during recruitment of candidates for HEW training were: shortage of female high school graduates and recruitment from outside the targeted kebeles.

Out of the total 3,241 HEWs deployed in the 64 woredas since HEP implementation, which varies between one to 6 years of implementation in the sample woredas, a total of 212 HEWs left their HEP work with overall attrition rate of 6.5%. The main reasons for leaving their HEP work in the woreda were: changed field of work (71 HEWs), due to personal reasons such as marriage and illness (68 HEWs), and due to uncomfortable work environment such as remoteness of kebeles, high workload, and low remuneration (31 HEWs).

Drug supply to health posts

Overall only 12 (18.7%) woreda health offices indicated the availability of adequate supply of drugs for all health posts within their respective woredas. The other problems stated in relation to drug supply include shortage of budget and transportation.

Current practice in management and support of HEP

The majority (40) of woreda health offices stated that kebele council was responsible for administrative issues of HEWs and health posts. Moreover, majority thought that this administrative arrangement would be the best arrangement.

Out of the 64 woredas, 44 reported that the woreda health office was currently responsible for technical support and supply management issues of HEWs & HPs. The remaining woreda health offices on the other hand stated that the nearest health center was responsible for technical support and supply management. Majority of the woreda health offices thought that the woreda health office as a responsible body for technical support would be the best arrangement.

Perception of woreda health office managers on HEP

More than 92% of woreda health office managers stated that one of the HEWs in each kebele were members of Kebele council. Majority of woreda health offices thought that membership of HEWs in kebele council has more advantages than disadvantages. The advantages stated included: HEWs can raise problems that they face during their daily activities and get solution easily, HEWs get access to decision making process, HEWs can plan HEP activities together with other decision making members of the kebele, facilitates implementation of HEP, and increases HEWs acceptance by the community. Some woreda health offices thought that the membership of HEWs in kebele council could lead to loss of working time and increased workload.

Majority of the woreda health offices were not satisfied by the level of support in the implementation of HEP they received from the woreda administration.

According to the woreda health office managers, the complaints about HEP most frequently heard from the community were lack of curative service, absenteeism of HEWs from their working area, and shortage of drug supplies.

5. WOREDA ADMINISTRATION SURVEY

5.1. BACKGROUND CHARACTERISTICS OF WOREDA ADMINISTRATORS

A total of 66 woreda administrators were interviewed and 19 of the woreda administrators have served for two years in the woreda as administrators, and 16 woreda administrators served three years. Only three of the woreda administrators were health professionals by educational background while the majority of the administrators were teachers followed by management background (27 and 19 respectively).

Table 5.1: Distribution of woreda administrators by years of service as woreda administrator, and by professional background, Ethiopia 2010

Region	Years of service					Professional Background				No. of respondents
	<=1 Year	2 Years	3 Years	4+ Years	Not Stated	Teacher	Health Professional	Management	Other	
Tigray	2	1	1	0	1	1	0	3	1	5
Afar	0	1	0	1	0	0	0	0	2	2
Amhara	6	4	4	1	0	8	0	4	3	15
Oromiya	3	5	5	4	1	8	1	3	6	18
Benshangul	1	1	1	1	0	0	1	1	2	4
SNNP	3	3	3	1	0	5	1	1	3	10
Gambela	2	2	1	1	1	3	0	4	0	7
Dire Dawa	0	1	0	0	0	1	0	0	0	1
Harari	0	1	0	0	0	1	0	0	0	1
Somali	0	0	1	0	2	0	0	3	0	3
Total	17	19	16	9	5	27	3	19	17	66

5.2. WOREDA ADMINISTRATION ENGAGEMENT IN HEP IMPLEMENTATION

5.2.1. Supervision at kebele level

Across the regions, almost all (64 of the 66), woreda administrators reported that they have visited at least one health post in the past 12 months. Similarly, 63 of the woreda administrators stated that they have discussed the problems they observed with HEWs during their visit.

Table 5.2: WAs reported practice of health posts visit and problem solving discussion, rural Ethiopia, 2010

Region	HPs Visited			Problems discussed			Number of respondents
	Yes	No	Not stated	Yes	No	Not stated	
Tigray	5	-	-	5	-	-	5
Afar	2	-	-	2	-	-	2
Amhara	15	-	-	15	-	-	15
Oromia	18	-	-	18	-	-	18
Benshangul	4	-	-	3	-	1	4
SNNPR	9	-	1	9	-	1	10
Gambela	6	1	-	6	1	-	7
Dire Dawa	1	-	-	1	-	-	1
Harari	1	-	-	1	-	-	1
Somali	3	-	-	3	-	-	3
Total	64	1	1	63	1	2	66

5.2.2. Engagement with woreda health office

All woreda administrators in all of the regions reported a practice of communicating any 'observed HEP related problems' to their respective Woreda Health Offices (WoHOs). Majority of the woreda administrators (55 WAs) have received feedbacks for the HEP problems from the woreda health management office. Most of the woreda administrators also had regular meeting with the woreda health office (53 WAs). From the regions, all 18 WAs in Oromia had communicated HEP problems with the WoHO and received feedback for the HEP problems from the respective WoHOs and they have also regular meetings with the WoHOs.

Table 5.3: Number of WAs that engaged with WoHO in HEP implementation, Ethiopia 2010

Region	Communicate HEP problems to WoHO	Received feedback on actions taken	Have regular meeting with WoHO	No. of respondents
Tigray	5	3	5	5
Afar	2	2	1	2
Amhara	15	12	10	15
Oromyia	18	18	18	18
Benshangul G	4	2	3	4
SNNPR	10	10	6	10
Gambella	7	2	6	7
Dire Dawa	1	1	1	1
Harari	1	1	1	1
Somali	3	3	2	3
Total	66	55	53	66

Most of the woreda administrators stated that they had management meeting with the woreda health management office monthly or weekly (19 and 18 WAs, respectively). Other 16 woreda administrators stated that they had the meeting whenever necessary while 6 of the woreda administrators mentioned to have the meeting quarterly.

Table 5.4: Number of WAs by reported frequency & regularity of meeting with WoHO, rural Ethiopia 2010

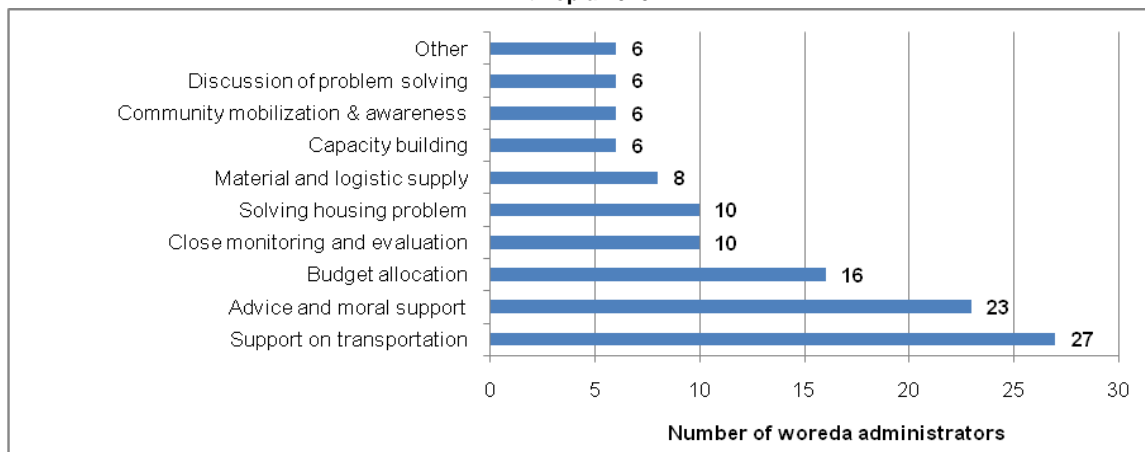
Region	Frequency						No. of respondents
	As needed	Weekly	Biweekly	Monthly	Quarterly	Other	
Tigray	1	0	1	3	0	0	5
Afar	0	1	0	0	0	1	2
Amhara	5	8	0	2	0	0	15
Oromiya	5	5	2	6	0	0	18
Benshangul G.	0	0	0	0	2	2	4
SNNPR	4	2	0	3	1	0	10
Gambella	0	2	1	1	3	0	7
Dire Dawa	0	0	0	1	0	0	1
Harari	1	0	0	0	0	0	1
Somali	0	0	0	3	0	0	3
Total	16	18	4	19	6	3	66

5.2.3. Specific areas of administrative support

The most frequently stated administrative supports to HEWs were: support on transportation (27 WAs), advice and moral support (23 WAs) followed by budget allocation (16 WAs).

Solving housing problems and close monitoring and evaluation were the next frequently stated administrative supports provided by the woreda administrations in the implementation of HEP.

Figure 5.1: Number of woreda administrators who stated the administrative supports they provide to HEP, rural Ethiopia 2010



5.2.4. Monitoring progress of HEP

Most of the woreda administrators have reported that the woreda administration offices have been monitoring the progress of HEP in their respective woredas (58 WAs). The woreda administrators were asked to specify the indicators they use to monitor the progress of HEP. Majority of the woreda administrators (42 WAs) stated that they monitor the overall achievement of the HEP plan. Some woreda administrators also stated that they use specific indicators to monitor the progress of HEP, which includes ITN utilization, community participation, EPI coverage, and number of graduated model-family households.

Table 5.5: Percent of woreda administrations that stated the indicators used for monitoring of HEP, rural Ethiopia 2010

Measures used	Total
Achievement of plan	42
ITNs Utilization	33
Community participation	25
EPI activity	22
Number of graduated model HH	15
Latrine Construction	4
Other	4

Source of information for monitoring HEP progress

Across the regions, WoHOs and villages were reported as important sources of information to monitor HEP's progress by most woreda administrators (33 and 22, respectively). On the other hand, only 4 of the administrators reported HEWs as their sources of information for this particular purpose.

Table 5.6: Number of woredas that stated the source of information for monitoring HEP progress, Ethiopia, 2010

Region	WA reported source of information by respondents				No. of respondents
	Village	WoHO	HEWs	Not Stated	
Tigray	0	2	0	3	5
Afar	0	1	1	0	2
Amhara	8	6	0	1	15
Oromiya	7	9	0	2	18
Benshangul G.	1	2	0	1	4
SNNPR	4	4	2	0	10
Gambella	1	6	0	0	7
Dire Dawa	0	1	0	0	1
Harari	0	1	0	0	1
Somali	1	1	1	0	3
Total	22	33	4	7	66

5.3. CURRENT PRACTICE IN SUPPORT AND MANAGEMENT OF HEP

5.3.1. Responsible body for administrative issues HEP

Across the regions, 45 of the 66 woreda administrators reported Kebele Councils as being responsible for the provision of administrative supports related to HEP and HEWs. The next frequently mentioned responsible body was woreda health office (19 WAs). From the regions, all the 10 WAs in SNNP stated that the responsible bodies for administrative issues were Kebele Councils.

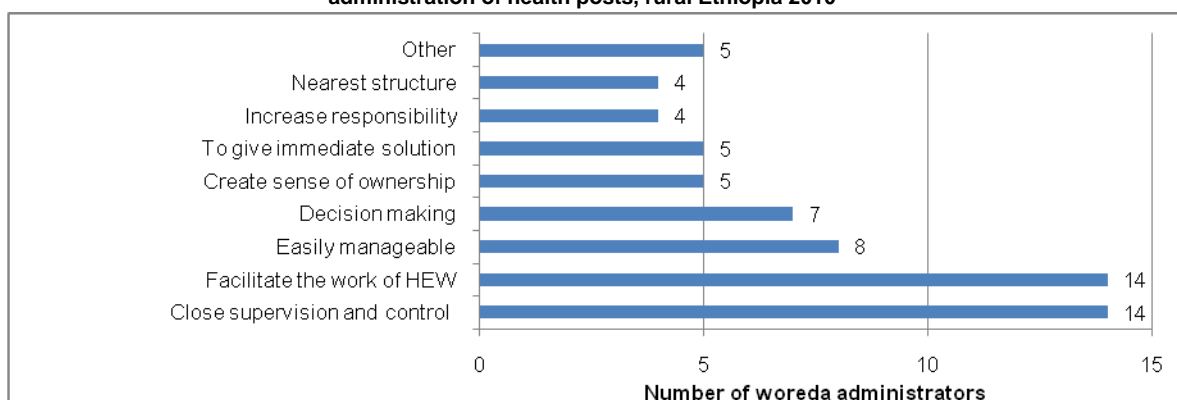
Table 5.7: Number of woredas that stated the responsible body for administrative issues of HEWs and health posts by region, rural Ethiopia, 2010

Region	Responsible body for administrative issues				No. of respondents
	Kebele Council	WoHO	Woreda administration	Other	
Tigray	1	4	0	0	5
Afar	0	2	0	0	2
Amhara	9	6	0	0	15
Oromiya	16	0	1	1	18
Benshangul G	3	1	0	0	4
SNNPR	10	0	0	0	10
Gambella	4	3	0	0	7
Dire Dawa	0	1	0	0	1
Harari	1	0	0	0	1
Somali	1	2	0	0	3
Total	45	19	1	1	66

Advantages and disadvantages of the most common arrangement (kebele council)

Forty five of the woreda administrators have mentioned that Kebele councils were responsible for administrative issues of HEP. The advantages of such arrangements were: close supervision and monitoring (14 WAs), facilitate the work of HEWs (14 WAs), easy manageability of HEP issues (8 WAs), and fast decision making (7 WAs). Few WAs stated disadvantages of the arrangement: conflict with kebele members (3 WAs), prioritizing other administrative issues (3 WAs), lack of experience in handling such issue (2 WAs), and lack of the necessary equipments (2 WAs).

Figure 5.2: Number of woredas that stated the advantage of Kebele Council as responsible body for administration of health posts, rural Ethiopia 2010



Opinion about the current arrangement

Across the regions, 59 of the 66 woreda administrators reported the current arrangement as the best arrangement. That means kebele councils remain the best choice for most of the 45 woredas across the regions who reported the current responsible body was kebele council. Similarly, WoHOs remain the best choice of arrangement for most of the 19 woredas who reported that WoHOs were responsible for current HEP administration.

5.3.2. Responsible body for technical support of HEP

Across the regions, 52 of the 66 woreda administrators have reported WoHO as being the responsible body for providing the technical supports to their respective HEWs and HEP while 12 of the woreda administrators mainly in Amhara and Oromia regions reported Health Centers as being the responsible body.

Table 5.8: Number of woredas that stated the responsible body for technical support of HEP by region, rural Ethiopia 2010

Region	WoHO	Health Centers	Not stated	No. of respondents
Tigray	3	1	1	5
Afar	2	0	-	2
Amhara	10	5	-	15
Oromiya	11	6	1	18
Benshangul G	4	0	-	4
SNNPR	10	0	-	10
Gambella	7	0	-	7
Dire Dawa	1	0	-	1
Harari	1	0	-	1
Somali	3	0	-	3
Total	52	12	2	66

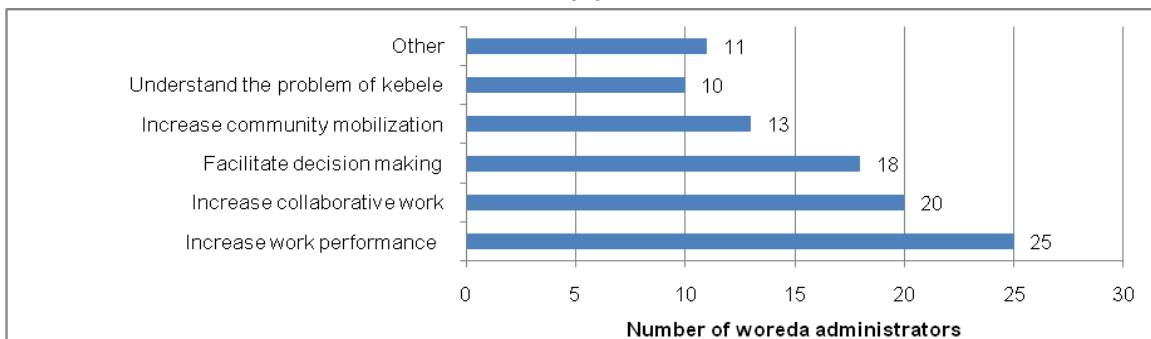
5.4. PERCEPTION OF WOREDAS ADMINISTRATORS ON HEP

5.4.1. Advantages of HEWs' membership in Kebele Councils

Most of the woreda administrators (58 of the 66) reported that HEWs were members of Kebele Councils in their respective kebele administrations. Woreda administrators were

asked if kebele council membership of HEWs had advantage and the most frequently stated advantages were: increase work performance (25 WAs), increase collaborative work (20 WAs) and facilitate decision-making process (18 WAs). The other mentioned advantages of HEWs' Kebele Council membership were: increase community mobilization and helps to understand the problems in the Kebele.

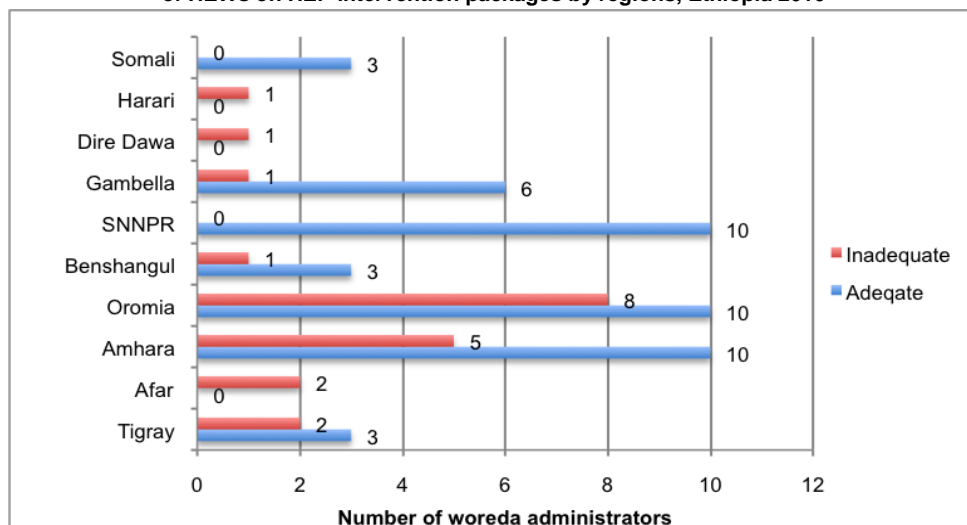
Figure 5.3: Number of woredas that stated the advantages of HEWs' membership in Kebele Council, Ethiopia 2010



5.4.2. Adequacy of pre-service training of HEWs

Overall, about two-third of the 66 woreda administrators thought that HEWs were well trained on the 16 interventions package of HEP (45 WAs). At regional level, all woreda administrators of SNNP and Somali stated that HEWs have received adequate training; however, eight WAs in Oromia and five WAs in Amhara reported that HEWs didn't receive adequate training on the HEP packages.

Figure 5.4: Number of woreda administrators who expressed their opinion on the adequacy pre-service training of HEWs on HEP intervention packages by regions, Ethiopia 2010

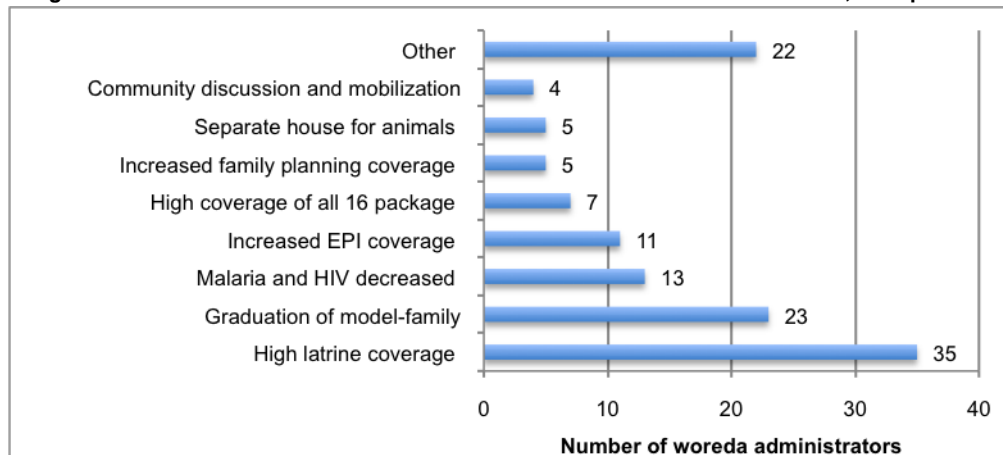


5.4.3. Effect of HEP

Woreda administrators were asked to state the main effects of HEP they observed since the implementation of HEP in their respective woreda. The effects of HEP implementation most

frequently reported by woreda administrators' were: 'latrine coverage' (35 of the 66), 'graduation of model-family' (23 of the 66), 'decreased HIV and malaria burden' (13 of the 66), and 'good EPI coverage' (11 out of 66). At regional level, high latrine coverage was mentioned in all regions while graduation of model-family was not reported as the best practice of HEP in Tigray, Afar, Benshangul G, Gambella, Dire Dawa and Harari. Besides, coverage of all 16 interventions package was reported as the best practice of HEP only in Tigray, Amhara and Oromia.

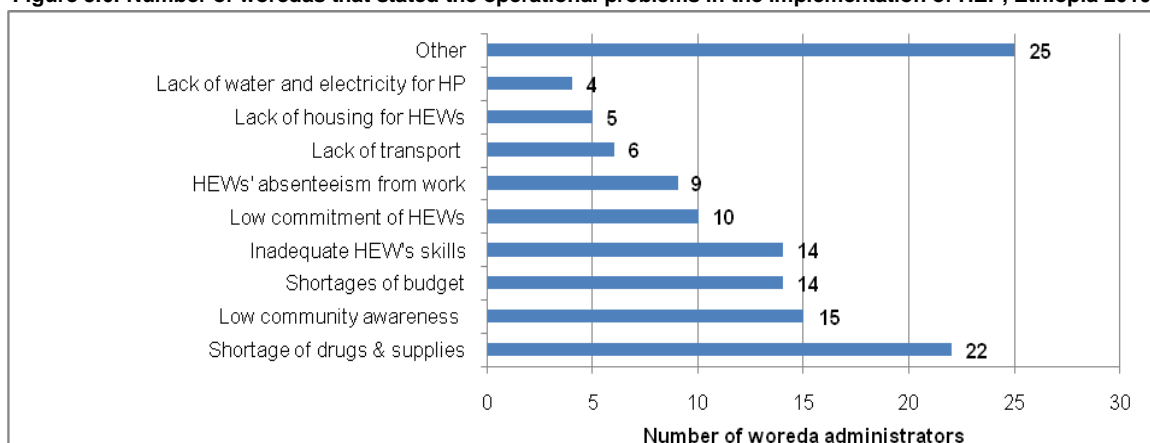
Figure 5.5: Number of woredas that stated the main effects observed due to HEP, Ethiopia 2010



5.4.4. Operational problems

The woreda administrators were asked to state the operational problems in the implementation of HEP. The most frequently stated operational problems were: shortage of drugs and supplies (22 WAs), low community awareness (15 WAs), shortage of budget (14 WAs), and lack of skills of HEWs (14 WAs). The other less frequently stated operational problems were: low commitment of HEWs, absence of HEWs from work, and lack of transport.

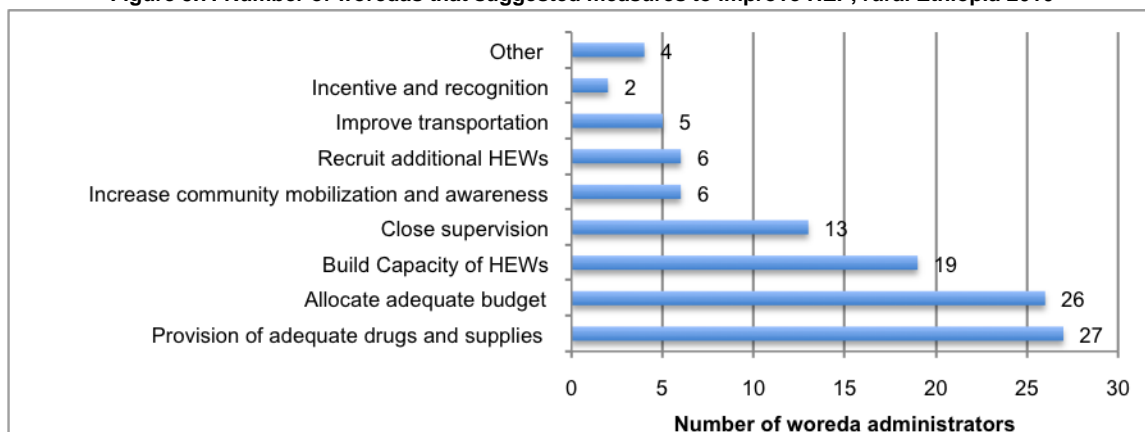
Figure 5.6: Number of woredas that stated the operational problems in the implementation of HEP, Ethiopia 2010



5.4.5. Solutions to HEP problems

The most frequently stated solutions to operational problems in the implementation of HEP were: provision of adequate drugs and supplies (27 WAs), allocation of adequate budget (26 WAs) followed by building the capacity of HEWs (19 WAs). Other suggested measures stated by some wereda administrators were close supervision of HEWs and

Figure 5.7: Number of woredas that suggested measures to improve HEP, rural Ethiopia 2010



5.5. CONCLUSION

Woreda administration engagement in HEP implementation

- Almost all of the WAs have supervised at least one health post and discussed about HEP with HEWs in the year preceding the survey.
- Majority of the woreda administrators reported that they usually communicate with the woreda health office regarding the observation of their visit to the health posts whenever they make such supervisory visits. Moreover, majority of the woreda administrations undertake regular meeting at least once a month with the woreda health office to discuss about HEP.
- The woreda administrators reported that the specific support provided by the woreda administration to ensure the successful implementation of HEP included provision of transportation, advice and moral support, provision of housing for HEWs, and monitoring of HEP implementation.
- The activities/indicators used by majority of the woreda administration to monitor the progress of HEP included overall achievement of the plan, mosquito net utilization rate, level of community participation, and EPI coverage. Number of graduated model-family households was also used by some woreda administrations to monitor the progress of HEP.

Current practice in support and management of HEP

- According to majority (45) of the woreda administrators, the kebele councils were responsible for the provision of administrative support to health posts and HEWs, while 19 of the WAs reported that the woreda health office were the responsible body for administrative support. The woreda administrators stated that kebele council as responsible body for

administrative support was the best approach and has more advantages such as ensuring close supervision and monitoring, facilitate the work of HEWs, and easy management and fast decision-making.

- Majority (52) of woreda administrators have reported that the woreda health office was the responsible body for providing technical supports for the HEP, while only 12 woreda administrators reported that health centers were serving as the responsible body for technical support.

Perception on HEP

- About two-third of the 66 woreda administrators thought that HEWs had received adequate pre-service training on the 16 interventions package of HEP.
- According to majority of woreda administrators, the main effects of HEP implementation were: increased latrine coverage, graduation of model-family, decreased burden of HIV and malaria, and high EPI coverage.
- The main operational problems of HEP stated by woreda administrators were: shortage of drugs and supplies, low community awareness, shortage of budget, and lack of HEWs' skills. The most frequently stated solutions to operational problems of HEP implementation were: provision of adequate drugs and supplies, allocation of adequate budget, and building the capacity of HEWs.

6. RECOMMENDATIONS

Ensuring a strong and systematized supportive supervisors

- Adequate number of supervisor should be recruited and uniformly stationed at health centers as per the new HEP supervision guideline, which would strengthen the link between health posts and health centers. However, the district health office should also provide support, in particular until the targeted number of health centers is functional and well staffed.
- Due attention should be given to the background profession of health workers when selected to serve as supervisors. Among the critical areas where HEWs lack the skills and knowledge to provide quality services and the areas where the uptake of the services by the community has been consistently low include delivery service, newborn care and PNC, on the job training on these areas during supportive supervision can only be provided by clinical nurses or midwives.
- Since additional responsibilities could compromise their ability to discharge responsibilities as HEP supervisors, supervision should be the sole responsibility of supervisors.
- Improve quality of supervision through systematic approach, which should include:
 - Equip supervisors with the tools for supportive supervision – supervision guideline and check list to be used during supervision. Although such guideline is already developed, it should be distributed to all supervisors and supervisors should receive familiarization orientation on the tools.
 - Equip supervisors with the skills for supportive supervision – induction and refresher training. They should be trained on supervision techniques as well as on HEP packages so that they would be able to provide on the job training for HEWs, particularly on delivery, newborn care and PNC.
 - Develop a proper supervision action plan at health center and individual supervisor levels to ensure regular and supportive supervision.
 - Institute a working norm of providing written feedback and following up of the implementation of the action points in the feedback.
 - Provide sustainable and proper means of transportation for supervision activities.
- Establish mechanism to ensure a sustainable motivation system to HEW-supervisors including acknowledgement and performance award, continued education, provision of transportation, etc.
- There should be a common understanding about the newly proposed 'health development army' approach replacing vCHPs by all stakeholders - woreda health office, health centers, HEWs, woreda administration and kebele council to ensure standardized implementation and support.

Strengthen administrative and logistics supports to HEP

- The responsible body for administrative issue of the health posts and HEWs should be clearly defined. Uniformity of responsible body providing administrative supports would be very helpful to facilitate the provision of these supports to HPs and HEWs effectively and adequately. This will avoid confusion and diffusion of responsibilities between the woreda health burea and Kebele Councils.
- Due attention and timely corrective measures and mechanism to ensure all HEWs are available at their duty stations.
- Woreda administrations should take into consideration the financial and logistic constraints in relation to HEP implementation and increase the allocation of budget for health sector.
- Ensure the provision of medical and non-medical supplies, and medical equipments to equip all health posts as per the HEP standard.

Strengthening the referral system and the linkage with health centers

- Health centers should have the institutional capacity to provide basic emergency obstetric care, thus ensure the availability of essential drugs and supplies:
 - **Drugs**: priority should be given to injectable ergometrine, injectable diazepam/magnesium sulfate, and injectable amoxicillin.
 - **Supplies/equipments**: incubator; vacuum extractor and forceps for assisted delivery and manual vacuum extractor for abortion.
- Have well trained staff capable of using and operating equipments, and performing all the components of basic emergency obstetric care
- Improve feedback provision from the health centers to the referring health posts.
- Seek for appropriate means of transporting obstetric emergency referral cases from health posts to health centers. Bajaj ambulance, which is being piloted currently in the country, could be one of the best means of transporting patients to health centers.

Support from stakeholder to HEP

The woreda administration should support and regularly assess the performance of the woreda health office, health center and kebele council in the implementation of HEP, and include some key outcome measure of HEP as performance indicators of the health sector and Kebele Council.

APPENDIX: SAMPLE DISTRICTS AND KEBELES

APPENDIX – I: LIST OF DISTRICTS AND RURAL KEBELES BY REGION

TIGRAY				
Districts	Kebeles			
Alamata	Garjele	Lemaat	Selen WuhaTao	Tsetsera
Ofla	Denka	Guara	Lat	Wenberet
Adwa	Endaba Gerima	Lakia	wedi Keshi	Weyenti
Kola Tembien	Ataklty	Getski Milesley	Miwtsae Werqi	Tawet Giwerges
Werie Leke	Azmara	Maekelawi	Mai Tuem	Werie
Welkait	Degena	Wefargef	Mygeba	Tsebri
Hawzein	Debre Berhan	Fireweyni	Debre Hiwot	Shelewa

AFAR				
Districts	Kebeles			
Ayisaita	Berga	Galifagi	Hinalena Wahilfanta	Mamule
Bure Mudaytu	kodea	Gefram	Jangeg	Debel

AMHARA				
Districts	Kebeles			
Basona Werana	Baria Ager	Gosh Bado	Moy	Zanjerua
Guangua	Ambiki	Gesaita	Mota	Yemali
Farta	Debresinana Limado	Huletu kenat	Qualeha	Workien
Simada	Eje Kidanemehert	Kes wuha	Sergawit	Yequas
Kalu	Arabo	Emeyo Sertie	Kurfa	Wereba
Tuhuluderie	Boru Mitoru	Hitecha	Korkie	Tebisa
Jabitahenan	Awent Yedefas	Guay wubshet we	Mender Meter	Zengeble Beddega
Basoliben	Dendageb	Gundelmit	Talal amba	Zenbol
Gozamn	Chertekel	Yetejana shebelma	Washa michael	Kibi
Bati	Chachatu	Gerfa uranie	Kopafo	Selatie
Dabat	Bentero	Defiya	Janbelew	Weken zuria
Lay Armachiho	Ambagiorgis Zuria	Chichike	Debraso	Gonter Abo
Lalo mama midir	Enbut Ferie	Selam Betigil	Yedil Chora	Yeselam Wegaggen
Yilmana Densa	Angar	Ginb Geregera	Mesob	Yegebeta selemgie
Dehan	Chila	Gubaera/Gomenge	Misko	Tsere wala

OROMIA				
Districts	Kebeles			
Hitosa	Boru lencha	Gonde Finchama	Tedo Leman	Sibu Abadir
Shirka	Gelebe Busa	Hale Tereta	Sengo Yaya	Waji Rafisa
Dawo	Dawo Sadan	Gora Roge	Kersa Bimbi	T.gora sakayo
Anchar	Danab 08	Injicha 04	Lalo 07	Wachu 020
Habro	Gerb Teka	Kebele bore	Gadisa	Chafe 13
Cheliya	Dibi gara bulti	Jarso dire gada	Siba biche	Wegdi kortu
Nano	Bake Moti	Gamo Waliso	Kutaye Munyo	Nano Kondala
Arsi Negele	Cherri Lallu	Gorbi Arba	Lephese	Wotera
Shashemene	Burkua	Gonde Kerso	Kubi Guta	Watara Shegule
Dera	Bayo Nono	Ilu Wasyou	Ligoda Chafe	Were Gebro
Gera	Gada Gute	Kecho Andaracha	Kombolcha	Wanja Kersa
Omo-nada	Chucha Saredo	Jato Abe	Nada Cela	Toli Byam
Abaya	Bunata	Gello	Tokisha	Kelaltu
Girawa	Chiracha 03	Kara Furda	Mata Mojo	Tokuma Jalala
Kurfachale	Alam Duram	Darmasheet	Hula Janata	Rasa Janata
Gimbi	chuta sodu	Inango Danbali	Melka gasi	Wara seyo
Darimu	Bukko	Gobe	M/Guda	W/Bambi
Gasera	Awebencho Meselemide	Denbebo amgesa	Ilu Kersha	Yebsana Wele

BENSHANGUL-GUMUZ				
Districts	Kebeles			
Assosa	megele 36	Amba 5	Hoha 15	Rubelageda
Odabuldi	Belanjaro	Zumba	Daltey	Yonki
Mao komo	taja	Penshube	Yangu	keser
Mandura	Gumedi	Jigada	G/martema	Photo M

SNNP				
Districts	Kebeles			
Amaro	Dano Bulto	Golebie	Medayinie	Zokesa
Benatsema	Luka	Goldia	Yergo	Mukecha
Daramalo	Domea	Hoya	Masta	Wacha
Wenago	Gola	Heroriesa	Mokonisa	Wetiko
Abeshege Badawacho (Misrak/mirab)	Tubana Telelo	Layagnaw Gerba	Hudad Amestenga	Chesa
	Andegna koto (2)	Jarso Anjaja (1)	Sepera (2)	Weyira Lalo (1)
Shashego	Bire Morakemo	Golicha Boyo	Laygaw gimbichu	Urbecha Antata
Kachabira	Buge	Kachabira(Eas 1,2)	Mesena	Zegoba
Silti	Arat Ber	Detewezer	Wegerea Redebo	AGODE
Aroresa	Bubea Borea	Eletama	Melka Damitu	Welea Megada
Boloso Sore	Badayu	Dubo	Metala Hembecho	Ykara
Humbo	Abele Koshebo	Eala Kebela	Koyesha Agudama	Zelan Chew Karie

GAMBELA

Districts	Kebeles			
Abobo	Pukedi	Shebo village 11&12	Perpengo	Shebo village14
Abobo	Shebo village 7	Ukuna kijag	Shebo kir	Tiyerchiru
Gog	Ajiranga	Puchala	Ateyil	Gog jenjer
Gog	Chamo	Aboda	Pugnudo	Gog dipach
Godere	Dunchay	Metti 02	Akeshi	Tiliku metti
Godere	Goshene	Mekakelegna metti	Yekina gengeboz	Chemi
Mengeshe	Abiy 04	Dushi	Ashine	jenjay
Mengeshe	Shone	Baya	Kume	Godere mision
Etang	Achawa	Pukemu	War	Pignman
Etang	Pol	Birhaneselam	Pulwal	Uwal
Jikawo	Nginggang	Bilgnahak	Lul	Birmontol
Jikawo	Makuwar	Biyen	Mariyal	jognriri
Lare	Rech	Nib nib teyilut	Edani	Med wer kong
Lare	Kutong chamak	Cham	Kech gnepach	Bilimonkun

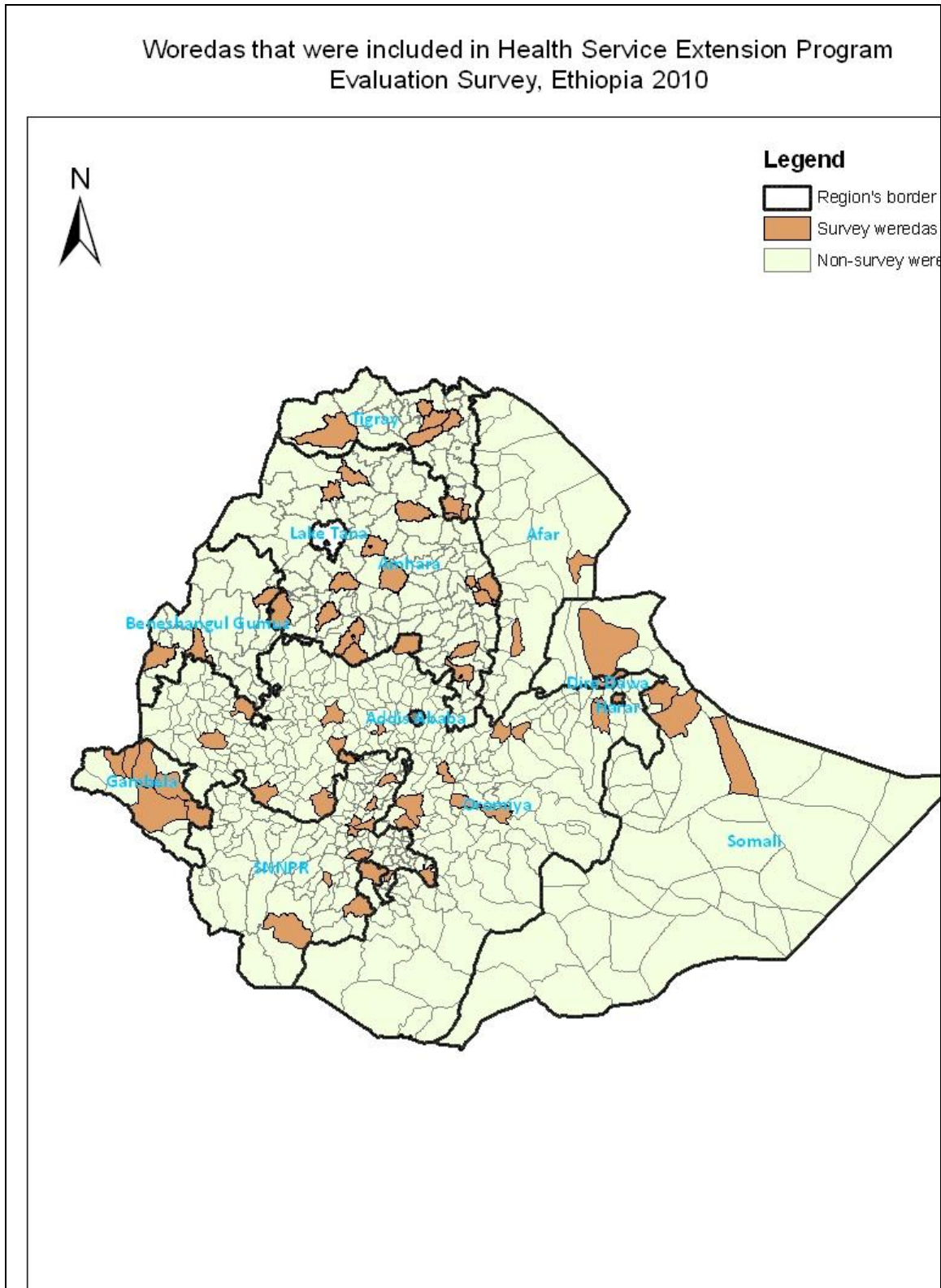
DIRE DAWA	
Districts	Kebeles
Beyo Awale	Bekehalo Legu Aneni
Addis Ketema	Jelo Belina
Wahil	Gerbe Aneno

HARARI	
Districts	Kebeles
Sofi	Aweberkelle
Erer	Erer Wordya Hawaye
Dire Teyara	Sukul

SOMALI	
Districts	Kebeles
Awbere	Jare Abayfulan Garwadhile Lafaisa
Jigjiga	Harta alibeyle Amadle Tulli guled Gebigebo
Kebri-beyah	Hartasheik/warabajirro Adadye/Goyo Dula`ad Dhalandiga
Shinile	Dinley HP Baraq HP Tomi Harawa HS

APPENDIX – II: MAP OF SAMPLE DISTRICTS

Woredas that were included in Health Service Extension Program Evaluation Survey, Ethiopia 2010



APPENDIX – III: PERSONS INVOLVED IN HEP EVALUATION SURVEY

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Ato Assefa Dissasa (Benshangul-Gumuz RHB)

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