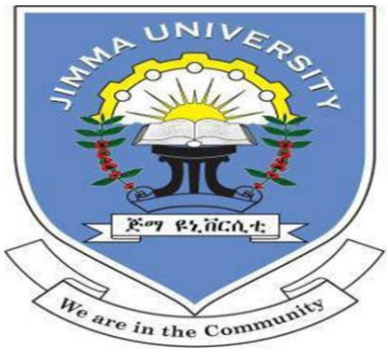

Process Evaluation of Community Based Nutrition Programin Soro Woreda, Hadiya Zone, Southern NationsNationalities and People's Region, Ethiopia

An Evaluation Thesis to be Submitted to: Jimma University, Institute of Health Sciences, Department of Health Economics, Management and Policy, Health Monitoring and Evaluation Program Unit, for Partial Fulfillment of the Requirements for the Degree of Master of Science in Health Monitoring and Evaluation.

By: Behailu Abayeneh (BSc.)

June, 2017

Jimma, Ethiopia

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By: -Behailu Abayeneh (BSc)

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June, 2017

Jimma,Ethiopia

Abstract

Background: *Malnutrition is continuing to be implicated in more than half (55%) of child deaths worldwide. Children and women are most vulnerable to malnutrition in developing countries because of low dietary intakes, infectious diseases, lack of appropriate care, and inequitable distribution of food within the household. In Ethiopia, national prevalence rates of stunting, underweight and wasting among children were 38%, 24% and 10%, respectively. In Soro Woreda, Weighted children under two years are 78 % in average, Normal weight children 84%, underweight children 13%, and severely underweight children 3%. However, the program status and level of implementation is not clearly indicated despites its long term implementation in soro woreda. So this process evaluation was conducted to assess implementation status of community based nutrition program in the woreda.*

Objective: *Toevaluate the process of community based nutrition program in soro woreda Hadiya zone Southern Ethiopia.*

Method: *Single case study design with quantitative and qualitative data collection methods was employed at selected health posts of Soro woreda from March 05- April 7, 2017.The evaluation was focused on process part of the program with dimensions; availability, compliance and caretaker satisfaction in the dimension of acceptability. Resource inventory, document review; key informant interviews and observations were conducted. Caretaker satisfaction was assessed through exit interview; with sample size of 382.The qualitative data were analyzed manually using thematic analysis and quantitative data were analyzed by using SPSS version 20 software. Bivariate and multivariate logistic regressions weredone to determine the predictor of client satisfaction.The findings were compared with preset criteria for the final judgment.*

Result: *Out of 14 health posts studied, 92.2%had trained health extension workers oncommunity based nutrition. Around 85.7% and 71.4% of the health post were had family health card and growth chart respectively. All health posts were had guideline,Mid-upper arm circumferencetape, registration book, vitamin A, and functional weight scale, 85.7% of the required resources were available for provision of community based nutrition programand theresult wasjudged as**GOOD.** The result of Compliance was 83.2% which was judged to be **GOOD,**but many of health extension workers were not participated on performance review meeting and not supervised with in third quarter of Ethiopian fiscal year. Seventy-five point nine percent of the care takers were satisfied with service provided by the health posts **GOOD** in judgmental.Possessing of family health card,**(AOR=2.558, 95% CI=1.134, 5.771)** Counseled and Appointed**(AOR=3.952, 95% CI=1.567, 9.964)**and Waiting time to get community based nutrition service(**AOR=2.883, 95% CI=1.406, 5.913)**were predictors of care taker satisfaction.*

Conclusion and Recommendation: *the overall implementation of community based nutrition service in health post of Soro woreda wasjudged as **GOOD** withagreed judgment criteria. There was inadequate supportive supervision and performance review meeting on community based nutrition program. Zonal health department, woreda health offices, health centers and development partners have to strengthen regular supportive supervision, performance review meeting and improve the program.*

Key word*: Evaluation, Community based nutrition, Health post, Hadiya Zone, Ethiopia.*

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List of Abbreviations

CBN: Community based nutrition

CHD: Community Health Day

ECCD:Integrated early child care and development

EDHS: Ethiopian demography health survey

EOS: Enhance our reach services

GAIN: Global alliance for improve nutrition

HAD: Health Development Army

HC: Health center

HCW: Health care worker

HEP: Health extension program

HP: Health Post

HSDP: Health sector development plan

MDG: Millennium development goal

NNP: National nutrition program

PRH: Population and reproductive health

SNNPR: Southern Nations, Nationalities and Peoples Regional State

SUN: Scaling up nutrition

TSF: Targeted supplementary food

UNICEF: United nation international children emergency fund

WHO: World health organization.

Operational Definitions

Availability: The relationship between the volume and type of services (and resources) to the client's volume and type of needs. It is mostly about the adequacy of resources. In this context it refers availability of program resources for the implementation of the CBN program according to the national guideline.

- Availability of human resource- qualification health extension worker who received training on CBN program (Two Health extension worker per Health post).
- Program resources-refers to infrastructure (health post, water supply and latrine facility) logistics and supplies (GMP registration book, family health cards, Growth chart, weight scale…).

Compliance: adherence to predetermined standards or guideline. In this context it refers to the compliance of health extension workers to CBN program national implementation guideline while assessing weight of children, classifying the nutritional status, counseling, and referring; providing follow-up; recording and reporting.

Acceptability:this dimension is assessed through clients' perspective /client view/ that the state of being received the serviceand satisfied in which the health post organized service, resources including infrastructures to accept client.

Care takers Satisfaction: This is clients' opinion/perception about the service readiness to provide CBN after received the service. In this study the satisfaction level was used to measure the level of care taker satisfaction on acceptability (satisfaction level).

Care taker: is a family or relatives that provide a care for under two children who are enrolled in community based nutrition program.

Evaluation judgment matrix: a matrix that shows the list of indicators to be evaluated, and the criteria for giving judgment depending on the findings.

Relevance matrix: tabular presentation of the rating of judging criteria according to their relevance to the program.

Report timeliness: proportion of CBN reports that were send by health post and received by the health institution & health administrative level during a given time period (b/n the day of month 20-26)

Report completeness: indicates whether facilities have reported on the data they are supposed to report on

Level of importance in stakeholder identification and analysis:

- Low– the stakeholder can do little to adversely affect the outcome of the evaluation.
- Medium – the evaluation could achieve its objectives against this stakeholder's opposition, but it would not be easy
- High – the person or group has the power to cancel or significantly change the evaluation.

Chapter 1: Introduction

1.1: Background

Malnutrition is continuing to be implicated in more than half of child deaths worldwide. Deaths of 6 million children (55% of the total) are either directly or indirectly attributable to malnutrition. Well over two-thirds of these deaths, which are often associated with inappropriate feeding practices, occur during the first year of life (1).

Worldwide, malnutrition is an underlying cause in the deaths of more than 3.5 million children under the age of 5 each year. Around 13 million infants are born each year with low birth weight (LBW). Fifty-five million children are wasted, and of these 19 million are severely wasted. About 178 million children around the world are stunted. Of the estimated 178 million, 90 percent live in 36 countries(2).Also 171 million children are experiencing chronic malnutrition, which leaves a large portion of the world's children not only shorter than they otherwise would be, but also facing cognitive impairment that lasts a lifetime (3).

In developing world malnutrition still, a major public health problem From10-11 million under 5 years' children who die in each year with preventable causes; malnutrition contributes over 50% of the death (4).Acute malnutrition is extremely common condition, associated with high rates of mortality and morbidity, so it needs specialized treatment and prevention interventions(5).This is equivalent to almost 60 million children suffering from moderate and 13 million suffering from severe acute malnutrition at any one time in developing country. Although data are imprecise, it is known that the risk of mortality in acute malnutrition is directly related to severity, with moderate wasting associated with a mortality of between 30-115/1000/year and severe wasting associated with a mortality rate of between 73-187 / 1000 / year(6).

Of the nearly 1.9 billion children in the developing world, 31% are stunted (7). Despite the continued progress in all the developing countries, it is still predicted that there was 128-155 million underweight children by the year 2020 with 35% of these children to be from sub-Saharan Africa (8).

In Africa, almost 2 in 5 children are stunted a total of 60 million children. This largely unnoticed child malnutrition crisis is robbing the health of tomorrow's adults, eroding the foundations of the global economy, and threatening global stability (1).

Nutrition status in Ethiopia is alarming: almost half of the children are malnourished, and thenational prevalence rates of stunting, underweight and wasting among children are 38%, 24% and 10%, respectively(9).

Malnutrition is abnormal physiological condition caused by deficiencies, excesses or imbalances in energy, protein and/or other nutrients. Malnutrition is also defined as "a state in which the physical function of an individual is impaired to the point where he/she can no longer maintain adequate bodily performance processes such as growth, pregnancy, lactation, physical work, and resisting and recovering from disease". But in the case of under nutrition, this definition does not take into account the cause of unintentional weight loss. Malnutrition is categorized as acute or chronic. It can be either under-nutrition or over-nutrition(10).

Children under age 2 are especially vulnerable, and the negative effects of malnutrition at this age are largely irreversible. The issue of chronic malnutrition, as opposed to acute malnutrition seldom grabs the headlines, yet it is slowly destroying the potential of millions of children (11).

The causes of malnutrition can be very complex. Malnutrition is influenced by many factors acting at multiple levels. These factors often act in a continuous cycle and include dietary intake issues, diseases, food insecurity, and inadequate maternal and child health care and sanitation services. Illiteracy and poverty may also influence the food intake of people in our community and become causes of malnutrition. Usually malnutrition is not the single consequence of a single factor but a mixture of different causes. The size of the contribution of each of these may varyadequate nutrition during early childhood is fundamental to the development of each child's potential. It is established that the period from birth to two years of age is a "critical window" for the promotion of optimal growth, health and overall survival of children (11).

In 2008, the Government of Ethiopia (GOE) developed the National Nutrition Program (NNP), which aims to reduce malnutrition and achieve the target 1 and 2 of the Millennium Development Goal (MDG) through a comprehensive approach in order to prevent children from falling into malnutrition, family and community should be the first line of protection. CBN aims to build up communities and families' capacity and ownership to make informed decisions on child care practices at family and community levels, the major implementation approaches include Growth Monitoring and Promotion, supported by Community Conversation/Triple-A in which community members ASSESS the situation of their own children, ANALYZE causes of malnutrition and other problems, and take ACTIONs for their own children. Community Dialogue provides a forum to bring about appropriate and feasible

solutions/actions by learning from each other and helping each other, especially for the most disadvantaged ones. It also provides simple tools to aide community mobilization, problem identification, analysis and problem solving by themselves(12).

1.2: **Statement of the problem**

In Africa, almost 2 in 5 children are stunted – a total of 60 million children. This largely unnoticed child malnutrition crisis is robbing the health of tomorrow's adults, eroding the foundations of the global economy, and threatening global stability(11).

The magnitude of child malnutrition in Ethiopia is among the highest in the world. According to the Ethiopian DHS 2016 key indicator the prevalence of stunting among under-five children was 38%, wasting 10% and underweight 24%. These data suggest child malnutrition not only high in the country but also has remained unchanged over the past few years (9), micronutrient deficiency diseases such as vitamin A, iron and iodine deficiencies, which often occur in association with protein-energy malnutrition, are also highly prevalent in the country, and almost 37% of preschool children were affected by sub-clinical vitamin-A deficiency and 39% of the school age children were affected by Iodine deficiency disorders (IDD) (13).

The percentage of stunting, wasting and underweight in South Nation Nationality People Region were 44.1, 7.6 and 28.3 respectively. Malnutrition has severe consequences. Malnutrition reduces functioning of the immune system, wound healing, increases the chance of developing pressure sores, impairs the quality of life and increases mortality. These complications of malnutrition lead to increased length of stay in hospital with increased use of medication, leading to increased healthcare costs. In children malnutrition not only has direct consequences, but, because a child is developing, it also causes long-term effects such as lower intelligence quotient and retard the growth or development (14).

Children under age 2 are especially vulnerable, and the negative effects of malnutrition at this age are largely irreversible. The issue of chronic malnutrition, as opposed to acute malnutrition seldom grabs the headlines, yet it is slowly destroying the potential of millions of children(9).

The causes of malnutrition can be very complex. Malnutrition is influenced by many factors acting at multiple levels. These factors often act in a continuous cycle and include dietary intake issues, diseases, food insecurity, and inadequate maternal and child health care and sanitation services. Illiteracy and poverty may also influence the food intake of people in your

community and become causes of malnutrition. Usually malnutrition is not the single consequence of a single factor but a mixture of different causes. The size of the contribution of each of these may vary(15).

In Ethiopia to prevent malnutrition problems different interventions have been implemented, the Community Based Nutrition Programme (CBN) is one of the key components of the Ethiopian NNP,it was initiated in 2008, the basic principle is to make nutrition a priority agenda for families and communities and influence sustainable behavioral changes in child care practices and health-seeking behaviors.

The model includes two main interventions conducted by the health extension workers. The first is monthly Growth Monitoring and Promotion of all children under 2 years, the most vulnerable period for child malnutrition, together with counseling for care takers, and the second component focuses on establishing regular community dialogue to engage community members in assessing the overall children malnutrition in their community to understand the barriers and potential supports for improved nutrition develop consensus and plans of action to make a difference (8).

However different studies and reports show that there are challenges or limitations that hinder the program to be meet its objectives. The study conducted on four region of Ethiopia (Amhara, Oromia, Tigray and SNNP regions) show that poor management of supplies, incomplete availability of all supplies according to the guideline and interruption of supply delivery to the HP were the main encountered operational problems. As result of these problems difficult to delivering CBN service successfully. So availability of supplies is the most important implementation or process indicator(16).

Study associates the implementation of CBN program with the availability of program resources pre-determined standards. Implementation of CBN program can be affected by availability of program resources like trained human resources, implementation guideline, drugs and medical supplies. Without careful attention to financing, human resources, and other inputs, CBN programs risk uneven roll out and disappointing results. The primary constraints of CBN implementation was lack of continuous and sufficient supplies like vitamin A, de-worming, and growth chart at health posts (HPs). Ethiopia Service Provision Assessment Plus Survey assessed for availability of Growth chart80 %, sufficient supply and drug67%, family health card68%, and at least one staff member who received training in CBN/ growth monitoring are 88%(17).

In the process evaluation study done in two region of Ethiopia (SNNPR and Tigray), frequency of weighting within 3 months once, 2-3 times, and more than 3 times are 61.1%, 36.6%, and 2.3% respectively. Among HEWs who received supervision, most confirmed that visits included orientation about IYCF information 92.1% in Tigray and 90.5% in SNNPR, and further asked the type of nutrition information they received from HEWs. It appears that most women reported to have received some important information from HEWs that include, in order of priority, information on exclusive breastfeeding (66.4%-80.2%), complementary feeding 62%, child/weight/growth 45.4% and on giving plumpy-nut to their child 32.4%(16).

Qualitative findings of the above study reinforced that supportive supervision did not cover all the expected elements. Supervisees were routinely checked for completed activities and given some technical information, but the availability and use of materials were not checked, and they rarely received advice on ways to improve on their mistakes or how to complete their activities under constraints(18).

Community based nutrition program being implemented in soro woreda since 2008 G.C, Many resources were invested on the program for human resources training, material and supplies availing in the woreda(19).According to Soro Woreda health office annual report in 2016 total Weighted children under two years are 78 % in average Normal weight children 84% underweight children 13% severely underweight children 3%(20). However, the program status and levell of implementation is not clearly indicated despites its long term implementation in the woreda. So this process evaluation was conducted to address this gap.

1.3: **Significance of the evaluation**

It was mentioned that community based nutrition program is one of the strategies to reduce nutritional problem, which is known to be the cause of child mortality(12). The main purpose of this process evaluation is to evaluate the activities done and procedures followed during community based nutrition program by assessing resources and the process of the service as intended to service providers in Soro woreda, Hadiya zone.It will be also serve as a baseline for further large scale studies in the field, and contributes in bridging the information gap. The study findings could be also used by the local and district health offices, NGOs (WFB, UNICEF) other service providers, and donor agencies in designing locally appropriate nutrition intervention projects. Finally, the findings of the study will be used by soro woreda health

office to inform the health workers in the district to improve the CBN service delivery to the community, which in turn contributes to reduced child morbidity and mortality in the area.

Chapter 2: Description of the program to be evaluated

2.1: Stakeholders identification and engagement

Different stakeholders were actively involved in the implementation of CBN program in Soro woreda. The evaluability assessment conducted on CBN tried to identify different stakeholders involved in improving nutritional status of children and mothers, partners and beneficiaries. Stakeholders' identification has been done carefully to assure sustainability and support of the program. The following are primary stakeholders: Soro woreda health office, Health centers in soro woreda, Hadiya zone health department,SNNPR health bureau, Soro woreda administration, Kebele administration, Health Development Army(HDA), UNICEFs, mother's/care taker, health care providers were identified with the direct owner of the program (Soro woreda health office).

There were different communication strategies used with different stakeholders. By having formal letter from soro woreda health office, all stakeholders expected to use the evaluation or can affect the use of evaluation finding are addressed by evaluability assessment.

All stakeholders are equally important for the program, those who can use the finding directly are leveled as highly important and others are leveled with respect to their role (Table 1).

2.2: **Stakeholder Identification and Analysis Matrix**

Table :Stakeholder Identification and Analysis Matrix for CBN program in Soro Woreda, Hadiya Zone 2017.

Stakeholder	Role in the Program	Stakeholder interest in evaluation	Role In The Evaluation	Communication Strategy	Level of Importance
SNNPR health bureau	Allocation & delivery of resource (protocol, guidelines, supply and equipment's). Providing technical support and supervision.	Use the evaluation finding as an input for program improvement and effectiveness Decision making.	Interpreting findings and disseminating information Use the evaluation finding as an input for program	Formal letter Telephone	H
Hadiya Zone Health Department	Technical support Resource Allocation and Capacity building (training), ISS, conduct review meeting	Use the evaluation finding as an input for program improvement, Decision making, resource allocation)	Describing program activities and context , Interpreting findings, use and disseminating information	Face to Face Formal letter	H
SoroWoredaHealth Office	Plan, implementation, Provide Technical Support and Facilitate Management Activities, Record and report, Monitoring, budget allocation, training of HEWs, ISS conduct review meeting	Use evaluation findings for program improvement and effectiveness	Formulation of Evaluation Question, set judgment criteria Serving as sources of data, use findings ,Describing program activities, context, priorities and goal	Face to Face	H
Soro Woreda administration	Community mobilization, Resource allocation	Use evaluation finding for resource allocation and decision making	Administrative support in the conduct of the evaluation	Face to face Letter Telephone	M
Health center and health care providers	Plan, Program Implementation, monitoring and follow up, community mobilization, ISS, capacity building, Recording and reporting	Use the findings for program implementation & improvement	Source of Information, Formulation of Evaluation Question, set judgment criteria Serving as sources of data Interpreting findings	Face to Face Telephone Letter	H

Health post	Plan, Implementation , monitor , follow up, recording and reporting	Use the findings for program implementation improvement	Source of information, Formulation of Evaluation Question, set judgment criteria Serving as sources of data Interpreting findings	Face to face Telephone Letter	M
Kebele administration	Community mobilization, Strengthen of HDA program achievement	Utilizing the results for Improvement in the provision of service collaboration in program implementation	Transferring information Use the findings for client mobilization	Face to face Letter Telephone	L
Health Development Army(HDA)	Community mobilization Support and facilitate implementation	Utilizing the results for Improvement by mobilizing the community	Transferring information Use the findings for community mobilization	Face to face	L
UNICEFs	Capacity Building Providing logistic and Support Resource	Program improvement	Selection of indicator, Formulation of Evaluation Question, set judgment criteria	Face to face Telephone	H
Care taker of under 2 year children**.**	- Beneficiary of the program - Utilization of service	Enhance knowledge on service they received	• Serving as sources of data during the evaluation	Discussion meeting	L

2.3: Expected program goal and objectives

2.3.1: Goal

To support the national efforts to reduce stunting from 44% to 30% and reduction of child mortality through implementing high impact multi sectoral nutrition intervention(20).

2.3.2: Program objective

The main objective of the program is strengthening community capacity to assess and analysis of the cause of their malnutrition problems and to take action by making better use of family, community and external resources to improve the nutritional status of children in all food insecure woreda throughout the country by the end of 2016/17

2.3.3: Specific objectives of the program

1. To decrease wasting prevalence among children under two from 11% to 3% in soro district in 2016/17
2. To decrease stunting prevalence among children under two from 44% to 31% in soro district in 2016/17
3. Increase the proportion of under two children managed for severe malnutrition from 83% to 91% in soro district in 2016/17(20).

2.3.4: Major strategies

Major strategies in reaching the objectives include (21).

- Use all contacts between Health Extension Workers (HEW) and mothers (ANC visit, Delivery, postnatal care visit, EPI, sick and well-baby visits, etc.) for nutritional counseling on maternal, infant and Young child nutrition.
- Mobilize mother's/care takers for monthly Growth Monitoring Programme and counseling.
- Build the capacity of Health Development Armies and 1-5 network to improve optimal nutrition practices for mothers and children at community and HH levels.
- Use HEW's school visit program to promote nutrition, hygiene and sanitation practices and to prevent harmful traditional practices
- Partnership with otherNGOs and training institution
- Build the capacity of AEW and Agriculture Programme Managers at all level to implement nutrition sensitive agriculture program.
- Supporting nutrition linkages in various agriculture programs (Production Safety Net Programme (PSNP), Household Asset Building Programme (HABP), Agricultural growth Programme (AGP) etc.

- Strengthen the linkages between HEWs and Development Armies (DA) for improved household nutrition practices.

2.4: Program activities and resources

2.4.1: Program input/resource

These are the people, money, and information needed usually from outside the program to mount program activities effectively(21, 22).

The inputs for the implementation of CBN program in the study area includes:

- The presence of trained Human resource (health extension workers, HDA)
- Finance
- Presence of health posts (infrastructure)
- Supply (Guideline, manual, OTP quick reference, Family health card, growth chart, MAUC measurement and weighing scales).
- IEC/BCC materials.
- Registration book, monthly reporting formats, referral forms and standard supervision checklist.

2.4.2: Activities of the program

These are the actions mounted by the program and its staff to achieve the desired outcomes in the target groups. Activities will vary with the program (21)

The activities of the CBN program includes: -

- Training for health extension workers on CBN.
- Allocating budget.
- Conduct Growth monitoring and promotion
- Providing Vitamin, A and de-worming once every six months
- Counseling care takers /mothers for food, fluid and when to return
- Conducting review meeting
- Conducting supportive supervision
- Measuring weight and MUAC
- Conducted community conversations regularly every month to assess malnutrition among children, analyze causes and plan for action
- Recording and reporting each activity.
- Referring complicated cases to next level.

2.4.3: Output of the program

Outputs are the direct products of activities, usually some sort of tangible deliverable. Outputs can be viewed as activities redefined intangible or countable terms. They are usually the immediate results of using the program resources(21, 22).

The output of the CBN program in the study area includes:

- Number of trained health extension workers on CBN.
- Number of HDAs trained on CBN.
- Amount of budget allocated.
- Number of children got Growth monitoring and promotion service.
- Number of children supplemented with Vitamin, A and de-wormed.
- Number of care takers /mothers counseled about child feeding and when to return.
- Number of conducted review meeting.
- Number of supportive supervision conducted.
- Number of children whose weighted and MUAC measured
- Number of community conversation conducted.
- Number of on time reports sent to next supervisory body
- Number of complete reports sent to next supervisory body.
- Number of children referred.

2.4.4: Outcome of the program

Outcomes are the changes in someone or something (other than the program and its staff) that you hope will result from your program's activities. It is the effect of the program on the target beneficiaries(21, 22).

The outcome of the program includes:

- Improved health seeking behavior (increased service up- take by care takers)
- Improved nutritional status of children.
- Improved service quality
- Improved quality of data

2.4.5: Impact of the program

Impact of the program is usually long term effect of the program on the whole society rather than the target beneficiaries of the program(22).

The impact of the program includes:

- Reduction of child morbidity due to malnutrition
- Reduction of mortality due to malnutrition

To summarize CBN program components are presented in the logic model below (Fig.2)

2.5: **Logic model of CBN**

A logic model is a commonly-used tool to clarify and depict a program within an organization. it may have been heard as a logical framework, theory of change, or program matrix, but the purpose is usually the same: to graphically depict the program, initiative, project or even the sum total of all of organization's work. It also serves as a foundation for program planning and evaluation (23).

Statement of the problem: Ethiopia is one of the countries with highest under-five child mortality rate, with malnutrition underlying to 57% of all children deaths, In soro woreda underweight children 13% severely underweight children 3% (18).

Goal: - To contribute reduction in morbidity and mortality of children due to nutritional problem in the soro woreda by 2016

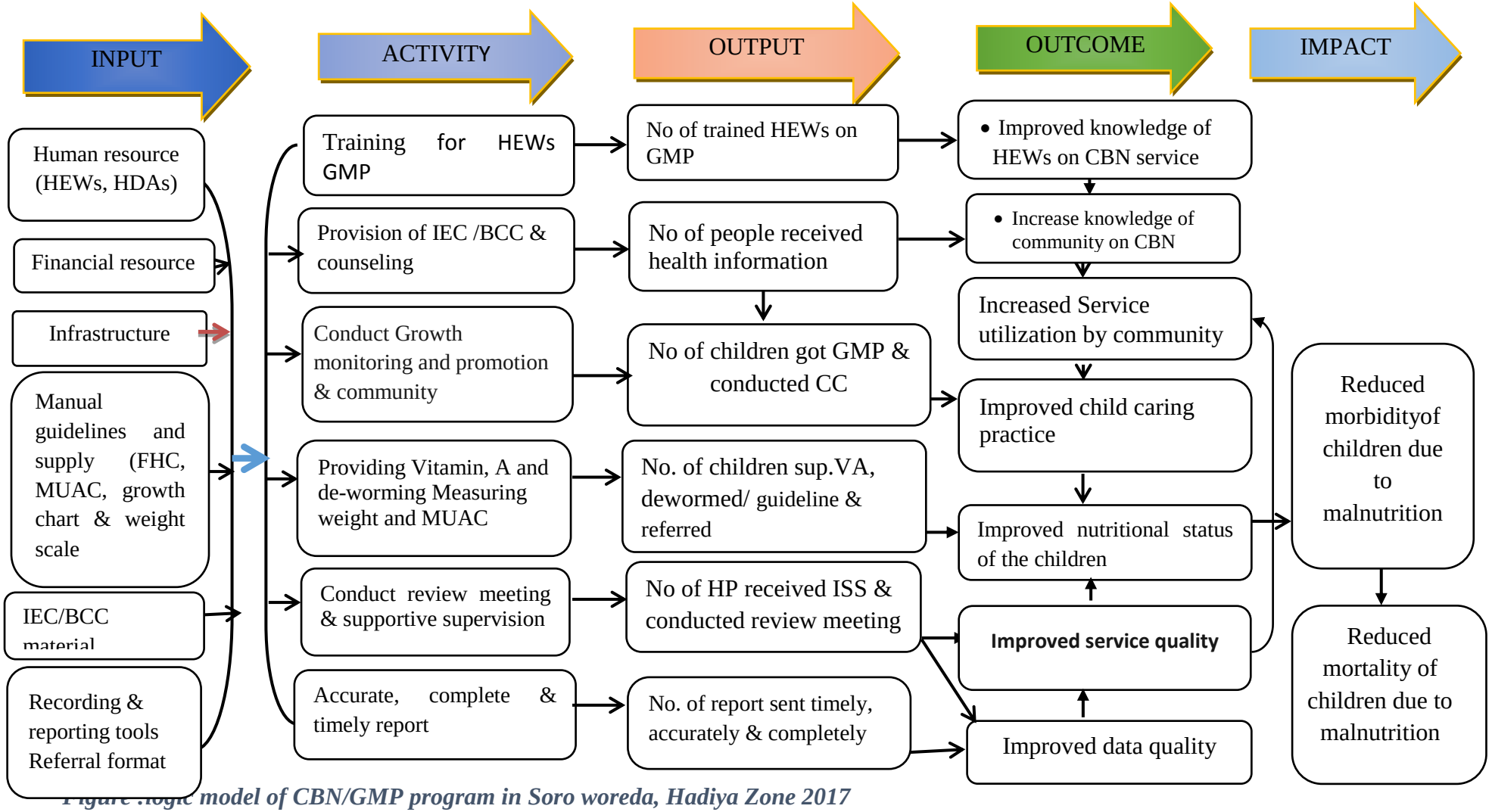

Figure :logic model of CBN/GMP program in Soro woreda, Hadiya Zone 2017

2.6: **Stage of program development.**

In Ethiopia the nutrition program becomes different developmental hierarchy. The translation of the health policy was followed by the formulation of four consecutive phases of comprehensive Health Sector Development Plans (HSDPs), the first phase of which was implemented starting in 1996/97. Both of the policy formulation as well as the development of the first HSDP have been the result of critical reviews of the nature, magnitude and root causes of the prevailing nutritional problems of the country and the broader awareness of the newly emerging nutritional program in the country(24).

In 2008, the Government of Ethiopia (GOE) developed the National Nutrition Program (NNP), which aims to reduce malnutrition and achieve the target 1 and 2 of the Millennium Development Goal (MDG) through a comprehensive approach to address both emergency and preventive measures. NNP places a significant emphasis on the sub-component, called "Community-Based Nutrition (CBN)". As a contribution to the NNP, the GOE-UNICEF Country Program Action Plan 2007 -2011 has initiated the implementation of the CBN sub-component in selected woreda in Amhara, Oromia, SNNP and Tigray. In order to prevent children from falling into malnutrition, family and community should be the first line of protection. CBN aims to build up communities and families' capacity and ownership to make informed decisions on child care practices at family and community levels, the major implementation approaches include Growth Monitoring and Promotion, supported by Community Conversation/Triple-A in which community members ASSESS the situation of their own children, ANALYZE causes of malnutrition and other problems, and take ACTIONs for their own children. Community Dialogue provides a forum to bring about appropriate and feasible solutions/actions by learning from each other and helping each other, especially for the most disadvantaged ones. It also provides simple tools to aide community mobilization, problem identification, analysis and problem solving by themselves (12).

The last five years have seen promising achievements in Ethiopia. For one, the policy landscape for nutrition has improved. The Growth and Transformation Plan has set stunting reduction as one of its goals for 2015. The Government of Ethiopia, in collaboration with nutrition development partners, has shown its commitment to reducing stunting at a faster rate, and signed the commitment for food and nutrition security at the G8 meeting in 2012(24).

In the study area, soro woreda, CBN program implementation has started since 2008G.C in 46 rural kebele health posts.

Chapter 3: Literature review

3.1: Implementation of CBN program

The implementation of community basednutrition program requires availability of HEWs; whether HEWs are trained in CBN; supportive supervision; continued availability of drugs and supplies; and demand generation activities, such as community education and mobilization) be delivered at a high level of intensity that is sustained throughout the program in the intervention woreda. Likewise, improvements should be seen in services provided by HEWs and in utilization of services by the community. The adequacy of program inputs, processes and outputs needs to be assessed early after the launch of the program to ensure that necessary adjustments and corrections are made (25).

3.2: Availability of program resources (Structure)

Structure is the conditions under which care is provided which include: Material resources, such as facilities and equipment; human resources, such as the number, variety, and qualifications of professional and support personnel, kinds of supervision and performance review, methods of paying for care, and so on. Thus, structure includes the human, medical, physical and financial resources that are used to provide community based nutritionprogram (26).

Human resource capacity is instrumental for program implementation. But there is a lack of adequate and qualified staff to implement program activities at the local level. Due to increased demand for nutrition intervention, providing sufficient training is also constrained. For example, studies indicate that health extension workers (HEWs) are overburdened. This challenge was induced after the government changed the modality of health service delivery at community level. Supporting human resources for implementation can help to effectively deliver services and scale up programs and interventions(27).

Study conducted to assess factors affecting availability of essential medicines showed that product availability to be weak in each country, with more than half of HEWs stocked out of at least one tracer product on the day of the assessment and product availability is a challenge for CBN programs and finding affordable, simple, and sustainable supply chain solutions must be guided by evidence, country context and program structure(28).

The Growth Monitoring Card/family health card helps care takers monitor the growth of children. Child growth reflects the ability of care takers to provide appropriate home based care for feeding and prevention of disease. An adequate growth shows that a child is receiving the right dietary intake and is well protected against disease and inadequate growth reflects poor nutrition or lack of protection against disease. By following a growth curve based on the weight of the child with the following classification i) ascending line (weight gain); ii) horizontal line

(constant weight) and; iii) descending line (weight loss) the growth monitoring card allows parents to monitor the child's growth and attend to his or her health needs (29).

Parents should be encouraged to bring their children to the health facility for growth monitoring once a month up to two years. Health workers should explain to care takers the meaning of the growth curve and how it can help depict a hidden sickness. Health workers may negotiate appropriate actions with care takers and ensure that the mother takes the card with her when she goes back home. Health workers must encourage her to share it with other family members especially the husband. Unfortunately, where growth monitoring is not included in the minimum package of health services, the growth card is not available. It is recommended that the growth card be considered an essential item in the delivery of quality care by the health system (29).

Regarding child growth monitoring and promotion survey study conducted in four major regions of Ethiopia (Amhara, Oromia, Tigray and SNNPR) shows that only 48% of children have either family health card or other growth card and 5.7 %of them have both kinds of health cards(16),Ethiopia Service Provision Assessment Plus Survey shows that 58%,51%, and 60% of health post have child scale, MUAC, and growth chart respectively(25).

Thus availability of program resource is one of the pillars that support the activities of community based nutrition program since without them; the service becomes impossible at community level.

3.3: **Compliance of health extension workers (Process)**

Process of health care are the activities of health care including assessment, diagnosis, treatment, rehabilitation, prevention, and patient education usually carried out by professional personnel, but also including other contributions to care, particularly by patients and their families. It is the detailed characteristics of health-care processes and can provide discriminating and valid judgments about improvement of the service. It is direct measure of implementation status of health care in which for better technical care should be performed with the responsible health care provider and also there should be good relationship between the client and the care provider. It measures whether a patient received what is known to be good care. They can refer to anything that is done as part of the encounter between a health extension worker and a client, including interpersonal processes, such as providing information and emotional support, as well as involving patients in decisions in a way that is consistent with their preferences(26).

Implementation statues of community based nutrition program is associated with the manner in which the service is provided or the process of care. For better outcome; health extension workers should follow the protocol/guideline while assessing, classifying the nutritional statues,

counseling and follow-up of the children. Furthermore, the services provided should be comprehensive, integrated and continue throughout follow-up period to achieve the goal of CBN (30).

The assessment survey report of UNICEF in four regions in Ethiopia (Oromia, Amhara, SNNPR, and Tigray) shows that two-third of the children age 0-35 months reported to possess either a family health card (FHC) or other growth card or both. FHC alone was reported to be owned by 23.7%, of the children in survey areas. The corresponding proportion of children that owned other growth card were 21.5%(16).

In the preceding of the survey, frequency of weighting within 3 months once, 2-3 times, and more than 3 times are 61.1, 36.6, and 2.3 respectively. Among HEWs who received supervision, most confirmed that visits included orientation about IYCF information (92.1% in Tigray and 90.5% in SNNPR). However, activities such as checking the availability ofIPC tools (inter personal communication tool) (31.6% of HEWs in Tigray and 20.3% in SNNPR) or providing tools (23.7% and 6.8% respectively) and providing immediate feedback 7.9% and 6.8% respectively were reported less often. During the weighting sessions including weighting the child 57.1%, community conversation 35.9%, individual counseling on child growth 31.8%, discussion on growth chart 26.8% and plotting on growth card 22.7% (16). Similar patterns of activities covered in supervision were reported by community volunteers. Supervision received by volunteers were conducted individually or in groups and often included orientation about IYCF information (95.7% in Tigray and 93.0% in SNNPR), but little else of other activities related to IYCF materials or corrective actions. Qualitative findings reinforced that supportive supervision did not cover all the expected elements. Supervisees were routinely checked for completed activities and given some technical information, but the availability and use of materials were not checked, and they rarely received advice on ways to improve on their mistakes or how to complete their activities under constraints(18).

3.4: **Acceptability of the service (outcome)**

Outcomes are taken to mean changes (desirable or undesirable) in individuals and populations that can be attributed to health care. An outcome of health care can include: changes in health status; changes in knowledge acquired by care takers and family members that may influence future care; changes in the behavior of care takers or family members that may influence future health and satisfaction of client and their family members with the care received and its outcomes (31).

One of the pillars of improving quality of health services is measuring and addressing client satisfaction. Client satisfaction is the level of satisfaction that clients experience after having used a service/care process and is of fundamental importance as a measure of the quality of

care, because it reflects the difference between the expected services and the perception or actual experience of the service. Whereas expectations of the service rendered are influenced by past experiences, external influences, personal needs and word of mouth (32).

In Ethiopia,58 percent of infants under 6 months are exclusively breastfed. Contrary to recommendation by WHO that children under age 6 months should be exclusively breastfed, 17 percent of infants 0-5 months consume plain water, 5 percent consume non-milk liquids or other milk, and 11 percent consume complementary foods in addition to breast milk. Five percent of infants under age 6 months are not breastfed at all. The percentage exclusively breastfed decreases sharply with age from 74 percent of infants age 0-1 month to 64 percent of those age 2-3 months and, further, to 36 percent of infants age 4-5 months. Nine percent of infants under 6 months use a bottle with a nipple, a practice that is discouraged because of the risk of illness to the child. It is recommended that a child continues to breastfeed until age 2. However, in Ethiopia, the percentage of children who are currently breastfeeding decreases from 91 percent among children age 12-17 months to 76 percent among children age 18-23 months (16).

Mothers'/caretakers' knowledge of a breastfeeding and complementary food by intervention group, CBN evaluation survey, percent who said breastfeeding should be initiated immediately after birth 56.0, 58.4, and 62.9, and percent who said children should be given only breast milk up to age 6 months 77.1, 77.5, and 76.6 in three intervention area.

Most mothers 83.1% report to know about colostrum. Only 27.9% of the women saw colostrum's as a first immunization to the newborn. A relatively higher portion of these women 51.3% said colostrum's is beneficial for child growth. On the other hand,26.9 % of the women who knew about colostrum's didn't report any benefit of colostrum's, and further asked the type of nutrition information they received from HEWs. It appears that most women reported to have received some important information from HEWs that include, in order of priority, information on exclusive breastfeeding (66.4%-80.2%), complementary feeding 62%, child/weight/growth 45.4% and on giving plumpynut to their child 32.4%(16).

The study conducted to assess Client/care taker satisfaction within health service program in Ethiopia indicated the socioeconomic nature of thecare takers especially maternal education and incomelevel besides its intrinsic health nature has association with client satisfaction(32).

In summary the implementation of CBN services can be measured using conceptual framework and was described in figure 3 below.

3.5: **Conceptual framework**

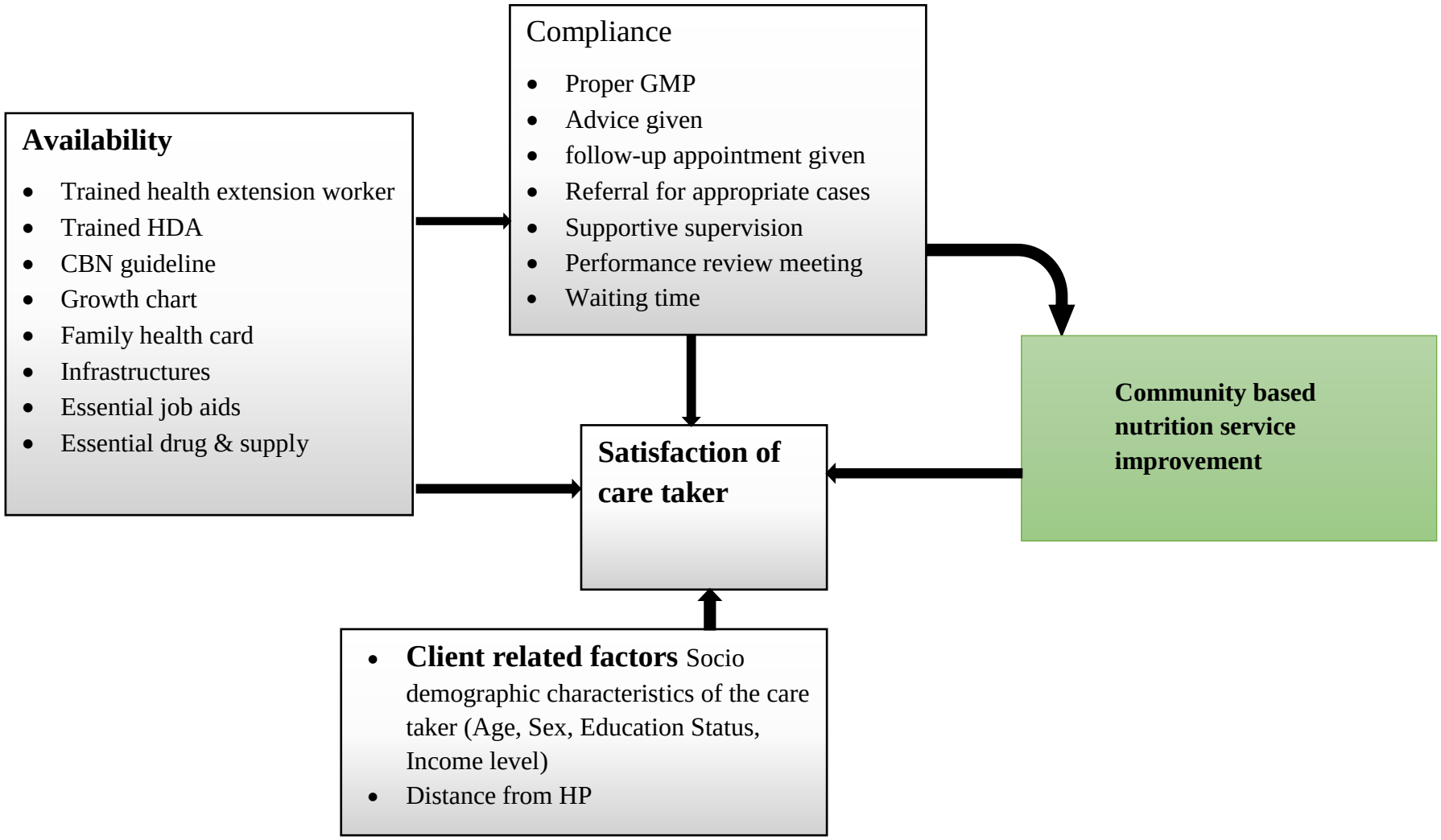

Figure :Conceptual framework for evaluation of CBN program in Soro woreda, Hadiya zone, 2017adapted from literatures(32, 33)

Chapter 4: Evaluation Questions and Objectives

4.1: Evaluation Questions.

1. Do the community based Nutrition service providers comply with national CBN guidelines in delivering the service? If not, Why?

2. Are the resources needed to provide CBN available? If not, Why?

3. Are the client satisfied with CBN service provided for them in health post of soro woreda? If not, Why?

4. What are the factors that affect satisfaction of Care takers on community based nutrition program in health post of soro woreda.

4.2: Objectives

4.2.1: General Objective

To Evaluate the process of community based nutrition program at Health post level in soro woreda Hadiya Zone, south Ethiopia 2017 G.C

4.2.2: Specific Objectives `

1. To assess the availability of resources required to provide community based nutrition program at Health post level in soro woreda Hadiya Zone, south Ethiopia.

2. To describe the compliance of Community based nutrition service providers at Soro woreda Health post with the CBN guidelines.

3. To determine the level of satisfaction among users of CBN services at Health post level in soro woreda Hadiya Zone, south Ethiopia.

4. To determine factors associated with client satisfaction on CBN program at Health post level in soro woreda Hadiya Zone, south Ethiopia.

Chapter 5: Evaluation Methods

5.1: Study area and period

The study wasconducted in Soro woreda Hadiya zone SNNPR from March 5, 2017-April 7, 2017.Soro woreda is one of 10 woredas in Hadiya zone, which is located 32 kilometers far from zonal town, Hosanna; 235 kilometers from Addis Ababa, the capital city of Ethiopia; and 194 kilometers from regional city, Hawassa. It is bordered by Lemo woreda in the East,Duna woreda in the North, Gombora woreda in the South and Oromia region&Yem Special Woreda in the west (Fig 2). The woreda is administratively divided in to 46 rural and 3 urban kebeles. 2016/17 G.C Finance & economy bureau records indicated that the woreda has a total population of 241,577 from which Male 120,307 (49.8%), Female 121,270 (50.2%) with 49,301households (4.9 person/HH). The woreda has 10 health centers, out of this one is administered by NGO (Catholic health center) and 46 health posts. It also has 1 middle clinic, 5 lower clinics and 3 drug stores which are privately owned. In all HPs CBN service are given by HEWs routinely(20).

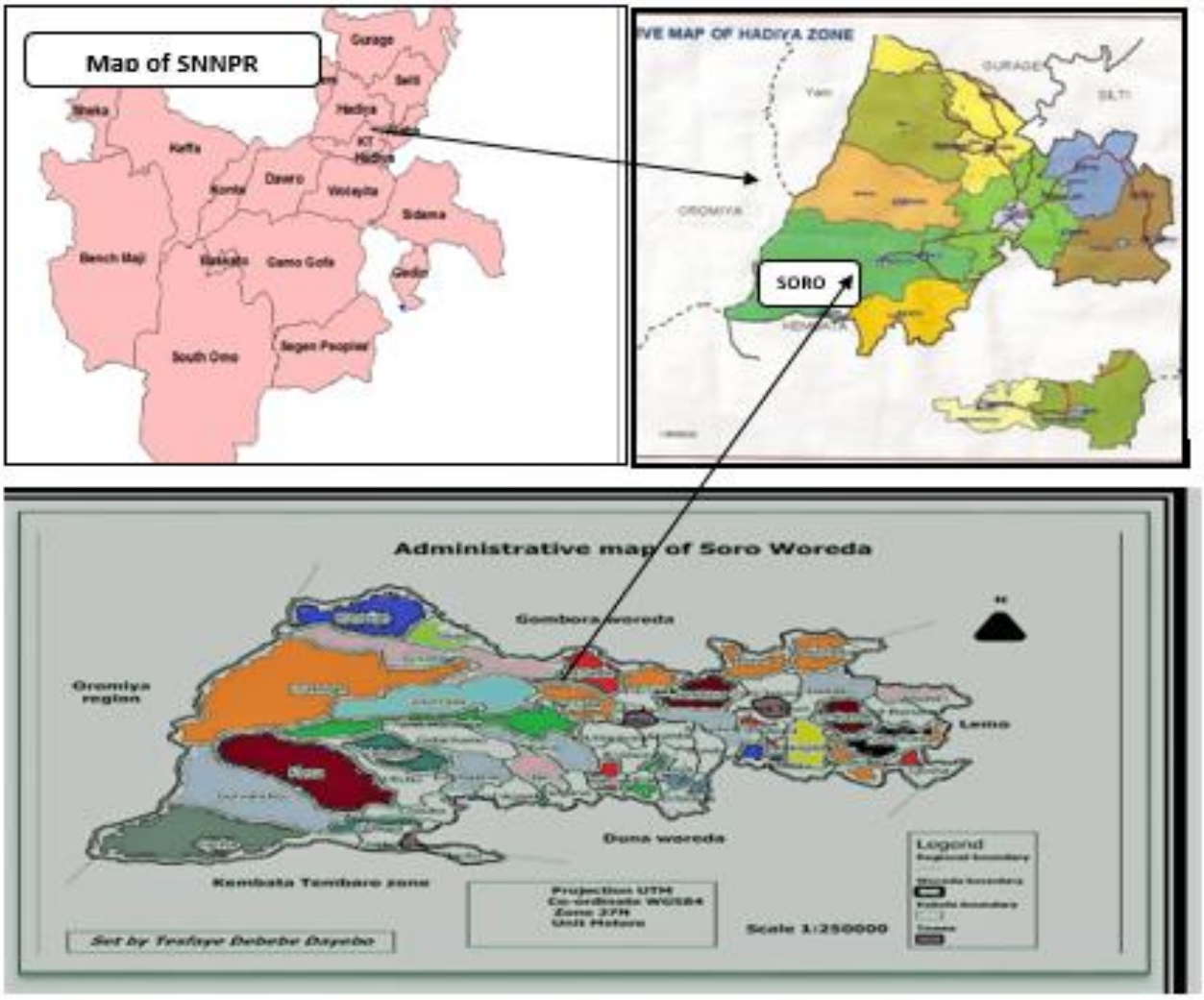

Figure :Administrative map of soro woreda/Evaluation area

5.2: **Evaluation approach**

Formative evaluation is process oriented and involves a systematic collection of information to assist decision-makers during planning or implementation stages of a program and often it begins during program development and continues throughout the life of the program. It uses evaluation methods to improve the way a program is delivered. It is conducted with the intention of improving a program through information gathered (34, 35).So a formative evaluation approach was used with the intention of improving the strategy to make decisions about CBN program improvement in Soro woreda, Hadiya zone.

5.3: **Evaluation design**

Single case study design, with both qualitative and quantitative data was used. Mothers of under two children in the program and Health posts in Soro woredawere primary and secondary units of analysis, respectively.

The approach of Case study design with concurrent mixed method approach was used to evaluate the process of community based nutrition program. Qualitative and quantitative data was collected concurrently, analyzed separately, and integrated during interpretation of findings. By using this design, it is possible to understand the degree of implementation of CBN program in soro woreda, Hadiya zone. The case study design also helps to answer the evaluation questions by digging data retrospectively. So taking into consideration all above advantages of a case study shown by previous researchers(36).and the information that we need to get from the program in order to assess the implementation of the program, a case study design were found to be appropriate to assess client's satisfaction with the services that were provided by soro woreda Hadiya zone health posts.

5.4: **Focus and Dimension of evaluation**

5.4.1: Focus of evaluation

It is a process evaluation that focus on understanding, describing, testing and improving components of CBN programs' implementation theory components: program's organizational plan (activities to be accomplished, resources to be used and expected outputs) and Service Utilization Plan which involves assumptions taken by the program about uptake of services produced (value given by target population about CBN services(acceptability) (22).

5.4.2: Dimensions of CBN evaluation

This evaluation was assessed the availability, compliance and acceptability dimensions of implementation of the program.

Availability: The relationship of the volume and type of existing services (and re-sources) to the clients' volume and types of needs. It refers to the adequacy of the supplies, health care providers and service delivering infrastructures with their respective clients(31).

Compliance: refers to whether the activities are according to the standard or with the best practice or a state of being in accordance with the established guidelines, therefore, CBN activities of the Soro woreda health posts was assessed and compared with the CBN guideline for implementing CBN activities (31).

Acceptability: Conformity to client preference regarding accessibility, the patient-practitioner relationship, the amenities, the effect of care, and the cost of care (31).

5.5: **Indicators**

5.5.1: Availability indicators

1. Proportion of health post with trained health extension worker on CBN services.
2. Proportions of HP with family health card no stock out in the last threemonths.
3. Proportionof HPwith growth chartno stock out in the last three months.
4. Proportionof HP with functional weight scale.
5. Proportionof HP with CBN/GMP implementation guideline.
6. Proportion of HDA trained on CBN in available the Health post catchment area.
7. Proportion of HP withMUAC tape no stock out in the last three months.
8. Proportion of HP with posters and leaflets (IEC/BCC) materials related to GMP service.
9. Proportion of HP havingGMP registration book.
10. Proportion of HP with OTP quick reference book (for HEWs).
11. Proportion of HP with monthly reporting format.
12. Proportionof HPs with no stock out of Vitamin A in last three months.
13. Proportionof HPs with no stock out of deworming tablet(alebendazol) in last three months
14. Proportion of HP with clean water supply in the compound.

5.5.2: Indicator related to compliance

1. Proportionof HEWs show respect for care taker (greeting and offer seat)
2. Proportionof 0-24 month children weighted.

3. Proportionof 0-24 month children weighted and classified according to growth chart.
4. Proportionof Children's plotted their nutritional statuses on growth chart.
5. Proportionof Children checked for vitamin A supplementation status according to guideline
6. Proportion children checked for de-worming status according to guideline.
7. Proportion of SAM cases identified according to implementation guide line.
8. Proportion of identified complicated SAM case who are referred to the next level.
9. Proportion of care taker who counseled (breast feeding and complementary feeding)
10. Proportion of care taker who oriented about next GMP session.
11. Proportionof HEWs who attended CBN performance review meetingwith in the 3rd quarter.
12. Proportion of health post that received supportive supervision from the next supervisory body withinthe 3rdquarter.
13. Proportion of health posts which sent report timely to the next supervisory bodywith in quarter
14. Proportion of health posts which sent complete report to the next supervisory bodywithinquarter.

5.5.3: Acceptability indicator

1. Proportion of care takers who perceive that the health extension worker is competent enough to provide service
2. Proportion of care takers satisfied with the consultation time.
3. Proportion of care takers who perceived that HEWs explain the nutritional status of the child very well.
4. Proportion of care takers who perceived that the health extension worker showed respect for them.
5. Proportion of care taker satisfied with GMP service area.
6. Proportionof care takers who recommend the service for other family or friend.
7. Proportion of care takers who agree that they will return back to the same facility to receive the same service.
8. Proportion of care takers who perceived that the waiting time is reasonable.
9. Proportion of care taker satisfied with the travel time toget service.
10. Proportion of care takers of children referred with complicated SAM case who claim that the referral is reasonable.
11. Proportion of care takers satisfied on the overall CBN service provided.

5.6: **Variables**

This evaluation has the objective of assessing the satisfaction of care taker on service provided by health post of Soro woreda. Accordingly, the following were the dependent and independent variables selected for this study and checked the association if any.

Dependent variables

- Satisfaction of care takers on CBN services

Independent Variables

- Socio demographic characteristics of the care taker (Age, Education Level, marital status Income level, Family size)
- Consultation time
- Distance from HP
- Waiting time to get service
- Frequency of visit(GMP) service
- Receiving nutritional information.
- Family health card possession of care taker

5.7: **Populations and sampling**

5.7.1: Target population

All 0- 24 month children living in Soro Woreda, all HP in the woreda, all health extension workers in the woreda, all program focal persons in each HC,and program coordinator in the woreda.

5.7.2: Source Population

The source population of the study were all children under two years which have got CBN service,their care takers, HEWs who provide the service, all program focal persons in HCs and program coordinator in the woreda was source population.

5.7.3: Study Population

Under-two children care takers visiting selected HPs for GMP service, selected health post, health extension workers in selected HPs,CBN Program document, selected program focal persons and program coordinators were study population.

5.7.4: Study Unit

All health extension workers in the selected health Posts, CBN focal of selected health center, DPHP coordinator/CBN focal of woreda health offices for qualitative data; Children's care takers visiting all health posts during data collection period for exit interview, and program document for quantitative datawere study unit.

5.7.5: Sample Size determination

Soro woreda has 46 rural kebeles and these rural kebeles encompass 46 health posts. Based on WHO suggested to selecting health facility for the assessment mainly depends on the number of health facility that the statistical arguments for the determination of the sample size, the available funds and human resources should also be taken into consideration. For example, for total number of health facility of 9 or less, 10-19, 20-39,40-59 and 60-99 the proposed sample friction was all the HF, 50%,40%,30% and 20% selected respectively(37). For this evaluation from total 46 HP 30% of total HP or 14 HP was selected.

5.7.5.1: ***For exit interview:***

Single population proportion formulawas used to compute the sample size for exit interview, by taking proportion of satisfaction of care taker in CBN program, P=50% because there was no previously done study on proportion of satisfaction of care taker in CBN programand standard error was considered to be d=0.05 at 95% confidence interval.

$$n = \frac{(\mathbf{Z\alpha/2})\mathbf{d^2P(1-P)}}{d^2} \; n = \frac{(1.96)^2(0.5)(.5)}{(0.05)^2} = 384$$

=384 and by adding non response rate of 10%, total sample size was 422.

5.7.5.2: ***Direct observation:***

Total of 14 health Extension workerswere observed whenthey providing services for five clients consecutively, by selecting the first client conveniently, and the first two observations were neglected, totally 42client's observation sessions were conducted.

5.7.5.3: ***Key informants interview:***

Key informant interviews were used to assess general service delivery structure, training status of service providers, their experience and availability of resources, suggestions for improving CBN service. Key informant: Oneworeda CBN focal person, 14 health extension workers and three head of health centers/CBN focalwas interviewed. Totally 18 key informants were interviewed.

5.7.5.3: *Document review*

CBN/GMP register, Report, client cardperformance review meeting documents and supportive supervision documentwerereviewed.

5.7.5.4: *Resource inventory*

Availability of resources (staff, guidelines, supplies, etc.) and infrastructures like, water supply availability were checked according to the set criteria.

5.7.6: Sampling procedure/technique

Clients exit interview

After including all the health posts selected in the sampling process, all care takers who come with children for first time and follow up visit during data collection period was included in the sample without any interruption up to meeting predetermined sample size, 384, and convenient sampling technique was used for selection of study participants.

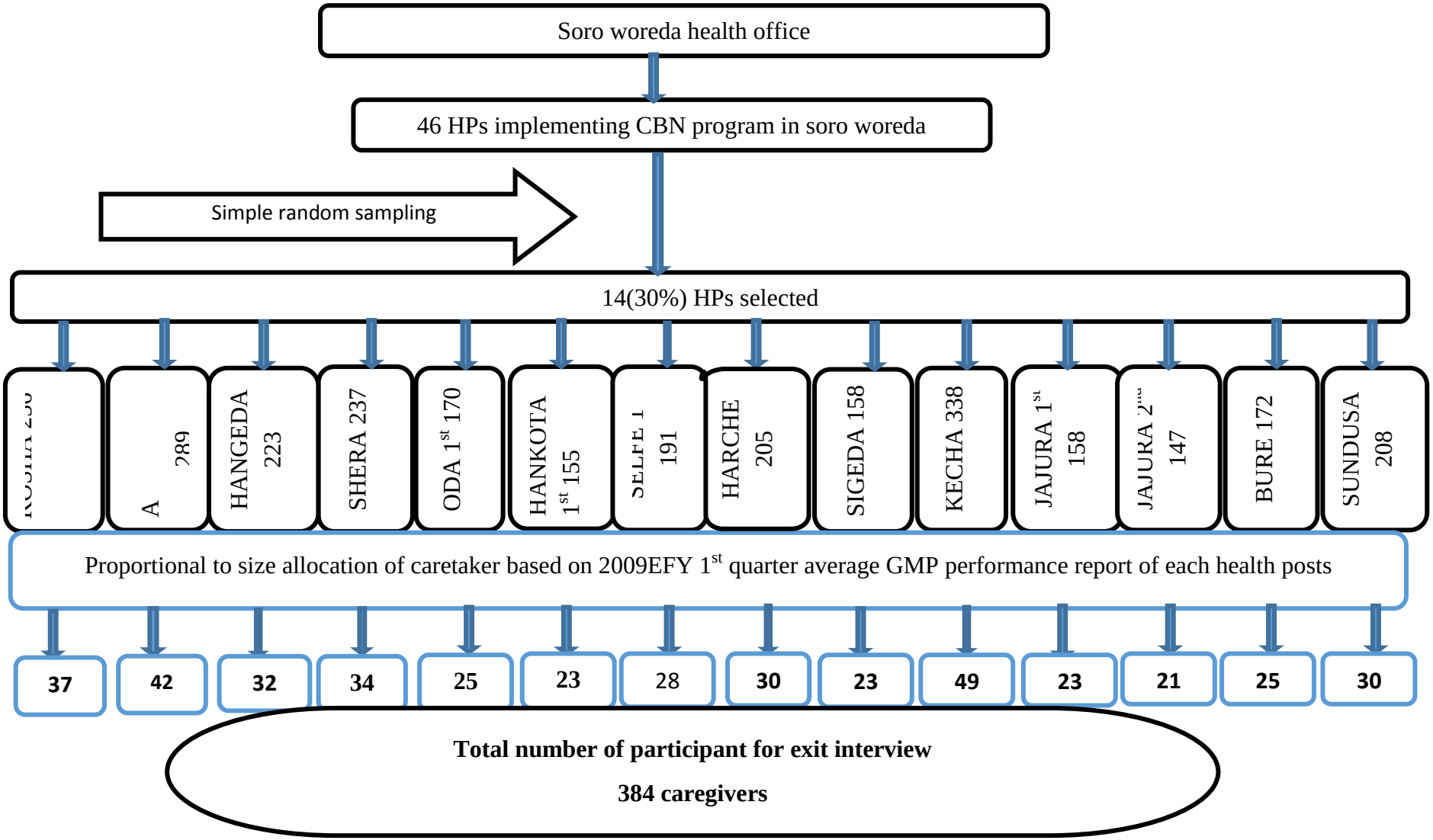

Figure : . Diagrammatical presentation of sampling procedure of selecting care taker for exit interview of CBN program evaluation, Soro woreda, Hadiya Zone 2017

Direct observation

This evaluation assessed the compliance of health extension workers through observing 70 under two year children while HEWs delivering GMP services at Health post. Five children per HEW from selected health posts during data collection period were observed. From these five, two of them were dropped to minimize Hawthorne effect and three GMP client per HEW were observed during data collection period.

Key informants interview

Purposive sampling technique was used for key informant's interview. program coordinators in woreda health office and HC focal person found those selected HP catchment area, and HEWs who assigned as coordinator of HPs were selected purposively to collect sufficient and relevant information which is related to CBN program, such as resources availability, monitoring strategy and the strength and weakness of the implementation of the program.

Document review

Documents were reviewed to ensure that the program is implemented with appropriate technical and material resources. For this reason, all clients' card during observation was put separately and at the end of the day the register was checked, and supportive supervision feedback, performance review meeting document, and monthly report of the 3rd quarter were checked.

Resource inventory

At convenient time for head of the facility or his representative all the data concerning structure was observed and when necessary concerned body was interviewed according to the operational definition of the items to be observed.

5.7.7: Inclusion and exclusion criteria

Inclusion criteria

Care taker of under-two children who come to health post for CBN/GMP in the evaluation period, and their document, Health care managers working on CBN program more than six months were included.

Exclusion criteria:

Those care takers, who come again within the study period for further consultation.

5.8: **Data Collection**

5.8.1: Development of data collection tools

A structured and semi-structured questionnaire and guideline were developed by referring different literatures, national CBN guideline and check lists(21, 38).

The questionnaire for the client exit interview was translated into Amharic then it wastranslated back to English to ensure consistency of questions. And pre-test was conducted 21(5%) of the total client at health Post other than the sampled health posts(Orcha HP, Keberbuya HP, and Checho HP) in the woreda. After pretest the quality of the tool further adjustment wasconducted to advance the credibility of the tool

CBN resource inventory tool: A structured questioner was developed containing three Parts- Infrastructure, human resource, CBN logistics (guidelines, recording and reporting tools). The tool was used assess the availability of program resources for the delivery of CBN services. And the list of resources were adopted from the program guideline of CBN(21).

***An in-depth interview guide for (health extension workers*)-** the tool was comprised of components such as background characteristics of the respondent; training and preparation; service organization and delivery; barriers to program implementation from the perspective of health extension workers and recommended solutions.

***An in-depth interview guide for program managers*: -**was comprised of components such as background characteristics of the respondent, general information related to CBN service, barriers to CBNprogram implementation.

An observation checklist: -structuredtool used to assess the compliance of health extension worker while delivering CBN service. The check list was developed by referring from nationalCBN guideline

Document review checklist: **-** was prepared based on CBN program guideline to assess the compliance of health extension workers(16).

Exit interview questionnaire: **-** A structured questionnaire was developed by referring different literatures and comprise of the following components: Socio-demographic characteristics of care takers and children, institutional factors, satisfaction of care takers on different components of service(16, 29, 32).

Data collectors

Data collectors werehealth professionalsBSc. and diploma having training on CBN and they were from other than study facility/area. For observation three HO/BSc nurses, for document review two HO/BSc

nurses, for exit interview a total of 6 diploma nurses, the in-depth interview was conducted by two Master degree holder in public health/HME, resource inventory in all health post was done by principal evaluator and for overall supervision principal evaluator with one MPH in Epidemiologist was participated.

The data collectors were trained on the content of the data to be collected, ethical issues to be addressed during gathering the data, how to communicate with respondents, how to use the data collection guide and tools by principal evaluator for 2 days. Supervisors were also trained on the content to be covered during data collectors training, on how to manage data collection process and the way to monitor the quality of data by principal evaluator.

5.8.2: Data collection field work.

Data was collected from each selected health posts through exit interview; document review; observation; resource inventory and in-depth interview of program personnel's and service providers.

Client exit Interview-It was conducted after each child received CBN services at health posts i.e.attheir exit from service. The first participant was selected conveniently and data collection was continued until the predetermined sample size was met. Further, for interview appropriate place out of disturbance of other clientwas arranged in order to protect the privacy of the respondent.

Document review-includes GMP registers and reportswas reviewed. The client registers were reviewed Consecutively based on observation order, in ordered to cross check and additionally report, supervision and performance review documents for the previous 3 monthswere reviewed.

Direct observation-The observations were conducted while the health extension workers deliver GMP services. Before conducting the observation, the data collector received consent from both the health extension worker and the client.

In-depth interview-wasconducted by the use of in-depth interview guide in which starting from program implementers and managers. The interview was conducted at health facilities (Woreda health offices, Health centers and Health posts) after accomplished document review, resource inventory and observation. Interview of health extension workers were conducted after an observation of client-provider interaction undertaken.

Resource inventory-was conducted by the use of resource inventory checklist, after direct observation by data collectors.

5.8.3: Data quality assurance

The following activities were done to ensure quality of data.

The data collection instrument was properly designed,the tools were pre tested in21(5%) of the sample size in non-selected health postsother than the sampled health posts (Orcha HP, Keberbuya HP, and Checho HP) which have similar contexts with the selected health posts in similar woreda before the actual data collection and some terminological adjustmentwas made accordingly, training for data collectors, continues supervision during data collection, data completeness, consistency was checked & onsite correction was given.

5.9: **Data management and analysis**

5.9.1: Data entry

The questionnaires were checked for consistency and completeness after data collection by principal evaluator together with data collectors and supervisor, consequently, any problems encountered was discussed among the evaluation team and solved immediately. Finally, the data were coded and entered to Epi data version 3.1and export to SPSS version 20 for processing.

5.9.2: Data cleaning

The data cleaning was done by principal investigator at field level and after entry to check coding error and missing values. Some errors which occurred during data collection wasdiscussed among supervisors and data collectors to be solved immediately in daily baseand the completeness of data checked daily. Additionally, the datawas cleaned by visualizing, calculating frequencies and sorting.

5.9.3: Data analysis

Quantitative data except data from exit interview was analyzed by using MS EXCEL. For exit interview. cleaned data from Epi-data version 3.1wasexported to SPSS version 20 for further analysis so that the results were mainly presented by using frequency tables and graphs. Univariate analysis was done to see the frequency, percent and mean of variables for descriptive results. Binary logistic regression used to determine the association between dependent variable and independent variables. And those variables which showed statistical significant value ($p< 0.25$) on bivariate analysis were selected for multivariate logistic regression to see the effect of confounding variable and p-value less than 0.05 was considered statically significant.

Satisfaction was rated by 11 items each having five point Likert scale from strongly dissatisfied one to strongly satisfied five. each satisfaction item wasanalyzed for their frequency. The client overall satisfaction level was classified above threshold score satisfied and belowthreshold score dissatisfiedby using demarcation threshold formula:(**Total highest Score-Total lowest score)/2 + Total lowest score**(39).regarding to qualitative result the recorded audio data were translated from the Amharic language to English by transcribing into word/written files. Final transcripts were compared against notes to ensure quality. The various responses were compared based on differences and similarities and

sorted into different themes. Quotes that best described the various themes and expressed what was said frequently in several participants were chosen.

Based on parameter of judgment each indicatorwasmeasured by their agreed score with observed value, the aggregate result of each indicator with in each dimensions. The result value of each dimension was aggregated, yielding the actual/total result of implementation level of the program then it was compared with implementation judgment criteria to notify the implementation level of community based nutrition program.

5.10: **Ethical issues**

Ethical clearance was secured from Jimma University College of public health and medical sciences ethical committee before the beginning of data collection activity. Written letter was obtained from the Soro woreda health office and from the concerning departments, in addition, official permission to selected Health Facilities, and each respondent was asked consent after explaining the purpose of the study to them. Confidentiality of the information given was maintained throughout the process of data collection. The evaluation team was trained on how to handle sensitive and emotional issues and on the importance of keeping confidentiality and conflict of interest was identified and dealt with openly and honestly, so that it does not compromise the evaluation processes and results.Evaluations was designed to assist organizations to address and effectively serve the needs of the full range of targeted participants.

As matter of utmost respect to the privacy of the studied clients, records were identified only by client registration numbers; no client or health care provider names was entered in the data record. The registers and chart review process was conducted at the end of the day in the class room itself to avoid unnecessary movement and displacement of client charts and plan documents.

Exit interview of the participants were interviewed after receiving written consent. For clients who refused to be interviewed, only reasons for refusal was asked.

5.11: **Evaluation dissemination plan**

Dissemination of findings is important step in the evaluation process because stakeholders should use the evaluation findings timely to take corrective action. The final evaluation report will be presented to Jimma University and valuable comments will be taken. One-day workshop will be organized and all stakeholders will be invited to participate for presentation of the evaluation findings. In addition, hard and electronic copies of the final report will be disseminated to stakeholders.

Finally, information use for decision making will be monitored by supporting the stakeholders during planning and monitoring including supportive supervision of the program.

Chapter 6: Result

6.1: Background characteristics of the study population

A total of 382 of study subjects were involved inexit interview Out of this 42 care takers were observed for the assessment of compliance the provider in accordance to guideline. During observation session the first two observations were neglected to minimize Hawthorn effect. In addition, facility inventory/audit were carried out in all study HPs and key informant interviews were conducted to supplement the quantitative result (one woreda health office program coordinator, three health center program focal and fourteen health extension workers were interviewed).

6.2: Availability of resource to provide community based nutrition services

6.2.1: Availability of Human Resource

In all Health posts except Kecha and 1st Hankota health post, there were two health extension workers. From those health extension workers, six of them, were upgraded their education level to level 4, and the rest of 20 health extensions were at level 3. All health extension workers except one HEW from one HP got CBN basic and refresher training by government and non-governmental organization in different times during the last seven years after started the program. In addition, ten health development leaders per kebele trained on CBN.

Most of key informants agreed on almost allhealth extension workers were trained; but they explained about a reason that high turnover of health center staff trained on CBN program as focal. Therefore, it leads to difficulty of support on CBN program.

A 25 years old Male BSc nurse experience of 2 years' head of health center said that.

"….. *Our health center staff almost all not trained on CBN program so that when we go for supportive supervision, we are faced problem to give support on CBN program, there is high turnover of trained health professionals."*

Another 23-year-old male Health officer head of health center with experience of 3 year & 3 months also added.

"If the trained health care providers were not in place, we are forced to give support on CBN program by untrained health worker with giving little information about the program..."

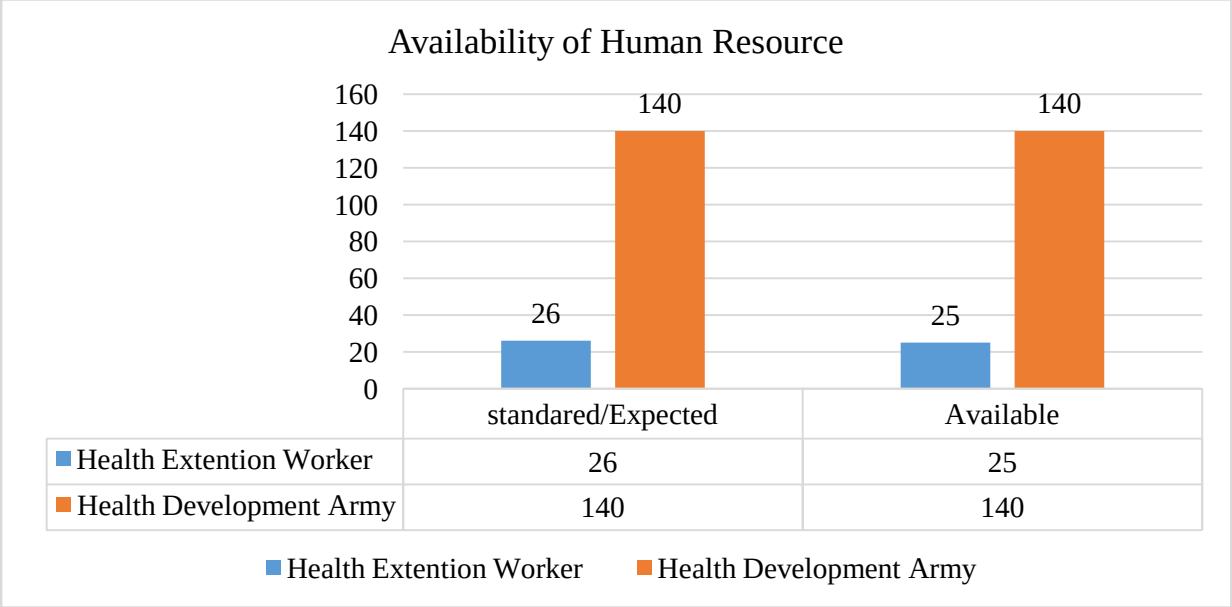

Figure :Availability of human resource for CBN program in Soro woreda Hadiya Zone, 2017

6.2.2: Guideline, Reporting and Recording Tool

From observed 14 health posts allofthemhadCBN guideline and (12)85.7% HPs hadOTP quick reference. All (14) HPs had Registration book, Monthly reporting format not stock out for six months, and Updated IEC/BCC materials was posted in 14 HPs, also from those observed HPs 10(71.4%) of them had growth chart.

A 25 years old Male BSc nurse experience of 2 years' head of health center Said.

"Mostly the trained health extension workers were not brought manuals and standard guideline provided for them during training to the health post. Instead they were taking to their home, for that reason updated program guideline and training manual not found some health post ..."

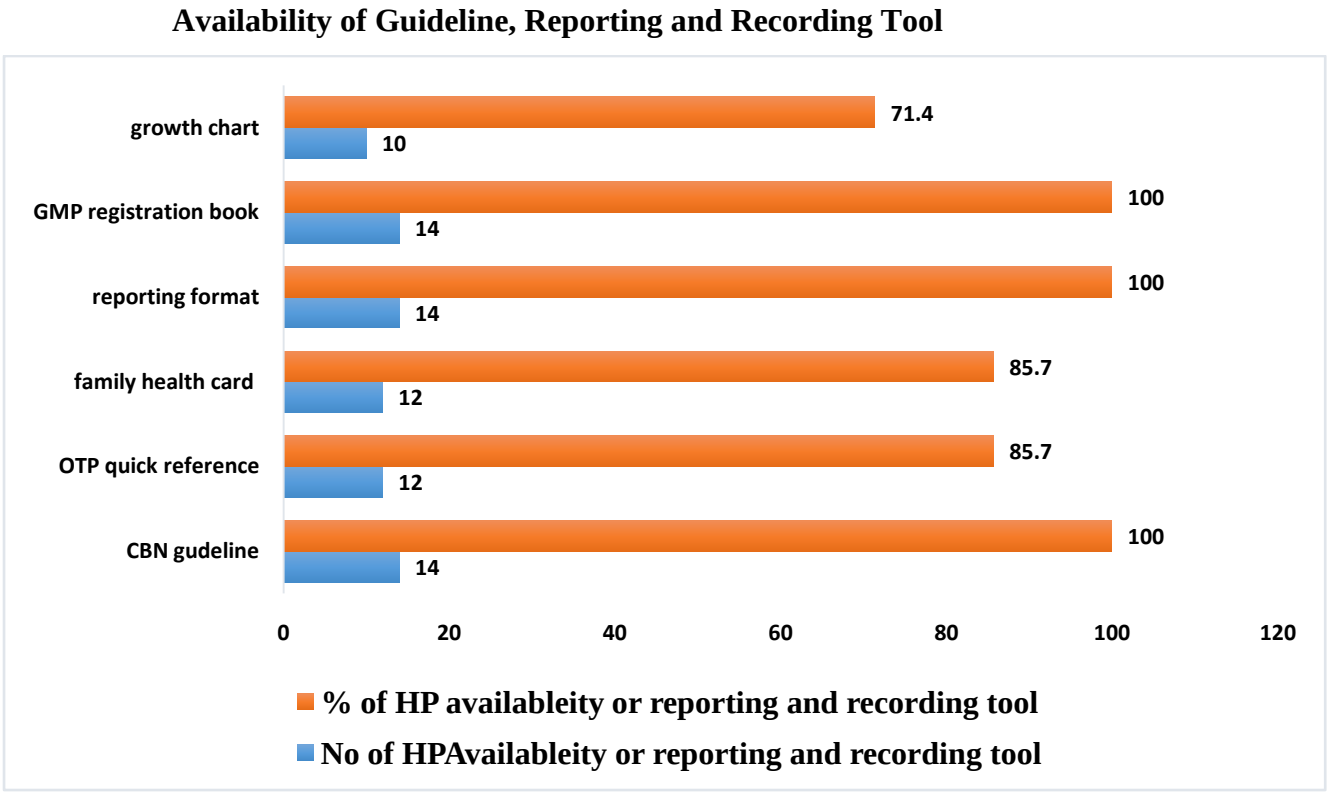

Figure :Availability of Guideline, Reporting and Recording Tools for CBN program in Soro woreda, Hadiya Zone, 2017

6.2.3: Availability of medical equipment's, drugs and infrastructure

Among observed Health Post all had MUAC measurement, weighing scale with basin (measuring weight of children) vitamin A capsule, and 4(28.6%) of health posthad height measurements (measuring height of children). In all HP no clean water supply in their compound.

A 36 years old HEW with service experience of 8 years.

"... most of the time we are brought water from our home for daily consumption, this is due to un availability of water supply in our heath post ...this has increase a burden for us in our daily activity."

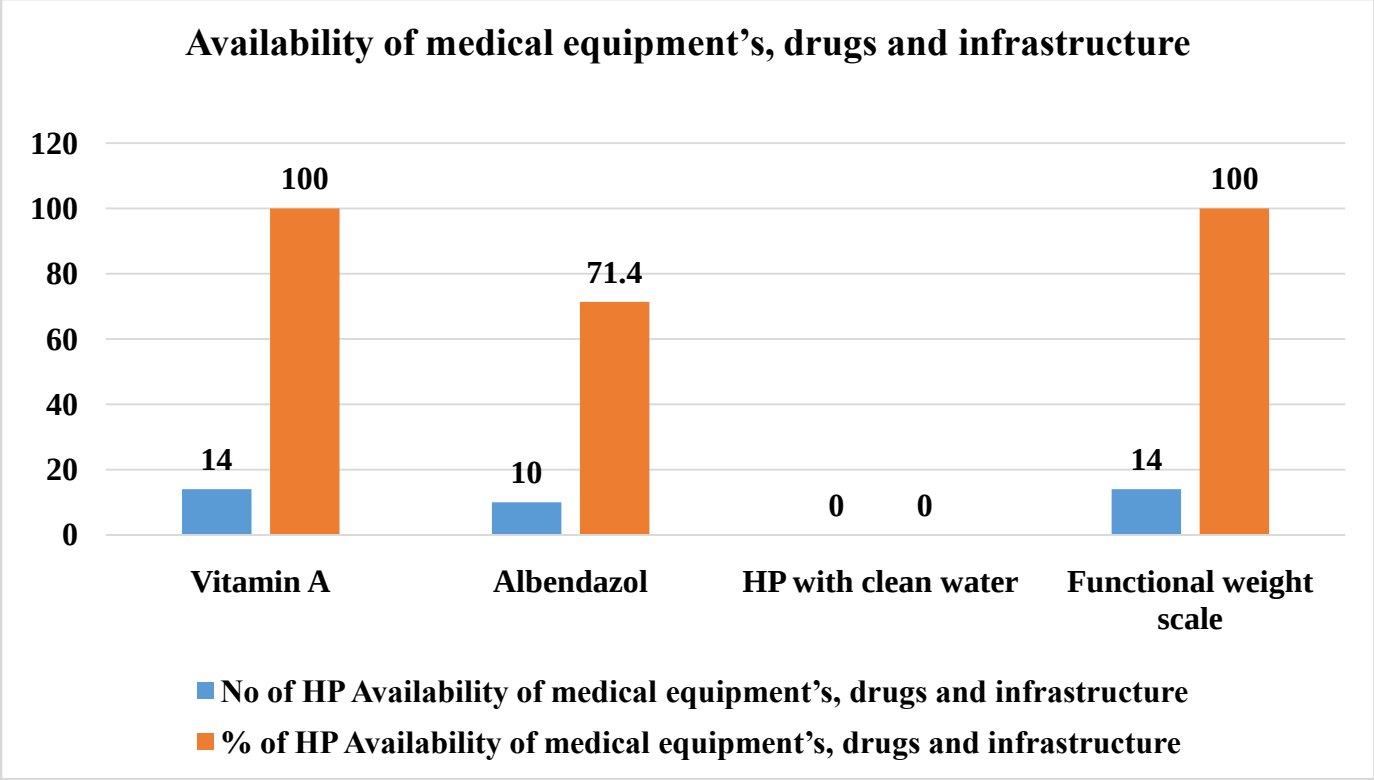

Figure :Availability of medical equipment's and infrastructure for CBN program in Soro woreda Hadiya Zone, 2017

In availability of program resource, the lowest result wasrecorded unavailabilityof clean and safe water supply in all health post compound, and 10(71.4%) of HPs had growth chart and deworming drug, and good result is recorded availability of guidelines, registration book, reportingtools, weight scale,13(92.9%)weretrained HEWs,12(85.7)of health post had family health card OTP quick reference. Overall an average implementation status of the program as per availability dimension is judged to be **good (85.7%).** The detail result of each item program resource is summarized in the following **(Table 2)**.

Table : Judgment matrix for availability dimension for CBN program in Soro woreda, Hadiya Zone, SNNPR 2017

Dimensions with indicators **Availability (35%)**	Agreed score	Observed score	Observed %	Judgment parameter
Proportion of health post with trained health extension worker on CBN services	10	9.2	92.2	[90–100]-V. Good [75 – 89] -Good [60-74] - Fair [< = 59] – poor
Proportion of HP with family health card no stock out in the last six month	7	6.0	85.7	
Proportion of HP with no stock out growth chart in the last six month	8	5.7	71.4	
Proportion of HP with Functional weight scale.	8	8.0	100	
Proportion of HP with CBN implementation guideline.	8	8.0	100	
Proportion of HDA trained on CBN in available the health post catchment area.	7	7.0	100	
Proportion of HP with anthropometric measurements(MUAC)	8	8.0	100	
Proportion of HP with posters and leaflets (IEC/BCC) materials related to malnutrition services	7	5.5	78.6	
Proportion of HP having standard GMP registration book	5	5.0	100	
Proportion of HP with OTP quick reference book (for HEWs)	5	4.3	85.7	
Proportion of HP with monthly reporting format	7	7.0	100	
Proportion HPs with no stock out of Vitamin A in last three months.	7	7.0	100	
Proportion HPs with no stock out of (Alebendazol) deworming tab in last three months.	7	5.0	71.4	
Proportion of HP with clean water in the compound	6	0.0	0	
Over all availability dimension	100	85.7		**Good**

6.3: **Health Extension worker's compliance with the CBN guideline**

Compliance of 14 health extension workers with national CBN guideline was evaluated at 14 health posts by reviewing document and direct observation while HEWs were providing CBN services for 42 under-two children at their corresponding health posts.

6.3.1: Direct observation of health extension workers while delivering CBN services.

Out of 42 observed under two children when got the service, 41(97.6%) of care takers were greeted and offer seat, allchildren were measured the weight,36(85.7%) of children were screened with anthropometric measurement (Weight/age). The other evaluation of direct observation finding shows that38(90.5%)of care taker were counseled (about breast feeding and complementary feeding), 35(83.3%) of care taker were oriented about next session, 39(92.9 %) of children were correctly classified for malnutrition and all SAM case with complication were referred.

6.3.2: Document and record review.

Thirty-six (85.7%) of children were identified vitamin A status, (88 %) of children were identified deworming status, 3(21.4%) of Health posts were attending CBN performance review meeting in the last three months, 9(64.3%) of health posts were received supportive supervision from the next supervisory body in the last three months, 12(85.7%) of health posts sent report timely to the next supervisory body and 9 (64. 3%) of health posts send complete report to the next supervisory body.

Key informant interview also showed that poor compliance of HEWs for the program mainly due to weak supportive supervision system of managerial and technical stuffs(health worker).

A 33 years old HEW key informant said

"…through the year there was no supportive supervision from woreda and health center specifically on CBN services, due to this our skills on CBN was not improved especially new report format and chart classification and an additional updated information regarding to the program"

Another health extension worker whose age is 26, and five-year experience also added.

"…. In different time from different level supportive supervision team was come to our health post from health center, woreda health office, Zonal health department, and different non-governmental organizations, but I don't know what the reason no one conducted support on CBN program"

A 33 years old HEW key informant also added.

"…even though two health professionals were assigned to our health post for technical support weekly, but they did not support us on CBN because they were not trained on CBN."

In compliance of the health extension workers with national guideline of CBN program lowest result were recorded in CBN performance review meeting 3(21.4%) of HPwere attended,9(64.3%) of HPswere received supportive supervision specially focus on CBN program and 9 (64.3%)of health posts were send complete report to the next supervisory body, and good result is recorded 41(97.6) of care takers were greeted and offer seat by HEWs, 42(100%) of children measured their weight, 36(85.7) ofchildren were screened according to anthropometric measurement(W/A).

Thirty-six (85.7%) of children check and supplement vitamin A, seven (88%) of children dewormed, and38(90.5%) of care takerscounseling about breast feeding and complementary feeding also35(85.3%) of care taker got informationwhen to return for next visit. Overall on average implementation status of the program as per compliance dimension is determined to be **good (83.2%)**. The detail result of each indicator for compliance of health extension workers were summarized in the following(Table)

CHILD FEEDING PRACTICES

Timely Initiation of breastfeeding:

It is recommended that children be put to the breast immediately or within one hour after birth this chart shows that the finding of this study. Among children 0-24 months the proportion that started breastfeeding within an hour, after one hour, after one day, and not mentioned were 60 %, 35 %, 4 % and 1 %, respectively.

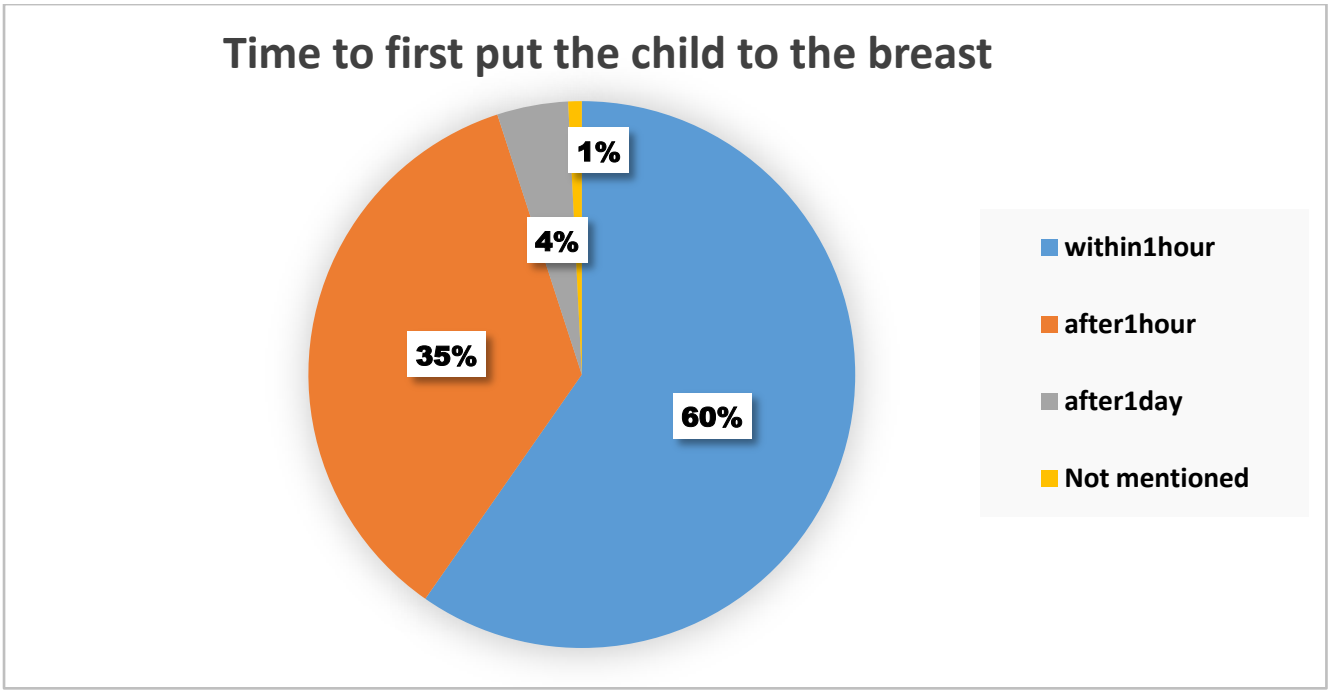

Figure :first initiation of breast feeding in the study area during CBN program evaluation at health post of soro woreda.

Exclusive breastfeeding among children

WHO recommends that children be exclusively breastfed fed only breast milk with no other liquids (including water) or food on demand for the first 6 months of life. Care taker reported about duration of e EBF 68%, 18%, 9%, 4% and 1% of care taker EBF less than 6 months, 3-6 months, for 6 months, more than 6 months and not mentioned respectively.

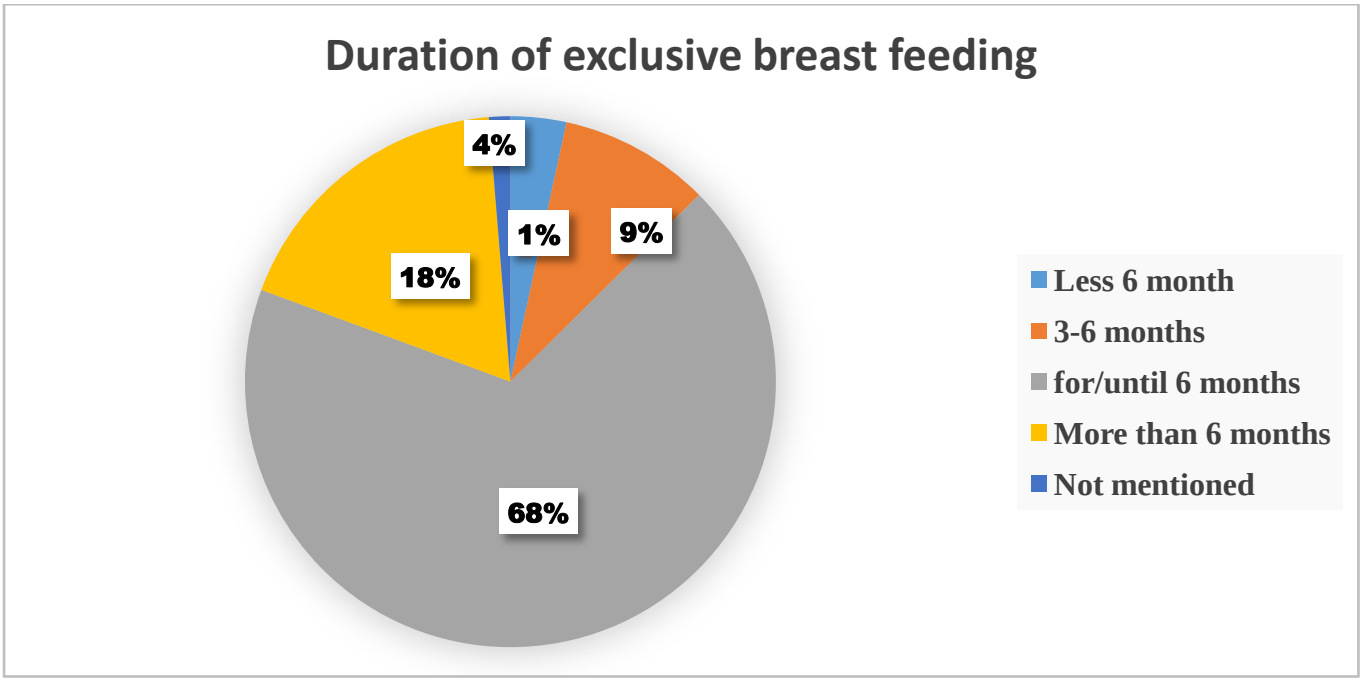

Figure :Duration of exclusive breast feeding in the study area during CBN program evaluation at health post of soro woreda

Frequency of breastfeeding:

Mothers of children 0-24 months were asked to report the number of times they breastfed their child in the 24 hrs. preceding the interview. The question was asked separately for the number of time the child breastfed during the day and night time. On the whole over 51 % of the children reported to breastfed more than 8 times, 33 % of them 6-8 times,8.4 % 4-6 times and 1.6 % the previous 24 hrs. When asked to report the frequency of breastfeeding.

Pre-lacteal feeding:

Pre-lacteal feeding is giving liquids or foods other than breast milk prior to the establishment of regular breastfeeding. In this survey we asked respondents whether they gave liquids or foods to their children immediately after birth only 8.6 % of care takers had Saied yes, preceding the interview What food or fluid provide before the first breast, reported to have had 4.7%, 1.8%, 1.6 %, and 0.6% gave water, water with sugar, butter and tea respectively.

Dimensions and indicators **Compliance (40%)**	**Agreed scores**	**Observed score**	**Observed %**	**Judgment parameter**
Proportion of sessions were HEWs show respect for care taker (greeting and offer seat)	6	5.9	97.6	[91–100]-V. Good [75 – 90] -Good [61-74] - Fair [< = 60] – poor
Proportion of 0-24 month children Screened according to anthropometric measurement (W/A scale)	7	7.0	100	
Proportion of 0-24 month children weighted and classified according to growth chart /recommended W/A scale.	8	6.9	85.7	
Proportion of Children identified nutritional status according to standard.	8	7.2	90	
Proportion of children checked for vitamin A supplementation status according to guideline	8	6.9	85.7	
Proportion children checked for de-worming status according to guideline.	8	7.0	88	
Proportion of SAM cases identify according to implementation guide line.	7	6.5	92.9	
Proportion of identified complicated SAM case who are referred to the next level.	7	7.0	100	

Proportion of care taker who are got counseling (breast feeding and complementary feeding)	8	7.2	90.5	
Proportion of care taker who are oriented about next session.	7	5.8	83.3	
Proportion of HEWs attended CBN performance review meeting.	6	1.3	21.4	
Proportion of health post received supportive supervision from the next supervisory body with in quarter	8	5.1	64.3	
Proportion of health posts which sent report timely to the next supervisory body with in quarter	6	5.1	85.7	
Proportion of health posts which sent complete report to the next supervisory body with in quarter	6	4.3	71.4	
Overall score of compliance dimension	100	83.2		**GOOD**

Table : Analysis and judgment matrix for provider's compliance dimension of CBN program in Soro Woreda, Hadiya Zone, SNNPR 2017

6.4: **Acceptability dimension**

6.4.1: Socio demographic characteristics of the study participants

Three hundred eighty-two (382) care takers exit interview were conducted in 14 health posts of Soro woreda Hadiya zone. The response rate was 99.4%. The majority of the care takers 49% age b/n 26-30. One hundred fifty-seven (41.1%) Were able to read and write only, but had no formal education. Two hundred seventy-seven (72.5%) of the care takers were protestant. Two hundred five (53.7%) were yearly family income between 5000 and 10000 Ethiopian birr. Three hundred forty-two(89.5%) of the care takers were married,more than half of the care takers 255 (66.8%) were house wives (unemployed) and followed trader/merchant 83(21.7%).The children come with their caretaker 210(55%) were age b/n 12-24monthes, followed 134(35.1%) were age b/n 6-11month, 38(9.9) Less 6 months of age category(Table 5)

Table : Socio-demographic characteristics of Community based nutrition service care taker at health post of Soro woreda, Hadiya Zone, 2017.

Socio demographic characteristics care taker(n=382)	Frequency (n=382)	Percent (%)

Age of care taker(year)		
15-20	8	2.1
21-25	85	22.3
26-30	187	49.0
31-35	61	16.0
>35	41	10.7
Marital status of care taker		
married	342	89.5
single	24	6.3
divorced	3	.8
widowed	13	3.4
Religion		
orthodox	60	15.7
protestant	277	72.5
Muslim	6	1.6
catholic	38	9.9
Others	1	.3
Educational level of care taker		
no education	150	39.3
Write and read only	157	41.1
Primary (1-8)	45	11.8
Secondary (9-12)	26	6.8
Collage and above	4	1.0
Socio demographic characteristics care taker(n=382)	**Frequency (n=382)**	**Percent (%)**
Occupation		
Government employee	15	3.9
trader/merchant	83	21.7
Daily labor	26	6.8
housewife	255	66.8
farmer	3	.8
Annual income of the family		
Less than 5000 ETB	20	5.2
5000-10000 ETB	205	53.7
More than10000 ETB	157	41.1
Age of the child		
Less 6month	38	9.9
6-11month	134	35.1

12-24monthes	210	55.0

**g ove ha

6.4.2: Care takers awareness and services delivered

Care taker were asked they have received any message on nutrition from the HEWs and the majority 360 (94.2%) of care takers responded that received nutritional information and 34 (8.9 %) was not received nutritional information.

Respondent/ caretakers were further asked they received nutritional statues of the child from HEWs and majority 349(91.2%)of care takers respondedwere told them about nutritional statues of their children, and 22(5.8%) of care takers respondedwere not told. Three hundred forty-two (87.7%) care taker had family health card and the rest 40(10.5%) care taker had no family health cared.

Table :Services provided to participants of CBN services in in Soro woreda, Hadiya Zone Health posts, 2017(N=382)

Variables	Category	Frequency	Percentage
Under two children frequency of weighing (participate on GMP service) in the last three months	Once	155	40.6
	Two times	182	47.6
	Three times	37	9.7
	Did not participate	8	2.1
Care taker participated in community conversation in the last three months	Once	145	38.0
	Two times	140	36.6
	Three times	32	8.4

	Did not participate	65	17.0
Children's werereceived vitamin A every six month, starting from at age of six month.	Yes	289	75.7
	No	63	16.5
	Lessthan6month	30	7.9
Care taker had received nutritional information from HEWs	Yes	360	94.2
	No	22	5.8
Care taker received specific appointment from HEWs when to come back.	yes	348	91.1
	No	34	8.9
Care takers seek treatment or care from.	Gov't hospital	8	2.1
	Health center	215	56.3
	Health post	147	38.5
	Private health institution	10	2.6
	Others	2	0.5

6.4.3: Care taker satisfaction level on service acceptability of CBN service in Health Post of Soro woreda.

The threshold level of client satisfaction on the CBN services taken was 36 based on demarcation threshold formula, and scored less than the threshold was dissatisfied, and above the threshold were satisfied(39).

Three hundred six(80.1%)of care taker were agreed that the health extension worker wascompetent enough to provide service and 289(75.7%) ofcare takers were satisfied with the consultation time, two hundred ninety (75.7%) of care takers who perceived that HEWs explain the nutritional status of the child very well. And also 310(81.2%) of care taker were satisfied on HEW respect of them when received the service, 293 (76.7%) of care taker satisfied on appropriateness of service area, 302(79.1%)

of respondent were explain by their satisfaction to agree recommend the service for other family and friends.

Satisfaction on time management: waiting time to get a service of CBN 273(71.5%) of care takers were satisfied, 300(78.5%) of care takers were satisfied on management and referral, and 225(58.9%) of care taker were satisfied with the time took home to facility and finally 307(80.4%) were satisfied on the overall CBN service.

Table :Satisfaction level of care taker with demarcation threshold formula of CBN services in Soro Woreda Hadiya zone, 2017(N=382)

Variables	Scored above the mean satisfaction score (satisfied)		Scored below the mean satisfaction score (not satisfied)	
	#	%	#	%
Proportion of care takers who perceive that the health extension worker is competent enough to provide service	306	80.1	76	19.9
Proportion of care takers satisfied with the consultation time.	289	75.7	93	24.3
Proportion of care takers who perceived that HEWs explain the nutritional status of the	289	75.7	93	24.3

child very well.				
Proportion of care takers who perceived that the health extension worker showed respect for them.	310	81.2	72	18.8
Proportion of care taker satisfied with appropriateness of GMP service area.	293	76.7	89	23.3
Proportion of care takers who promised to recommend the service for other family or friend.	302	79.1	80	20.9
Proportion of care takers who agree that they will return back to the same facility to receive service.	296	77.5	86	22.5
Proportion of care takers who perceived that the waiting time is reasonable.	273	71.5	273	71.5
Proportion of care taker satisfied with the travel time to get service.	225	58.9	157	41.1
Proportion of care takers who claim that the referral/manage is reasonable.	300	78.5	82	21.5
Proportion of care takers who satisfied on the overall CBN service provided	307	80.4	75	19.6
Overall satisfaction	319	83.5	63	16.5

Table :Care takers satisfaction level on CBN service in Soro woreda Hadiya zone, April, 2017

S. N	Satisfaction items on Acceptability dimension	Strongly Dissatisfied No.(%)	Dissatisfied No.(%)	Neutral No.(%)	Satisfied No.(%)	Strongly satisfied No.(%)
1	Proportion of care takers who perceive that the health extension worker is competent enough to provide service	2(0.5%)	11(2.9%)	63(16.5%)	212(55.5%)	94(24.6%)
2	Proportion of care takers satisfied with the consultation time.	2(0.5%)	14(3.7%)	77(20.5%)	207(54.2%)	82(21.5%)

S. N	Satisfaction items on Acceptability dimension	Strongly Dissatisfied	Dissatisfied	Neutral	Satisfied	Strongly satisfied
		No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
3	Proportion of care takers who perceived that HEWs explain the nutritional status of the child very well.	3(0.8%)	21(5.5%)	69(18.1%)	216(56.5%)	73(19.1%)
4	Proportion of care takers who perceived that the health extension worker showed respect for them.	3(0.8%)	10(2.6%)	59(15.4%)	210(55.0%)	100(26.2%)
5	Proportion of care taker satisfied with appropriateness of GMP service area.	2(0.5%)	16(4.2%)	71(18.6%)	231(60.5%)	62(16.2%)
6	Proportion of care takers who promised to recommend the service for other family or friend.	2(0.5%)	23(6.0%)	55(14.4%)	248(64.9%)	54(14.1%)
7	Proportion of care takers who agree that they will return back to the same facility to receive service.	4(1.0%)	21(5.5%)	61(16.0%)	226(59.2%)	70(18.3%)
8	Proportion of care takers who perceived that the waiting time is reasonable.	4(1.0%)	47(12.3%)	58(15.2%)	227(59.4%)	46(12.0%)
9	Proportion of care taker satisfied with the travel time to get service.	1(0.3%)	34(8.9%)	122(31.9%)	192(50.3%)	33(8.6%)
10	Proportion of care takers who claim that the referral/manage is reasonable.	1(0.3%0	31(8.1%)	50(13.1%)	249(65.2%)	51(13.4%)
11	Proportion of care takers who satisfied on the overall CBN service provided	2(0.5%)	33(8.8%)	40(10.5%)	256(67%)	51(13.4%)

6.5: **Factor affecting care taker satisfaction on service acceptability of CBN**

6.5.1: Bivariate analysis of variables associated with CBN services

One of the objective of this evaluation is assessing factors related with care taker satisfaction on service acceptability. So, bivariate logistic regression analysis was done to identify variables having association with care taker satisfaction on service acceptability of community based nutrition. In this analysis variable including, nutritional information, frequency of GMP service, participation on community conversation, waiting time, possession of family health card and socio-demographic variables (age, marital status, education, occupation, religion, family size, and income) were tested. However, in this

analysis frequency of GMP service, waiting time, nutritional information, distance from health post, possession of family health card, next session appointment, and socio-demographic variables (income) were found significant association with care taker satisfaction ($p<0.25$).

Table :Binary logistic regression analysis result of care taker satisfaction on Community based nutrition program in Soro woreda Hadiya zone, April, 2017(n=382)

Variables		Frequency	Care taker satisfaction		P-value	COR	95% CI	
			Not satisfied	Satisfied				
			Count	Count			Lower	Higher
Distance from home to HP	30-60 minute	156	35	126	1	1		
	<30 minute	221	28	193	.020	1.915	1.110	3.303
Possessing of family health card	No	45	13	32	**1**	1		
	Yes	337	50	287	.020	2.332	1.145	4.749
Income level per year	less5000	20	3	17	.581	.688	.183	2.593
	5000-10,000	205	43	162	.011	.457	.250	.838
	>10,000	157	17	140	1	1		
Nutritional information	No	56	15	41	.001	2.733		
	Yes	326	48	278	.027	2.119	1.089	4.125
Counseled and Appointed	No	34	14	20	1	1		
	Yes	348	49	299	.000	4.271	2.024	9.014
Frequency of GMP service	Once	155	35	120	.036	1.832	1.040	3.225
	Two times	182	25	157	.030	5.104	1.169	22.285
	Three times	37	2	35	.511	2.042	.243	17.161
	No	8	1	7	1	1		
Waiting time to get CBN service	>=30 minute	65	20	45	**1**	1		
	<30 minute	317	43	274	.001	2.832	1.528	5.249

6.5.2: Multivariate analysis of variables associated with CBN services

Those variables significant (p<0.25) for bivariate analysis, their association with care taker satisfaction were tested and analyzed for multivariate logistic regression analysis using backward LR method. Therefore, those variables having significant association with care taker satisfaction on service acceptability of Community based nutrition service were identified as predictor of care taker satisfaction. As a result of multivariate analysis result show that possessing of family health card, Counseled and Appointed, and Waiting time to get CBN service were found to be the predictors of care taker's satisfaction on service acceptability.

Table :Multivariate logistic regression analysis result of care taker's satisfaction on Community based in Soro woreda Hadiya zone, April, 2017

Variables		Frequency	Care taker satisfaction		P-value	AOR	95% CI	
			Not satisfied	Satisfied				
			Count	Count			Lower	Higher
Possessing of family health card	Yes	337	50	287	0.024	2.558	1.134	5.771
	No	45	13	32				
Counseled and Appointed	Yes	348	49	299	0.004	3.952	1.567	9.964
	No	34	14	20				
Waiting time to get CBN service	<30 minute	317	43	274	0.004	2.883	1.406	5.913
	>=30 minute	65	20	45				

Accordingly, those care takers who had Possessing of family health cardwere 2.5 times more likely satisfied with Community based nutrition service compare to care taker who had no Possessing of family health card**(AOR=2.558, 95% CI=1.134, 5.771).**Care taker who were counseled and appointed to next visit were 3.9 times more likely satisfied compare to care takers who werenot counseled and appointed to next visit**(AOR=3.952, 95% CI=1.567, 9.964).**Care takers who got service within 30 minute were 2.8 times more satisfied as compere to those who got more than 30 minutes (**AOR=2.883, 95% CI=1.406, 5.913)**.

Table :Judgment matrix for satisfaction of care taker on CBN services in Soro woreda Hadiya zone, 2017.

Dimensions with indicators **Satisfaction (Acceptability) (25)**	Agreed score	Observed score	Observed %	Judgment parameter
Proportion of care takers who perceive that the health extension worker is competent enough to provide service	11	8.8	80.1	[85 –100] -V. Good **[75– 84] -Good** [60-74] - Fair [< =59] - Poor
Proportion of care takers satisfied with the consultation time.	11	8.3	75.7	
Proportion of care takers who perceived that HEWs explain the nutritional status of the child very well.	10	7.6	75.7	
Proportion of care takers who perceived that the health extension worker showed respect for them.	10	8.1	81.2	
Proportion of care taker satisfied with appropriateness of GMP service area.	11	8.4	76.7	
Proportion of care takers who promised to recommend the service for other family or friend.	8	6.3	79.1	
Proportion of care takers who agree that they will return back to the same facility to receive service.	7	5.4	77.5	
Proportion of care takers who perceived that the waiting time is reasonable.	9	6.4	71.5	
Proportion of care taker satisfied with the travel time to get service.	8	4.7	58.9	
Proportion of care takers who claim that the referral/manage is reasonable.	7	5.5	78.5	
Proportion of care takers who satisfied on the overall CBN service provided	8	6.4	80.4	
Average scores of Satisfaction (100%)	**75.9 %**			**GOOD**

6.6: **Judgment matrix for overall implementation of CBN Program**

The overall level implementation of Community based nutrition service in health post of Soro woreda Hadiya zone; it is achieved **GOOD** and with the overall judgment result of **82.2 %** according to the sated indicators.

Table :Overall judgment matrix and analysis of CBN services in health Post of Soro woreda Hadiya zone, Southern Ethiopia, 2017

Dimension	**Agreed score**	**Observed score**	**Present achieved**	**Judgment criteria**
Availability	35	29.9	85.7%	**[85 –100] -V. Good**
Compliance	40	33.3	83.2%	**[75– 84] –Good**
Acceptability	25	19	75.9%	**[60-74] – Fair** **[< =59] – Poor**
Total score	**100**	**82.2**		**GOOD**

Chapter 7: Discussion

This study has attempted to evaluate the process of Community based nutrition program in health post of Soro woreda, Hadiya Zone, Southern Ethiopia. Sustaining and improve Community based nutrition service in general and GMP in particular is an issue of concern to government at community level to decrease nutritional problem especially with increase in participation rate on GMP (growth monitoring and promotion) service, as a result of reaching zero sever underweight, decreases sever acute malnutrition and problems related with nutrition(33).

Therefore, understanding the level of implementation of Community based nutrition is crucial to identify important and basic decision making information to primary stakeholders including Soro woreda management bodies and other stakeholders to optimally ensure the organization to meet its strategic objectives of the program.

7.1: **Availability of resource to provide CBN**

The overall judgment of availability of CBN program resources was good, and all health posts had CBN guide line, registration book and monthly reporting formatwith not stock out for six months. From total of 14 health posts (12)85.7% HPs have an OTP quick reference, and Updated IEC/BCC materials was posted in all HPs, also from those observed HPs 10(71.4%) of them had growth chart. This finding indicate little improvement when compared with evaluation survey done in Ethiopia of CBN program in 2011(16), and Implementation Evaluation of Nutrition Interventions for Children from Conception to Age 2 done in south Africa shows Guidelines and protocols for most nutrition interventions were available at >80% of the facilities visited. The exceptions were the guidelines for the Management of Severe Malnutrition (74% of facilities) and Infant and Young Child Feeding (68% of facilities) comparable to this finding(40).

Availability of medical equipment's, drugs and infrastructure is fundamental to implement good service health care and client satisfaction(41)In this study, the availability of all essential drugs and supplies Among Observed Health Post all had MUAC (measure mid arm of the children), weighing scale with basin (measuring weight of children), vitamin A capsule,functional thermometer, and 10(71.4%) of them had deworming tablet (Alebendazol). Among 14 HPs 4(28.6%) have height measurements (measuring height of children). Regarding to infrastructure in all HP no clean water supply in their compound.

This finding indicate little improvement except clean water supply when compared with Ethiopia Service Provision Assessment Plus Survey shows that70%, 66%, 58%,51%, and 60% of health

post have Vitamin A, deworming tab, child scale, MUAC, and growth chart respectively(25) This difference might be due to the coverage difference of the study in local level and country level.

Clean water supply was important to deliver any service at health facility level including CBN services, but the study shows that unavailability of clean water supply all observed HP. This finding comparable with the study conducted on children with severe acute malnutrition admitted to therapeutic feeding centers in Southern Region of Ethiopia indicated that 15% of health posts had clean and safe water (14)This might be dueto poor coverage of functional pipe water in the kebeles and the installation was not set at the beginning of health post construction as reported from one of the woreda coordinators of CBN program coordinator.

Evaluating of trained human resources was one of the perspectives; it is required to implement planned activities and to achieve intended objectives of the program. According to current study majority 92.2% of the health extension worker and 100 % health development team leader were trained on community based nutrition program at different times during the last five years. This evaluation finding was better to compare evaluation study done in Tigray and SNNPR shows that trained HEWs 92.5% and 67.7%, HAD/volunteers69.8% and 65.9% in Tigray and SNNPR respectively(42)

Almost all HEWs trained in line with the standard of national CBN guideline which recommended that all service provider(HEWs) in health post and health worker were trained per-health center as program focalmust trained at least one times in the in the last five year(33, 43).Currently in contrast to this unavailability of trained health workeron CBN as program focalin some health center and one HEW from one HP were not trained.

The finding from key informant interview support this finding that most of key informants agreed on the unavailability of trained health care provider in some health centeras a focal, due to high turnover. Therefore, it leads difficulty to give support for HEWs on CBN program.

7.2: **Compliance of service provision**

According to judgment matrix of compliance dimension over all compliance of health extension workers with national CBN guide line was good with scoring of 83.2%. Direct Observation findings indicated that All observed under two year children wereweighted, and this result is better than study done to assessment of counselling on infant and young child feeding in Ghana which indicate 66% of children were weighted(44), and other findings of this study shows 85.7% classified their nutritional status according to growth chart, 85.7% checked vitamin A supplementation status,92.9% severely underweight children checked SAM. The finding is better

than the survey done in three region of Ethiopia, 64.9%, 83%, and 80% checked nutritional status, Vitamin A supplementation statues, and checked SAMstatus respectively(16).

By this study 90.5% care taker got counseling about breast feeding and complementary feeding, this is better comparable to evaluation study in Ethiopia, SNNPR, and counseling in complementary feeding and breast feeding 78.3% and 76.1% respectively(42).However, CBN performance review meeting and receiving supportive super vision from the next supervisory body result were showed that 21.4% and 64.3% respectively. This is not appropriate as per national guideline(45).

This finding of supportive supervision indicate little improvement when compared with the study done two region of Ethiopiashows thatonly 52.5% of HEWs in Tigray and 33.7% in SNNPR reported having received supervisory visits(42).as one of the HC program focal person this problem might be happen because of irregular supportive supervision from the HC and interruption of performance review meeting with HEWsdue to lack of concern on CBN program.

7.3: **Care taker satisfaction on service**

In this evaluation, acceptability of CBN services by care takers was measured by satisfaction. Overall satisfaction of services provided to them was 76.1%. This finding is comparable to the study conducted to assess client satisfaction with in Jimma overall satisfaction which 77.0%(46), and less than the study conducted in Hawassa, SNNPR in which 80.1% of client satisfied (37). The waiting time to get service of CBN 80.5% of care taker were satisfied. The result seems similar with study done client satisfaction with quality of health care in rural Bangladesh (80%) of client were satisfied by the waiting time(47). Study conducted in four African countries, waiting times were nearly always considerably longer at public facilities, at public sector health centers roughly 40% of care takers reported problems with waiting times at public clinics in Kenya(48),And also in this study (75.7%) care takers satisfied with the consultation time, This finding is lower compare with study conduct rural Bangladesh (96%) of care taker were satisfied on consultation time(47). This difference might be due to subjective nature of overall satisfaction which could be explained by different literatures used different dimensions of satisfaction, there were no uniform judgment in each of these literatures and social desirability couldn't also be excluded for this difference.

7.3.1: Factor affecting care taker satisfaction on CBN service provision in Soro Woreda

In the multivariate analysis result, those variables having significant association with care taker satisfaction on service acceptability of Community based nutrition service were identified as predictor of care taker satisfaction. As a result of multivariate analysis result show that possessing

of family health card, Nutritional information, Counseled and Appointed, and Waiting time to get CBN service were found to be the predictors of care taker's satisfaction on service acceptability in Health post of soro woreda.

This evaluation showed that care takers who had Possessing of family health cardwere 2.5 times more likely satisfied with Community based nutrition service compare to care taker who had no Possessing of family health card**(AOR=2.558, 95% CI=1.134, 5.771).**Care taker who were counseled and appointed to next visit were 3.9 times more likely satisfied compare to care takers who werenot counseled and appointed to next visit **(AOR=3.952, 95% CI=1.567, 9.964).**Care takers who got service within 30 minute or less 2.8 times more satisfied as compere to those who got more than 30 minutes (**AOR=2.883, 95% CI=1.406, 5.913)**. This result is comparable to study done in walayita sodo, SNNPR **(AOR=3.16, 95% CI=(1.37-7.25)**care taker whowaited less than or equal to 30 minutes in waiting area were to be 3.1 times more satisfied than those who were waited 30 minutes and above **(49).**The difference might be due to subjective nature of the respondents because measures of satisfaction depend on subjective response of the clients. Some times with similar situation different level of satisfaction on service users and also were used different variables to measure client satisfaction.

Limitation of the study

Since the study was done at Health Post level it might have been overestimate the results related to satisfactions. It is possible that not satisfied care takers might not come to health post. It is recognized that limitations that may arise from providers who had shown their best behavioral responses during the observation of care taker provider interaction (Hawthorne effect). Moreover, care takers had shown politenessand social desirability biasduring the exit Interview.

To minimize those limitation, we had taken measure like; for limitations that may arise from providers who had shown their best behavioral responses during the observation the first two observations were dropped.

Chapter 8: Conclusion and Recommendations

8.1: **Conclusion**

Process evaluation of community based nutrition program was judged to be good with good availability of necessary resources especially trained human resource and other necessary material for CBN; good compliance of health extension workers with national CBN guideline, besides poor performance review meeting conducted only three (Kosha, Hangeda, and Kecha HPs), and Supportive supervision was conducted for only nine out of 14 health posts in the last three months.

Regarding the availability of resources (physical or Human) the result of this evaluation shows that; sufficient availability of trained health extension workers, medical/basic equipment, recording and reporting format in each health post with in sufficient(six-month stock) amount were very important to accomplish the intended objectives of the program in the woreda. However, inaccessibility of water supply in all health posts affect the quality of service and also unavailability of trained health worker in some health centers were problem to support HEWs on CBN program.

Concerning on the compliance of health extension worker during providing the service, the judgment was fall in GOOD category, and almost allobserved health extension who found in the selected health post follow standard guideline to assess and classify nutritional status of the children, and during counseling ofcare takers were somewhat in appropriate way counseled, in contrast to those good result low score recorded supportive supervision and performance review meeting were problem need to be improvement.

Judgment on the service acceptability where perceived satisfied by care takers were GOOD with respect to agreed judgment criteria. In conclusion, possessing of family health card, counseled and appointed (received information on revisit), and waiting time to get service were the main predictor variables of care taker satisfaction in this study.

The evaluation result of this study concluded that the overall implementation of Community based nutrition program in Health Posts of Soro Woreda was GOOD as per-settled judgment criteria with key stakeholders during EA phase.

8.2. Recommendations

The findings from this study have important implications for program improvement, demand generation and service provision. Below are recommendations to strengthen the CBN program in general and CBN in particular in Health Post of Soro woreda:

Hadiya zone health department attention to be Continues monitoring and regular supervisionof the program for improve performance of the program with different standard check list.

The Soro woreda administration and concerned sectors was expected to solve the problems of basic infrastructures like water supply by sitting priority to health post.

The Soro WoHO has to communicate with or in collaboration with Zone health department, Regional health Bureau and other NGO's bodies to increase number of trained staffs at health center level to competent to support the program. Also need to Continues monitoring and regular supervision of the program was needed for improve performance of the program with different standard check list.

Health centers give a Continues supervision for each health posts around the catchment.

The Health Post again give emphasis to minimize those issues that most of the care takers were not satisfied, and in each procedure during providing service and follow-up giving of attention and conducting as per national guideline is very important.

Chapter 9: Meta evaluation

Good evaluation requires that evaluation themselves be evaluated in order to check evaluations for problems such as bias, technical error, administrative difficulties and misuse. This will help to improve ongoing evaluation activities and to assess the merits of completed evaluation efforts (50)

Evaluation of the evaluation was conducted after performing all the procedure to synthesis the final report of this evaluation by principal evaluator; Meta evaluation was conducted by evaluator near to the study area who graduated HME. By using standardized checklist adopted from American Joint committee of Evaluation(51)

9.1: **Utility Standard**

During EA all stakeholders were engaged, those who have an interest on the program were clearly ensured and identified. This evaluation ensures stakeholder need on the evaluation question, indicators and judgment value based on their agreement. The evaluator was ensured credibility by competing enough (professional and experienced) and perform activity as far as his professional limit other issues were consulted with other professionals. The evaluator was made sure that the collected data are answering the stakeholder most important evaluation question (merit and worth). And in order to increase the likelihood of the evaluation utility the evaluator encourage and confirm the stakeholders to participated throughout the evaluation level from planning up to reporting and following. The report of this thesis was avoided jargon, ambiguity and uncertainty, so it was presented in way that comprise of clear description. Final report was disseminated as planned timeline that enhance the effective utilization of evaluation report by key stakeholders.

9.2: **Feasibility Standard**

In order to minimize disruption, the evaluation procedures were practical, to alleviate problems related to this issues the evaluator make sure that the method used for this thesis is fit for the study and minimal. Eight data collectors and one supervisors were recruited for data collection. They were recruited from other than study facility to minimize bias and one days training were provided on the data collection tool for both supervisors and data collectors & also pre-tested the tool away from sampled study area were carrying out. This thesis was recognized, monitored and balanced the difference between culture and politics of the study area, through the anticipation of different position of interested group or individuals in the study obtain support and recognition from leaders and stakeholders.

9.3: **Propriety Standard**

Formal written agreement on the evaluation was on hand basically on the indicators and judgment value that safeguard to develop mutual respect and trust between evaluator and stakeholders.

This evaluation was designed and conducted in a way that protects the welfare dignity and right of all stakeholders with whom they interact in the course of evaluation and the participants are not threatened or harmed. The evaluation was completed and fair in its examination and recording of strengths and weaknesses of the program being evaluated and conclusion and recommendations was reached to stakeholders in clear with in short period for improvement of the program.

9.4: **Accuracy Standard**

To maintain this evaluation accurate information was collected, processed, and reported in an evaluation systematic through reviewed of the collected information and detect if there are any errors were corrected. The evaluation was described the program emphasis on program component (the way program are functioning and working) to gain an understanding that the program inputs or resources, the activities or process. All procedures that the evaluation was followed and pass through were described. The information was gathered in relation to focus of evaluation and the evaluation questions of the study and applied variety of data collection methods to address those evaluation questions with detail description. To keep the validity different approaches were used during information gathering like recruit professionals on health working and have experience, provided training on the data collection tools, pre-test for check the quality of the tool and field work data completeness check.

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Annex:

Data collection Tools for CBN program

Jimma University Institute of Health Sciences, Public Health Department of Health Service Management Health Monitoring and Evaluation postgraduate's unit

Title: A data collection tool developed for Process evaluation of CBN program in selected health posts of Soro woreda Hadiya zone 2017.

Questionnaire I: Exit Interview with care takers of the child

Instruction: This is a questionnaire used to assess the adherence of care takers to the CBN services and health seeking behavior of care takers to community based nutrition program in the health posts. It was answered by care takers of under-two children visiting health posts for CBN services in soro woreda, Hadiya zone.

Consent form

I want to thank you for taking time to meet with me today. My name is _____from Jimma University and I would like to talk to you about your experiences participating in the community based nutrition program.

Specifically, as one of the components of our overall program evaluation we are assessing CBN program implementation in order to capture lessons that can be used in future to improve the implementation statues of program. The interview should take less than 30 minutes/an hour. All responses were kept confidential and your willingness for participation was respected. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are you willing to participate in this interview? Yes___ No____

S.no	Activities			Remark
I.	**Socio demographic information of respondent (care takers)**			
B 01	Name of the health post			
B 02	How old are you (age of care taker)?	1. 15-20 2. 21-25	3. 26-30 4. 31-34 5. ≥ 35	
B 03	Sex of care taker	1. M	2. F	
B 04	Family size_____			
B 05	What is your marital status	1. Married 2. Single	3. Widowed 4. Divorced/separated	
B 06	What is your religion?	1. Protestant 2. Orthodox 3. Muslim	4. Catholic 5. Other specify,_____	
B 07	What is your	1. No education	4. Grade 5-8	

	educational status?	2. No education but able to read and write 3. Grade 1-4	5. Grade 9-12 6. College and above	
B 08	What is your occupational status?	1. Government employee 2. Farmer 3. Trader/Merchant	4. House wife 5. Daily laborer 6. Other, specify_____	
B 09	Income level per year. Add all the income of the household (not only the care taker income)__....._____			
B 10	Mainly used Communication language?	1. Amharic 2. Hadiyisa 3. Kembatisa	3. Gurage 4. Others	
II Information on child health care practice				
B 11	Age of the child on months _____			
B 12	How long after birth did you first put *this child* to the breast? 1. Immediately within an hour. 2. After one hour 3. A days or after			
B 13	How long was duration of exclusive breast feeding? 1. 1-2 months 2. 3-6 months 3. For/until 6 month 4. More than 6 months 5. Don't know			
B14	Is your child on breast feeding?	1. Yes 2. No		
B 15	What is the frequency of breast feeding day and night?	1. Less than 4 times 2. 4-6 times 3. 6-8 times 4. 8-12 and more times		
B 16	Do you know the benefit of Breast feeding?	1. Yes 2. No		
B 17	If yes, QB 17 what is the benefit?	1. Child growth 2. Child health 3. Child food	4. For comfort not crying 5. Mother health 6. Prevention of pregnancy 7. Other	
B 18	Do you know colostrum?	1. Yes 2. No		
B 19	If yes, q B19, what is the benefit? 1. Use as a food 2. Medical purpose 3. For mother health 4. For hunger			

B 20	How long do you give BF in addition to complementary feeding? 1. Less than one year 2. 1-2 year 3. More than 2 year			
B 21	Did your infant receive any thing to drink or eat before the first breast -feeding? Yes…….1 No……..2 If no skip to q 24			
B 22	What food or fluid provided/ (more than one answer is possible don't read the choices probe for more) Butter ----------1 Water ----------2 Tea ----------3 Water and sugar ----------3 Others (specify) _____.....4			
B 23	When was complementary diet started? 1. <six month 2. At six month 3. >six month			
B 24	Type of additional foods in addition to BF 1. Gruel 2. Soft porridge 3. Cow milk 4. Formula milk 5. others			
B 25	What should the complementary food consist of 1. Only cereals /grain 2. Cereal and oil 3. Cereal and animal product 4. Cereal and vegetable/fruit 5. Other			
B 26	Do you use bottle for feeding?	1. Yes	2. No	
III. NFORMATION ON ANTEROPOMETRIC MASUREMENT AND FOLLOW UP CARE				
B 27	How long did it take to you to arrive at this health facility?	1. < 30 minute 2. 30 – 60 minute 3. >60 minute		
B 28	How long did you wait between the time you first arrived to the clinic and gets service?	1. < 30 minute 2. >= 30 minute		
B 29	Have you de-wormed your child every six month after 24months of age	1.Yes	2. No	
B 30	Have you supplied your child with vitamin A every six month after 6 months of age?	1.Yes	2.No	
B 31	How was the frequency of weighing in the last three months?	1. One times 2. Two times 3. Three times		

B 32	How many times did you participated in community conversation in the last three months?	1. One times 2. Two times 3. Three times	
B 33	Does your child have family health card?	1. Yes 2. No	
B 34	Where the family health card /growth card kept	1. Home 2. health post 3. Other specify	
B 35	Do you have received nutritional information from HEWs	1. yes 2. NO	
B 36	If yes, What type of information do you get?	1. Child growth 2. Exclude breast feeding 3. Complementary feeding 4. Family planning 5. Child caring practice	
B 37	Did health extension worker tell you your child's nutritional status?	1. Yes 2. No	
B 38	Did the health extension worker give a specific appointment when to come back at the HP? 1. Yes, 2. No		
Care during illness			
B 39	Do you give your child more food/fluid more than the usual During illness?	1. Yes 2. No	
B 40	From where did you seek treatment or care	1. Gov't hospital 2. Health center 3. Health post 4. Private health institution 5. Traditional healer 6. Others	
Water supply and usage			
B 41	What is your source of drinking water?	1. Pipe water 2. Protected Spring 3. Unprotected spring	4. Rain water 5. Protected well 6. Unprotected well 7. Other
B 42	Estimated water consumption of the house hold in litter ……		
Sanitation and hygiene			
B 43	Do you have factional latrine?	1.Yes 2. No	
B 44	Dose the latrine have hand washing facility for use after toilet 1. yes 2. No		

B 45	Do you have wash your hand after using toilet 1. Yes 2. No	

	Answer the following satisfaction level assessment questions as strongly agree, agree, neutral, disagree and strongly disagree when I ask you respective questions					
		Strongly dissatisfied 1	**Dissatisfied 2**	**Neutral 3**	**Satisfied 4**	**Strongly satisfied 5**
B 46	The health extension worker is competent enough to provide CBN service					
B 47	You are satisfied with the consultation time provided by HEW					
B 48	HEWs explain the nutritional status of the child very well					
B 49	Health extension worker respected you when you receive service					
B 50	You are satisfied with appropriateness of GMP service area.					
B 51	You are recommend the service for other family or friend					
B 52	Do you have willingness to participate continuously in CBN session.					
B 53	The time you waited is reasonable					
B 54	The distance from your home to the facility is reasonable					
B 55	It is reasonable to refer/manage your child at the facility					
B 56	You are satisfied on the overall CBN service provided.					

Closing: Thanks the care taker when finish your interview!!

Interviewer name: _____ Date: _____ Signature: _____

Checked by/supervisors name: _____ Checked date: _____ Signature: _____

በማህበረሰብተኮርስርአተምግብፕሮግራምአሰራርላይለሚደረገ ዉጥናትየ ተዘጋጀማጠይቅ

የ ጠያቂዎችመሚያ፡

ህጻናትየ እድገ ትክትትልአገ ልግሎትወስደወእንደወጠየ ህጻኑንተንከባካቢዎችቅረባቸወና ዛሬስለተሰጣቸወአገ ልግ ሎትአንድዳንድጥያቄዎችንለማጠየ ቅያላቸዉንፈቃደኛነ ትጠይቅ፤ ቀጥሎምፈቃደኛከሆኑያላችሁበትቦታለተገ ልጋዩዋ ምቹመሆኑንበማርጋገ ጥጥያቄዎችንቀጥል፡ ፡ ከነ ዚህህጻናትተንከባካቢዎችመካከልለማጠየ ቅፍቃደኛየ ሆኑትንብቻነ ወመጠየ ቅያለብህ/ሽ፡ ፡

<u>የ ተገ ልጋዮችፍቃደኛነ ትማጠየ ቅያፎርም፡ ፡</u>

ስሜ----------ይባላል፡ ፡

እዚህየ ምሰራወበሶሮወረዳየ ማህበረሰብተኮርስርአተምግብፕሮገ ራምአሰራርላይበሚደረገ ዉጥናትእንደሚጃሰብሳ ቢበመሆንሲሆን፤ ይህጥናትየ ሚደረገ ወበሶሮወረዳወስጥየ ሚ ኙጩ ኬላዎችበህጻናትየ እድገ ትክትትልአገ ልግሎትጊ ዜየ ሚሰጣቸዉንየ አገ ልገ ሎትአሰጣጥያለበትንደረጃለመለየ ትነ ው፡ ፡ ከዚህጥናትየ ሚ ኝሚጃለፕሮግራመሻሻልአ ገ ልግሎቱእንዴትመሰጠትእንደለበትእንድጠቁምይረደናል፡ ፡ እንደጥናቱአካልአድርገ ንዛሬወደጩ ኬላአገ ልጎ ሎት የ ማጠኑንየ ህጻናቱተንከባካቢዎችስለተሰጣቸወአገ ልግሎት፡ ሚጃ፡ በአገ ልግሎቱላይስለነ በራቸወእርካታናእን ዳናድየ ጠፍተጓዳኝማጠይቆችንእያደረግንነ ው፡ ፡ የ ምናደርገ ወማጠይቅያለርስዎፈቃድለማንምየ ሚነ ገ ርከመሆኑም ባሻግርአገ ልግሎቱንየ ሰጠቾዎትባለመያናሌሎችምቢሆኑአንዳቸወምእዚህሊገ ኙአይችሉም፡ ፡ ነ ገ ርግንበጥናቱላይየ ርስዎተሳትፎበፈቃደኝነ ትላይየ ተመሰረተናበጥናቱላይለመሳተፍከፈለጉጥያቄዎችንእንዳልጠይቅዎማሰቆምይቾች ላሉ፡ ፡ በጥናታችንላይባይሳተፉምንምአይነ ትየ ሚደረስብዎቅጣትየ ለምነ ገ ርግንየ ርስዎመሳተፍለጥናታችንከፍተኛ አስተዋፆአለዉ፡ ፡ ለመሳተፍፈቃደኛከሆኑበኋላእንኳህሳብመቀየ ርቢፈልጉመልሳይሊያስቆመኝናከጥናቱራስዎንሊ ያገ ሉይችላሉ፡ ፡

ጥያቄዎቹንመቀጠልእችላለሁ?

1. አዎ **2.** እይደለም

ማጠይቁየ ተጀመረበትሠዓት _____

1. ተጠናቋል **3.** ተቋርጧል

መ.ቁ _____

I. ስለተንከባካቢዋ የሚሞሉ /የሚከየቁ ሚጃዎች

E 01 የጡፍ ኬላዉስም _____

E 02 እድሜሽ ስንትነዉ(የተንከባካቢዋዕድሜ)**1. 15-20 2. 21-25 3. 26-30 4. 31-35 5. >35**

E 03 የተንከባካቢዋ/ወጻታ **1.** ወ 2. ሴ

E 04. የተገልጋይ ቤተሰብ ብዛት_____

E 05 የተንከባካቢዋየ ጋብቻሁኔታ **1.** ያገባች **2.** ያላገባች **3.** የተፋታች **4.** ቧላየሞተባት **5.** ሌላ

E 06 ሀይሞት **1.** ኦርቶዶክስ **2.** ፕሮቴስታንት **3.** ሞስሊም **4.** ካቶሊክ **5.** ሌላ

E 07 የትምህርትደረጃ **1.** መደበኛትምህርትየሌላት **2.** ማንበብናመጻፍየምትችል

3. የመጀመሪያደረጃት/ት **4.** ሁለተኛደረጃ **5.** ሦስተኛደረጃ

E 08 የሥራሁኔታ **1.**የመንግስትሠራተኛ **2.** ነጋዴ **3.** የቀንሠራተኛ **4.** የቤትእማኬት **5.** ሌላ

E 09 የቤተሰቡአማካዊገቢስንትነዉ.

1. ከ 5,000 ሺህ ብር በታች 2 .ከ5,000 – 10,000 ሺህ ብር 3.ከ10,000 ብር በላይ

E 10 ለመገባቢያየሚጠቀማቸትቋንቋምንድንነዉ(ከአንድ በላይ ካለ ይከበብ)

1. አማርኛ **2.** ሀድየኛ **3.** ከምጣተኛ **4.** ጉራጌኛ **5.** ሌላ

II በህጻናትእንክብካቤዙርያተንከባካቢዋንየሚከየ ቁጥቄዎች፡ ፡

E 11 የህጻኑ/ዋእድሜ(በወራትይገለጽ) _____

E 12 ይህህጻንከተወለደበኋላጡትየጠወመቼነበር?

1. በአንድሰአትዉስጥ **2.** ከአንድሰአትበኋላ **3.** ከአንድቀንበኋላ

E 13 ልጅሽንእስከመቼ ድረስነዉጡትብቻየምታጠቢዉ?

1. እስከ **2** ወር **2. 3-6** ወር **3.** ለ/እስከ **6** ወር **4.** ከ **6** ወር በላይ **5.** አላወቅም

E 14 ህጻኑአሁንምጡትእየጠባነዉ? መልሱአዎከሆነ ጥ.**15** ይጠየቅ፡ ፡ **1.** አዎ **2.** አይደለም

E 15 ህጻኑበቀንወስጥስንትጊዜይጠባል (ቀንናሜታንጨምሮ) ?

1. ከ **4** ጊዜያነሰ **2. 4 - 6** ጊዜ **3. 6 - 8** ጊዜ **4. 8** ጊዜናከዚያበላይ

E 16 ስለጡትማጥባትጥቅምታዉቂያለሽ? **1.** አዎ **2.** አላቅም

E 17 ጥያቄ **16** መልሱአዎከሆነ ጠቀሜታወያምንድንነዉከአንድ በላይ መልስ ከተገለጸ ከበብ **1.** ለህጻኑእድገት **2.** ለህጻኑጡፍ **3.** ህጻኑእንዳያለቅስ **4.** ለእናትየወጡይጠቅሜል **5.** እርግዝናንለማካላከል **6.** የተለየ

E 18 እንገርታዉቅያለሽ? **1.** አዎ **2.** አላወቅም

E 19 እንገር(የመጀመሪያ የእናት ጡት ወተት)ምንእንደሆነ ካወቀችጠቀሜታወያምንድንነዉ? ከአንድ በላ መልስ ካለ ይከበብ **1.** እንደምግብያገለግላል **2.** የመድሃኒትነ ትጠቀሜታአለዉ፡ ፡ **3.** የህጻኑንረሃብያስታግስለታል፡ ፡ **4.** የተለየ

E 20 ህጻኑ/ዋተጨማሪምግብከጀመረበኋላላምን ያህልጊዜታጠቢያለሽ

1. ከአንድአመትላነሰጊዜ **2. 1-2** ዓመት **3.** ከ **2** ዓመትበላይ

E 21 ህጻኑከተወለደበኋላከጡትሌላአስቀድሞየጣመወይምየበላዉነገርነበር ?

1. አዎ **2.** የለምመልሱየለምከሆነ ቀጣዩን **(22)** ጥያቄይዘለል፡ ፡

E 22 ህጻኑከተወለደበኋላከጡትሌላአስቀድሞጠጣመወይምየበላውምንነበር

1. ቅቤ **2.** ወሃ **3.** ሻይ **4.** ወሃበስኳር **5.** ሌላካለይገለጽ

E 23 ተጨማሪምግብለህጻኑመቼመጀመርአለበት

1. ከ **6** ወርበታች **2. 6** ወርእንደሞላዉ **3.** ከስድስትወርበኋላ

E 24 ተጨማሪምግብለህጻኑመጀመርያለበትበምንአይነ ትምግብነዉ

1. በአጥሚት **2.** ለስለስባለገንፎ **3.** በከብትወተት **4.** በዳቄትወተት **5.** ሌላ

E 25 ለህጻኑተጨማሪምግብሲዘጋጅከምንድንነ ወሚዘጋጀዉ **1.** ከእህልዘሮች(ስንዴ፤ በቆሎ፣ ማሽላ)

2. ከእህልዘሮችናዘይት **3.** ከእህልዘር ጥራጥሬና ከእንሰሳትተዋጽኦ

4. ከእህልዘሮችአትክልትናፍራፍሬዎች **5.** ከተገለጹትየተለየ

E 26 ህጻኑንለመመገብጠርሙትጠቀሚያለሽ? **1.** አዎ **2.** አልጠቀምም

III የምግብእጥረትልየ ታንበተመለከተ

E27 ከቤትሽ እስከጠፍ ኬላዉ/ እዚህእስከምትደርሺምንያህልሰአትይፈጅብሻል

1. ከ **30** ደቂቃያነሰ **2.** ከ **30** ደቂቃእስከ **60** ደቂቃ **3.** ከ **60** ደቂቃበላይ

E28 አገልግሎቱንከማግኘትሽበፊትምንያህልሰዓትጠበቅሽ

1. ከ **30** ደቂቃበታች **2.** ከ**30** ደቂቃበላይ

E 29 ላለፉትሶስትወራትስንትጊዜህጻኑለእድገ ትክትትልፕሮግራምመጥቷል?

1. አንድጊዜ**2 .** ሁለትጊዜ**3.** ሶስትጊዜ **4.** አልመጣም

E 30 ላለፉትሶስትወራትስንትጊዜበማህበረሰብዉይይትፕሮግራምተሳትፈሻል?

1. አንድጊዜ**2 .**ሁለትጊዜ**3.** ሶስትጊዜ **4.** አልተሳተፍኩም

E 31 ህጻኑየ ሆድዉስጥላ 1ልማስወገ ጃመድሓኒ ትወስድዋል?

1. አዎ **2.** አልወሰደም **3.** እድሜዉከ **24** ወርበታችነዉ

E 32 ህጻኑበባለፈዉስድስትወርዉስጥባይታሚኤወስድዋል? **(**እድሜዉከ **6** ወርበታችከሆነ ምርጫ **3** ይከበብ**)**

1. አዎ **2.** አልወስደም **3.** እድሜዉከ **6** ወርበታችነዉ

E 33 ህጻኑየ ቤተሰብጠፍ ማሞርያ/ካረድአለዉ? **1.** አዎ **2.** የ ለወም

E 34 የ ቤተሰብጠፍ ማሞርያ/ካርድካለዉየ ትነ ዉየ ሜቃማጠዉ? **1.** ቤት **2.** ጠፍኬላ **3.** የ ተለየ ካለይገለጽ

E 35 ከጠፍኤክስቴንሽንሰራተኛዋስለህጻናትአመጋገ ብትምህርት/ሚጃሰጥታሻለች? **1.** አዎ **2.** አይ

E 36 በህጻናትአመጋገ ብላይምክርሰጥታትከሆነ በምንዙርያ? ካንድበላይ ሜልስ ካለ ይከበብ **1.**

ተገቢየ ሆነየ ጠቅማጥባት **2.** ተገቢየ ሆነየ ስርአተምግብላይ **3.** ህጻናትንእንዴትመንከባከብእዳለብን

4. በቤተሰብምጣዙርያ **5.** የ ተለየ ካለይገለጽ

E 37 የ ጠፍኤክስቴንሽንሰራተኛዋህጻኑስላለበትየ ስርአተምግብደረጃበትክክልገልጻልሻለች?

1. አዎ **2.** አልገለጸችም

E 38 የ ጠፍኤክስቴንሽንሰራተኛዋመቼተመልሰሽእንደምትጫዉልጻልሻለች? **1.** አዎ **2.** አይ

IV ህጻናትበሚታመሙባትወቅትስለሚደረግላቸዉእንክብካቤበተመለከተየ ሚሰየ ቁጣዉይቆች

E 39 ለህጻኑበሚታመምባትወቅትከወትሮዉየ በለጠምግብናፈሳሽትሰጫዋለሽ? **1.** አዎ **2.** አይ

E 40 ህጻኑበሚታመምባትወቅትእርዳታለማግኘትወዴትነ ወይዘሽወምትሄጂዉ?

1. የ መንግስትሆስፒታል **2.** ጠፍጣቢያ **3.** ጠፍኬላ **4.** ወደግልየ ጠፍተቋም

5. ወደባህልህክምና **6 .**የ ተለየ ከሆነ ይገለጽ

V የ ወሃ አቅርቦትና አጠቃቀምን ተመለከተ

E 41 ለማጥናት ምን ብለህ ማሰብ ለወሃ ከየት ነህ ወደ ምታመጣው? **1.** ከቧንቧ **2.** ከተገነባ ምንጭ **3.** ካልተገነባ ምንጭ **4.** ከዝናብ በሚጠራቀም **5.** ከተገነባ ጉድጓድ **6.** ካልተገነባ ጉድጓድ **7.** የተለየ

E 42 በቀን ምን ያህል ሊትር ወሃ ትጠቀማለችሁ/ትጨልሳላችሁ .....

VI የ አከባቢና የ ግልንጽህና ን በተመለከተ

E 43 አገልግሎትእየ ሰጠያለመጸዳጃቤትአላችሁ? **1.** አዎ **2.** አይ

E 44 ከመጸዳጃቤትመልስእጅመታጠቢያወህ ተዘገጅቷል ? **1.** አዎ **2.** የለም

E 45 ከመጸዳጃቤትመልስአጃችሁን ትታጠባላችሁ **1.** አዎ **2.**የለም

VII

የ ህጻናትተን ከባካቢዎችበህጻናትእድገ ትክትተሉወቅትበአገልግሎቱአሰጣጥና ሌሎችምጉዳዮችላይያላቸዉን እርካታ በጣምተስማሙኛልተስማሙኛልምን ምእይልምእልተስማሙኝምና በጣምአልተስማሙኝምበማለትየ እርካታቸዉን ማጠን ይ ለያሉ፡ ፡

E 46.

የ ጠፍኤክስቴንሽንሰራተኛዋየ ማህበረሰብተኮርስርአተምግብፕሮግራመን በማጠኑላይባላትብቃትየ ተሰማሽንእርካ ታእንዴትትመድቢዋለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 47. ከጠፍኤክስቴንሽንሰራተኛዋ ጋርበነበረሽየ ወይይትምክርጊዜየ ተሰማሽንእርካታእንዴትትመድቢዋለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 48.

የ ጠፍኤክስቴንሽንሰራተኛዋህጻኑስላለበትየ ስርአተምግብደረጃበትክክልገልጻለች/እርካታዉንእንዴትትመድቢዋለ ሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 49. ከጠፍ ኤክስቴንሽንሰራተኛዋ ጋርበአጠቃላይበነበራት አቀራረብ /አገላለጽ/ አክብሮትየ ተሰማሽን እርካታ እንዴት ትመድቢያለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 50. አገልግሎቱንበተገ ቢወከማገኘት/ እየ ተሰጠካለበት ቦታ አንጻርየ ተሰማሽንእርካታእነ ዴትትመድቢዋለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 51. የ ማህበረሰብተኮርስርአተምግብፕሮግራምን ሌሎችእንዲጠቀሙትነ ግሪያቸዋለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 52. የ ማህበረሰብተኮርስርአተምግብፕሮግራምን በቀጣይነ ትለመሳተፍያለሽን ፍላጎትእነ ዴትትመድቢዋለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝ

E 53. የ ጠፍኤክስቴንሽንሰራተኛዋን ከማገኘትሽበፊትየ ጠበቅሽወወረፋደስተኛነ ሽ(እንዴትስ ትመድቢዋለሽ)?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 54. ከቤትሽእስከጠፍኬላድረስያለዉንርቀትእንዴትታይዋለሽ/እንዴትትመድብዋለሽ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 55. ህጻኑባገኘወአገልግሎት/ወደሌላተቋምተልኮከሆነ በዛላይያለሽንስምማ ትእንዴትትመድቢዋለሽ ?

1. በጣምተስማሙኛል **2.** ተስማሙኛል **3.** ምን ምእይልም **4.** አልተስማሙኝም **5.** በጣምአልተስማሙኝም

E 56. አጠቃላይበማህበረሰብተኮርስርአተምግብፕሮግራምላይየተሰማሽንእርካታእንዴትትመድብዋለሽ?

1. በጣምተስማምቶኛል **2.** ተስማምቶኛል **3.** ምንምአይልም **4.** አልተስማምኝም **5.** በጣምአልተስማምኝም

መዘግያ ፡ የህጻኑን/ዋንተንከባካቢበማሟገንአጠቃል/ይ

የመረጃሰብሳቢወስምናፊርማ_____ ቃለመጠየቁየተጠናቀቀበትሰዓት _____

የሱፐርቫይዘርስምናፊርማ_____ ቀን_____

Questionnaire II: Direct observation check-list (Guide)

An observation checklist used to assess the compliance of health extension worker in CBN service delivery at health post

Instruction: This checklist was used to conduct direct observation of health extension worker at health post while assessing, checking, classifying, and counseling services; providing follow-up with regards to CBN.

Consent form between health care provider and data collector

I want to thank you for taking time to meet with me today. My name is _____from Jimma University and I am hereby to observe the GMP sessions at this unit. This is part of the overall program evaluation and it will help to improve the implementation status of CBN program services delivered at this health post. The observation was conducted while the health Extension worker delivering services and all findings of the observation was kept confidential (i.e. shared only between evaluation team). Further we will ensure that any information we include in our report does not identify you as the respondent. Remember, everything was undertaken with your agreement and your willingness was respected.

Are you willing to participate in this interview?

_____ _____ _____

Interviewee observer Date

Consent form between health care provider and care takers

Thank you for visiting our health post for receiving services. Today I will provide you services in collaboration with my colleagues. He is hereby to observe the process and provide additional support which will help me to provide you better services. During the overall process your

information was kept confidential as previous and no one will identify you as part of the observation or respondent. Remember, everything was undertaken based on your will.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

_____ _____ _____

Interviewee observer Date

Identification and respondents background:

Name of the health post _____ Date of observation_____ MFN of the family:

Age of child (month) _____

Sex of child 1=male, 2= Female

Service intended to be observed:

The first component was completed once and the others per each session. Before starting the observation make sure that you took consent from the health care provider and client. Moreover, you are expected to complete the table if you observed the session only (tick below after you do so).

Code	Activities	Yes(1)	No(2)	NA(3)	Remark
Part I	**Client provider interaction**				
	CBN visit				
O-01	Do the HEWs show respect for the client (Greeting and offer seat)?				
O-02	Do the HEWs ask the age of the child				
O-03	Do the HEWs measure the weight of the child				
O-04	Do the HEWs identified nutritional status according to growth chart				
O-05	Do the HEWs checked/identify vitamin A supplementation status of the child according to guideline				
O-06	Do the HEWs checked/identify deworming status of the child according to guideline				
O-07	Do the HEWs identify SAM cases according to implementation guide line.				
O-08	Do the HEWs identified complicated SAM case are referred to the next level.				
O-09	Do the HEWs give counseling for care taker on breast feeding.				
O-10	Do the HEWs give counseling for care taker on complementary feeding.				
O-11	Do the HEWs oriented care taker about next session.				

O-12	Do the HEWs attended CBN performance review meeting.				
O-13	The health post received supportive supervision from the next supervisory body with in quarter?				
O-14	Do health posts sent report timely to the next supervisory body				
O-15	Do health posts send complete report to the next supervisory body.				

Closing: Thanks the health care provider as well as the client and then finish your observation!!
Observers name: _____ Observation date: _____ Signature: _____

Checked by/supervisors name: _____ Checked date: _____ Signature: _____

Questionnaire III: Key informants interview guide for health extension workers

Instruction: This questionnaire/tool was used to assess the CBN program service delivery and organization as well as factors associated with implementation of the program at the heath post level and was answered by health extension worker.

Consent form

I want to thank you for taking time to meet with me today. My name is _____from Jimma

University and I would like to talk to you about your experiences participating in the CBN program.

Specifically, as one components of our overall program evaluation we are assessing program implementation in order to capture lessons that can be used in future to improve the program. The interview should take 30 -45 minutes. All responses was kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

_____ _____ _____

Interviewee Interviewer Date

Identification and background characteristics of the respondent

1. Name of the health institution: _____
2. Date of interview: _____
3. Sex of respondent: _____
4. Age of respondent: _____
5. What is your profession? _____
6. How long you have been in this position (months/Years)? _____

I. CBN service delivered and organization of service at the health post

1. Could you please briefly describe me what and how CBN services provided in this health post?_

_____
_____
___

II. Factors for CBN service utilization/Barriers to implementation

2. Had the CBN service been interrupted due to unavailability of supplies and human power? If yes
   specify_____
   _____
   _____
3. In your opinion, from health practice perspective, what are some of the prominent problems or factors that affect CBN services at health post?
   _____
   _____
   _____
4. What are some of the common complaints forwarded by your clients on your CBN service?
   _____
   _____
   _____

III. Support system

5. Did you ever receive supportive supervision related to CBN service? Yes, No
6. If yes; when did last supervision received? (dd/mm/yy) ____/_____/_____
7. Who provided the support? _____
8. What support received? _____
9. How often the support provided? _____
10. Did they give feedback (see the feedback provided)? Yes/ No

IV. Solutions for the observed challenges

11. What action did you take to alleviate the problem of interruption of services?
    _____
    _____
    _____
12. Do you have any suggestions that you think are solutions to improve the implementation of CBN program at your health post? If yes, describe
    them_____
    _____
    _____

Thank you!!

Data collector name _____ Date of data collection _____

Signature_____

Checked by/supervisors name_____ Checked date

_____Signature_____

Questionnaire IV: Key informants interview guide for health care managers

Instruction: This guide was used to assess program management, barriers to program implementation and measures taken to alleviate the problems. It was answered by the woreda health office program focal and Health center program focal.

Identification and background characteristics of the respondent

1. Name of the health institution: _____
2. Date of interview: _____
3. Sex of respondent: _____
4. Age of respondent: _____
5. What is your profession? _____
6. How long you have been in this position (months/Years)? _____

I. Information related to program management

7. Is there support system (ISS) in this health facility for health extension workers? Yes/ no
8. If yes for Q7, could you please describe how frequently conducted? _____
9. Who conduct ISS? _____
10. If not for Q7 why? _____
11. Is there continuous implementation improvement system in this health facility? Yes /no
12. If for Q11 yes, could you please describe how it was conducted? _____
13. If not for Q11 why? _____
14. Is there performance review meeting in the health facility? Yes/no
15. If yes for Q17, how frequently conducted? _____

16. If not for Q17, why? _____
17. Is there regular performance review meeting with health extension workers in this health facility? yes/no
18. If yes for Q20, how often? _____
19. If not for Q20, why? _____

II. Barriers to service/program implementation

20. From your experience what are the barriers to implementation of CBN program in this health facility?
21. If shortage of resources, why? _____
22. If turnover of health extension worker, why? _____
23. If lack of regular supportive supervision, why? _____
24. If others (specify with reasons) _____

III. Solutions to improve quality CBN program implementation

25. Are there measures taken by your office to improve CBN program implementation? Yes/no
26. If yes How, If No, Why
27. Finally, if you have any suggestions concerning of CBN program implementation; list down_____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____

Thank you!!

Data collector name _____ Date of data collection _____Signature_____

Checked by/supervisors name_____ Checked date _____Signature_____

Questionnaire V: Protocol for collection of data from CBN registration book (health post document review)

Informed Consent form

My name is _____from Jimma University and as part of an overall program evaluation we will review CBN/GMP registration book in order to capture information related to CBN program implementation.

This will help to improve the implementation of the CBN program in the future. During the review, the confidentiality of the information was kept in which the reviewed information will not identify the child individually and the information was utilized for evaluation purpose.

Moreover, review of the document was conducted as long as the health institution is willing. That means the willingness of the health institution was respected.

May I review or continue to review the registration book? 1. Yes 2. No

Instruction: This questionnaire was used to conduct document review in order to assess the CBN program.

The data was collected from CBN registration book from each selected health posts.

Code of activity	**Questions**	**Code**			**Remark**
	Is the following information recorded on CBN register	**Yes (1)**	**No(2)**	**NA(3)**	
R01	Name of health post _____				
R02	Name of catchment health center _____				
R03	Date of data collection(dd/mm/yy)____/____/_____				
R04	Health post HMIS code_____				
R05	Age of child_____				
R06	Sex of child _____				
R07	Weight of child_____				
Anthropometric measurement and classification of the child					
R 08	Weight of the child registered accurately				
R 09	Age of the child is accurately recorded				
R 10	Nutritional status of the child classified correctly				
R 11	Severely underweight child measured MUAC to identify SAM				
R12	Severely underweight infant(less than six month identify visible wasting				
R 13	Measure mid upper arm circumference (MUAC) for greater than or equals to six months, 1.MUAC<11 2. MUA 11-12 3. MUA>=12cm				
R 14	Bilateral edema identify				

R 15	**HEWs classification of malnutrition (circle one of the classification listed below)** 1. Severe complicated malnutrition 2. Severe uncomplicated malnutrition 3. Moderate acute malnutrition 4. No acute malnutrition				
R 16	Have the child checked for de-worming status				
R 17	Have the child checked for vitamin supplementation status				
Information about communication and counseling					
R 18	Counsel about breast feeding				
R 19	Counsel about complementary feeding				
R 20	Counsel about when to return to the health posts for next appointment				
Information about referral					
R 21	Did the child need Referral?				
R 22	If yes for q…. was the child referred to next level facility				
Supervision and performance review meeting					
R 23	Do the HEWs attended CBN performance review meeting.				
R 24	The health post received supportive supervision from the next supervisory body with in quarter?				
Reporting					
R 25	Do health posts sent report timely to the next supervisory body				
R 26	Do health posts send complete report to the next supervisory body.				

Thank you!

Data collector name: _____ Date of data collection: _____ Signature: _____

Checked by/supervisors name: _____ Checked date _____Signature: _____

Questionnaire VI: - CBN Resource Inventer check-list

Instruction: This checklist was used to conduct Resource audit (inventory) in order to assess Infrastructure, human resource, CBN program supplies in al selected HP.

Name of Health post----------

Total population ----------

Number of HEWs ----------

Expected (planed) number of children for GMP----------

Code	Items	Standard	Available and use it		If the item was stock out		Remark
			Yes	No	Day of stock out	Reason of stock out	
	Human resource						
RI 01	Trained HEWs						
RI02	Trained HDAs						
	Recording & Reporting Tool						
RI 03	CBN guide line						
RI 04	GMP Registration Book						
RI 05	Family health card						
RI 06	Growth chart						
RI 07	OTP quick reference						
RI02	Monthly Reporting Format						
RI 08	Referral formats						
RI 09	IEC/BCC materials						
	Medical equipment and Infrastructure						
Code	Items	Standard on OTP guideline	Available and functional		If not available and functional		Remark
			Yes	No	Reason for it		
RI 09	Height measurement						
RI 10	MUAC measuring tape						
RI 11	Weighing scale - Baby lying or Salter scale with bowel						
RI 12	Thermometer						
RI 13	Clean water in the compound						

	Essential Drugs						
Code	Items	Standard on	Available and use it		If the item was stock out		Remark
			Yes	No	Day of stock out	Reason of stock out	
RI 14	Albendazole (deworming)						
RI 15	Vitamin A capsule						

Thank you!!

Data collector name----------supervisor's name: ----------

Date of data collection: ---------- Checked date----------

Signature: ----------Signature: ----------

Information matrix

Table :Information matrix of indicators used for evaluation of CBN program in Soro woreda, Hadiya Zone,2017

Evaluation Questions	Indicators	Sources of Data	Data Collection Method	Data collection tools
Are the required resources available for CBN program? If not, why?	Proportion of health post with trained health extension worker on CBN services	District health office, health centers, Health post	Document review & observation	Observation checklist
	Proportion of HP with family health card no stock out in the last six month	Health post	Document review & observation	Observation checklist
	Proportion of HP with no stock out growth chart in the last six month	Health post	Document review & observation	Observation checklist
	Proportion of HP with functional weight scale.	Health post	Document review & observation	Interview and observation checklist
	Proportion of HP with CBN implementation guideline.	Health post	Document review & observation	Interview and observation checklist
	Proportion of HDA trained on CBN in available the health post catchment area.	Health post	Document review & observation	Interview and observation checklist
	Proportion of HP with an appropriate anthropometric measurements(MUAC)	Health post	Document review & observation	Interview and observation checklist
	Proportion of HP with no stock out of OTP card for the last 6 months	Health post	Document review &observation	Interview and observation checklist

	Proportion of HP having standard GMP registration book	Health post	observation	Interview and observation checklist
	Proportion of HP with OTP quick reference book (for HEWs)	Health post	observation	Interview and observation checklist
	Proportion of HP with monthly reporting format	Health post	observation	Interview and observation checklist
	Proportion of HPs with no stock out of Vitamin A in last three months.	Health post	observation	Interview and observation checklist
	Proportion of HPs with no stock out of deworming in last three months.	Health post	observation	Interview and observation checklist
Dose the community based Nutrition service providers comply with CBN guidelines in delivering the service? If not, Why?	Proportion of HEWs show respect for care taker (greeting and offer seat)	Health post	observation	observation checklist
	Proportion of 0-24 month children Screened according to anthropometric measurement (W/A scale)	Health post	observation	observation checklist
	Proportion of 0-24 month children weighted and classified according to growth chart /recommended W/A scale.	Health post	observation	observation checklist
	Proportion of Children identified nutritional status according to standard.	Health post	observation	observation checklist
	Proportion of children checked for vitamin A supplementation status according to guideline	Health post	observation	observation checklist

	Proportion children checked for de-worming status according to guideline.	Health post	observation	observation checklist
	Proportion of SAM cases identify according to implementation guide line.	Health post	observation	observation checklist
	Proportion of identified complicated SAM case who are referred to the next level.	Health post	observation	observation checklist
	Proportion of care taker who are got counseling (breast feeding and complementary feeding)	Health post	observation	observation checklist
	Proportion of care taker who are oriented about next session.	Health post	observation	observation checklist
	Proportion of HEWs attended CBN performance review meeting.	District health office, health centers, Health post	observation	observation checklist
	Proportion of health post received supportive supervision from the next supervisory body with in quarter	Health post	observation	observation checklist
	Proportion of health posts which sent report timely to the next supervisory body	District health office, health centers,	observation	observation checklist
	Proportion of health posts which sent complete report to the next supervisory body.	District health office, health centers,	observation	observation checklist
. Are the clients	Proportion of care takers who perceive that the health extension worker is competent enough to provide service	Caregiver	Interview	Semi structured questionnaire

utilizing community based nutrition program in health post of soro woreda satisfied with community based nutrition program provided to them? If not, Why?	Proportion of care takers satisfied with the consultation time.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care takers who perceived that HEWs explain the nutritional status of the child very well.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care takers who perceived that the health extension worker showed respect for them.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care taker satisfied with appropriateness of GMP service area.	Caregiver	Interview	Semi structured questionnaire
	Proportionof care takers who promised to recommend the service for other family or friend.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care takers who agree that they will return back to the same facility to receive service.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care takers who perceived that the waiting time is reasonable.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care taker satisfied with the travel time to get service.	Caregiver	Interview	Semi structured questionnaire
	Proportion of care takers who claim that the referral is reasonable.	Care takers	Interview	Semi structured questionnaire

Definition of indicators

Table :Definition of availability indicators for evaluation of CBN program in Soro Woreda, Hadiya zone, 2017.

Indicator	Numerator	Denominator
Availability		
Proportion of health post with trained health extension worker on CBN services	Number of trained health extension worker on CBN services	Total number of Health post observed
Proportion of HP with family health card no stock out in the last three month	Number of HP with family health card no stock out in the last three month	Total number of Health post observed
Proportion of HP with no stock out growth chart in the last three month	Number of HP with no stock out growth chart in the last three month	Total number of Health post observed
Proportion of HP with Functional weight scale.	Number of HP with Functional weight scale.	Total number of Health post observed
Proportion of HP with CBN implementation guideline.	Number of HP with CBN implementation guideline.	Total number of Health post observed
Proportion of HDA trained on CBN in available the health post catchment area.	Number of HDA trained on CBN in available the health post catchment area.	Total number of Health post observed
Proportion of HP with anthropometric measurements(MUAC)	Number of HP with anthropometric measurements(MUAC)	Total number of Health post observed
Proportion of HP with no stock out of OTP card for the last three months	Number of HP with no stock out of OTP card for the last three months	Total number of Health post observed
Proportion of HP having standard GMP registration book	Number of HP having standard GMP registration book	Total number of Health post observed
Proportion of HP with OTP quick reference book (for HEWs)	Number of HP with OTP quick reference book (for HEWs)	Total number of Health post observed
Proportion of HP with monthly reporting format	Number of HP with monthly reporting format	Total number of Health post observed
Proportion HPs with no stock out of Vitamin A in last three months.	Number HPs with no stock out of Vitamin A in last three months.	Total number of Health post observed
Proportion HPs with no stock out of deworming in last three months.	Number HPs with no stock out of deworming in last three months.	Total number of Health post observed

Table :Definition compliance indicators for evaluation of CBN program in Soro Woreda, Hadiya zone, 2017.

Compliance		
Indicator	**Numerator**	**Denominator**
Number of HEWs show respect for care taker (greeting and offer seat)	Number of HEWs show respect for care taker (greeting and offer seat)	Total number of care taker interviewed
Proportion of 0-24 month children Screened according to anthropometric measurement (W/A scale)	Number of 0-24 month children Screened according to anthropometric measurement (W/A scale)	Total number of care taker interviewed
Proportion of 0-24 month children weighted and classified according to growth chart /recommended W/A scale.	Number of 0-24 month children weighted and classified according to growth chart /recommended W/A scale.	Total number of care taker interviewed
Proportion of Children identified nutritional status according to standard.	Number of Children identified nutritional status according to standard.	Total number of care taker interviewed
Proportion of children checked for vitamin A supplementation status according to guideline	Number of children checked for vitamin A supplementation status according to guideline	Total number of care taker interviewed
Proportion children checked for de-worming status according to guideline.	Number children checked for de-worming status according to guideline.	Total number of care taker interviewed
Proportion of SAM cases identify according to implementation guide line.	Number of SAM cases identify according to implementation guide line.	Total number of care taker interviewed
Proportion of identified complicated SAM case who are referred to the next level.	Number of identified complicated SAM case who are referred to the next level.	Total number of care taker interviewed
Proportion of care taker who are got counseling (breast feeding and complementary feeding)	Number of care taker who are got counseling (breast feeding and complementary feeding)	Total number of care taker interviewed
Proportion of care taker who are oriented about next session.	Number of care taker who are oriented about next session.	Total number of care taker interviewed
Proportion of HEWs attended CBN performance review meeting.	Number of HEWs attended CBN performance review meeting.	Total number of care taker interviewed
Proportion of health post received supportive supervision from the next supervisory body with in quarter	Number of health post received supportive supervision from the next supervisory body with in quarter	Total number of care taker interviewed
Proportion of health posts which sent report timely to the next supervisory body	Number of health posts which sent report timely to the next supervisory body	Total number of care taker interviewed
Number of health posts which sent complete report	Number of health posts which sent complete report	Total number of care taker interviewed

to the next supervisory body.	to the next supervisory body.	

Table :Definition satisfaction indicators for evaluation of CBN program in Soro Woreda, Hadiya zone, 2017.

Satisfaction (Acceptability)		
Indicator	**Numerator**	**Denominator**
Proportion of care takers who perceive that the health extension worker is competent enough to provide service	Number of care takers who perceive that the health extension worker is competent enough to provide service	Total number of care taker interviewed
Proportion of care takers satisfied with the consultation time.	Number of care takers satisfied with the consultation time.	Total number of care taker interviewed
Proportion of care takers who perceived that HEWs explain the nutritional status of the child very well.	Number of care takers who perceived that HEWs explain the nutritional status of the child very well.	Total number of care taker interviewed
Proportion of care takers who perceived that the health extension worker showed respect for them.	Number of care takers who perceived that the health extension worker showed respect for them.	Total number of care taker interviewed
Proportion of care taker satisfied with appropriateness of GMP service area.	Number of care taker satisfied with appropriateness of GMP service area.	Total number of care taker interviewed
Proportion of care takers who promised to recommend the service for other family or friend.	Number of care takers who promised to recommend the service for other family or friend.	Total number of care taker interviewed
Proportion of care takers who agree that they will return back to the same facility to receive service.	Number of care takers who agree that they will return back to the same facility to receive service.	Total number of care taker interviewed
Proportion of care takers who perceived that the waiting time is reasonable.	Number of care takers who perceived that the waiting time is reasonable.	Total number of care taker interviewed
Proportion of care taker satisfied with the travel time to get service.	Number of care taker satisfied with the travel time to get service.	Total number of care taker interviewed
Proportion of care takers who claim that the referral is reasonable.	Number of care takers who claim that the referral is reasonable.	Total number of care taker interviewed

Relevant matrix for indicators

Table :Relevant matrix for indicators of CBN program in soro woreda, Hadiya Zone, SNNPR 2017

	Indicators	Dimension		
S.N	**Availability**	Availability	Compliance	Satisfaction (acceptability)
1	Proportion of health post with trained health extension worker on CBN services	RRR	RRR	RR
2	Proportion of HP with family health card no stock out in the last six month	RRR	RRR	RR
3	Proportion of HP with no stock out growth chart in the last six month	RRR	RRR	RRR
4	Proportion of HP with Functional weight scale.	RRR	RRR	RR
5	Proportion of HP with CBN implementation guideline.	RRR	RRR	RR
6	Proportion of HDA trained on CBN in available the health post catchment area.	RRR	R	R
7	Proportion of HP with anthropometric measurements(MUAC)	RRR	RR	R
8	Proportion of HP with no stock out of OTP card for the last 6 months	RRR	RR	R
9	Proportion of HP having standard GMP registration book	RRR	RRR	R
10	Proportion of HP with OTP quick reference book (for HEWs)	RRR	RRR	R
11	Proportion of HP with monthly reporting format	RRR	RR	R
12	Proportion HPs with no stock out of Vitamin A in last three months.	RRR	RR	RR
13	Proportion HPs with no stock out of deworming in last three months.	RRR	RR	RR
	Compliance			
14	Proportion of HEWs show respect for care taker (greeting and offer seat)	R	RRR	RRR
15	Proportion of 0-24 month children Screened according to anthropometric measurement (W/A scale)	R	RRR	R
16	Proportion of 0-24 month children weighted and classified according to growth chart /recommended W/A scale.	R	RRR	R

17	Proportion of Children identified nutritional status according to standard.	R	RRR	R
18	Proportion of children checked for vitamin A supplementation status according to guideline	R	RRR	RR
19	Proportion children checked for de-worming status according to guideline.	R	RRR	RR
20	Proportion of SAM cases identify according to implementation guide line.	R	RRR	RR
21	Proportion of identified complicated SAM case who are referred to the next level.	R	RRR	RR
22	Proportion of care taker who are got counseling (breast feeding and complementary feeding)	R	RRR	RRR
23	Proportion of care taker who are oriented about next session.	R	RRR	RR
24	Proportion of HEWs attended CBN performance review meeting.	R	RRR	R
25	Proportion of health post received supportive supervision from the next supervisory body with in quarter	R	RRR	R
26	Proportion of health posts which sent report timely to the next supervisory body	R	RRR	R
27	Proportion of health posts which sent complete report to the next supervisory body.	R	RRR	R
	Satisfaction (Acceptability)			
28	Proportion of care takers who perceive that the health extension worker is competent enough to provide service	R	R	RRR
29	Proportion of care takers satisfied with the consultation time.	R	R	RRR
30	Proportion of care takers who perceived that HEWs explain the nutritional status of the child very well.	R	R	RRR
31	Proportion of care takers who perceived that the health extension worker showed respect for them.	R	R	RRR
32	Proportion of care taker satisfied with appropriateness of GMP service area.	R	R	RRR

33	Proportion of care takers who promised to recommend the service for other family or friend.	R	R	RRR
34	Proportion of care takers who agree that they will return back to the same facility to receive service.	R	R	RRR
35	Proportion of care takers who perceived that the waiting time is reasonable.	R	R	RRR
36	Proportion of care taker satisfied with the travel time to get service.	R	R	RRR
37	Proportion of care takers who claim that the referral is reasonable.	R	R	RRR