

Ethiopian Catholic Church Adigrat Diocese- Wukro Social and Development program(ECC-AD-WSDP)

Project Proposal on Additional Nutrition Support for Moderately Malnourished Children to Mitigate Child Malnourishment Problems.

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April 2019

1. Introduction

1.1. Malnutrition in Ethiopia

Malnutrition refers to a pathological state resulting from a relative or absolute deficiency or excess of one or more essential nutrients. It is a state of nutrition where the weight for age, height for age and weight for height indices are below -2 Z-score of the NCHS reference. Malnutrition continues to be a major public health problem in developing countries. It is the most important risk factor for the burden of disease causing about 300,000 deaths per year directly and indirectly responsible for more than half of all deaths in children.

Of the nearly 1.9 billion children in the developing world, 31% are stunted. Despite the continued progress in all the developing countries, it is still predicted that there will be 128-155 million underweight children by the year 2020 with 35% of these children to be from sub-Saharan Africa, (Mulugeta Child Paper, 2007).

Health and physical consequences of prolonged states of malnourishment among children are: delay in their physical growth and motor development; lower intellectual quotient (IQ), greater behavioral problems and deficient social skills; susceptibility to contracting diseases.

Much of the burden of deaths resulting from malnutrition, estimated to be over half of childhood deaths in developing countries, can be attributed to just mild and moderate malnutrition, varying from 45% for deaths due to measles to 61% for deaths due to diarrhea. The majority of studies on child nutritional status have described prevalence of malnutrition among under-five children and analyzed socioeconomic, demographic and cultural factors associated with child malnutrition in SSA (Nutritional Disorders & Therapy, 2013).

Child malnutrition continues to be a major public health problem in developing countries. Nutritional status is primarily determined by a child's growth in height and weight and is directly influenced by food intake and the occurrence of infections. Stunting (chronic malnutrition), wasting (acute malnutrition), and underweight (a general measure of health and nutritional status) are assessed at the population level through the Demographic and Health Surveys.

The EDHS measures children's nutritional status by comparing height and weight measurements against an international reference standard. According to the 2011 survey made by EDHS, 44% of children under five are stunted or too short for their age. This indicates chronic malnutrition. One in five children is severely stunted. Stunting reflects a failure to receive adequate food intake over a long period of time, and is therefore, a measure of chronic malnutrition.

In 2011, Ethiopia's under-five mortality rate was 88 per 1000 live births, a decline of over 50% since 1990 when the rate was 210 per 1000 live births. According to the 2011 Ethiopia Demographic and Health Survey, 9.7% of children under the age of five in Ethiopia suffer from acute malnutrition (wasting), 28.7% are underweight, and 44.4% are chronically malnourished (stunted). In Tigray region, 10.3% of children under the age of five are wasted, 35.1% are underweight, and 51.4% are stunted.

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Breastfeeding is very common in Ethiopia, with 98% of children ever breastfed. WHO recommends that children receive nothing but breast milk (exclusive breastfeeding) for the first six months of life? Only about half (52%) of children under six months in Ethiopia are being exclusively breastfed, and only 32% of infants 4-5 months old are exclusively breastfed. Infants should not be given water, juices, other milks, or complementary foods until six months of age, yet 19% of Ethiopian infants fewer than six months consume plain water, 4% consume non-milk liquids, and 10% receive complementary foods. On average, children are breastfed until the age of 25 months and are exclusively breastfed for 2.3 months. Children over six months should receive complementary foods, but only half of children ages 6–9 months are eating complementary foods.

Micronutrient deficiency is a serious contributor to childhood morbidity and mortality. Vitamin A deficiency can cause eye damage and can increase severity of infections such as measles. Iron deficiency can impair cognitive development, stunt growth, and increase morbidity from infectious diseases. A lack of iodine in the diet can cause mental and neurological disorders in children. Children can receive micronutrients from foods, including fortified foods (such as iodized salt) and through direct supplementation. Overall, 26% of Ethiopian children age 6-23 months ate vitamin A-rich foods such as meat, fish, eggs, carrots, pumpkins and dark green leafy vegetables in the 24 hours before the survey. Just over half (53%) of children age 6-59 months were given a vitamin A supplement in the six months before the survey. Children whose mothers have received more than secondary education are most likely to receive vitamin A supplements (72%).

1.2. Malnutrition in Tigray region

In Ethiopia, child malnutrition rate is one of the most serious public health problem and the highest in the world. High malnutrition rates in the country pose a significant obstacle to achieving better child health outcomes.

A cross sectional study conducted in Aynalem village in Tigray region, the overall prevalence of stunting, underweight and wasting were 45.7%,43.1% and 7.1% ,respectively.

The causes of malnutrition are numerous and multifaceted. These causes are intertwined with each other and are hierarchically related. The most immediate determinants are poor diet and disease which are themselves caused by a set of underlying factors; household food security, maternal/ child caring practices and access to health services and healthy environment. These underlying factors themselves are influenced by the basic socio-economic and political conditions.

Study conducted in rural Tigray region revealed that, a very high proportion of the mothers (80%) initiated feeding of newborns pre-lacteal feeds primarily butter or water. Child age, maternal anthropometric characteristics, inadequate complementary foods, and area of residence were the main contributing factors to child malnutrition. The prevalence of stunting and underweight were significantly associated with the age group of children in Aynalem village in Tigray region. Both highest prevalence of stunting and underweight were observed among the age group of 12-24 months whereas the lowest prevalence of stunting, wasting, and underweight were observed among the age 0-6 months age group. As our project area is part of the eastern zone of Tigray region which is highly exposed to malnutrition is very high in the area.

1.3. Project area and project applicant background

The town of Wukro is located in the Tigray region, approximately 45km north of Mekele, the regional capital. Wukro is the capital of the Wukro woreda, and is also surrounded by the Kilte-Awlaelo woreda which covers the surrounding rural areas. Wukro is home to approximately 50,000 residents, while Kilte Awlaelo woreda has approximately 135,000 residents.

Wukro Social Development Project(WSDP), previously known as St. Mary's Social welfare project, has been working for many years to support the most affected and poor people apart from the support to a good number of orphan and vulnerable children.

The project started in 1999 when the neighbours and poor relatives of orphaned children were requesting Fr. Ángel Olarán for economic support. During that period, many of the children lost their parents due to HIV/AIDS and the war with Eritrea.

Wukro social and development project (WSDP) is a project run under the Ethiopian Catholic Church, Diocese of Adigrat. Now the project carries out different social and development projects in both the two administrative districts (woredas) such as:

1. Provision of care and support to more than 550 orphan and vulnerable children
2. Care and support to 235 destitute elderly and disabled people
3. Care and support to 30 people living with HIV/AIDS
4. Additional nutrition support for 400 malnourished children under the age of 5 in Wukro town and kilte-Awlaelo Wereda.

The beneficiaries of the project are provided with basic necessities, economic and psychosocial support in order to be able to lead a normal life in their communities, something that they would not do without support. As a result of these projects, significant results have been achieved in alleviating the socio-economic problems of the needy in the areas of operation. The program's major intervention areas are Wukro town and Kilde Awlaelo woreda that is surrounding the Wukro town.

2. Statement of Problem and Rationale of the Project

Eastern Zone of Tigray has a population of more than 800,000 in 9 administrative woredas. Particularly, this zone has suffered from recurring drought and the recent Ethio-Eritrean conflict that resulted in instability, migration and displacement, and an increase in commercial sex workers coupled with prevalent misconception. The low income of families and the sex of household leader are among the determinant factors for the malnutrition of children under the age of five in the project area. Child age, maternal anthropometric characteristics, inadequate complementary foods because of the economic deficiency of families, and area of residence were the main contributing factors to child malnutrition.

Multiple studies acknowledge that an increase in household income/wealth is expected to reduce child malnutrition. Employment of the mother or caregiver may be expected to enhance accessibility of the household to income, which may in turn have a positive effect

on the nutritional status of the child though there might be negative effect due to the short time spent on child care. This may be expected because such income is more likely to be controlled by the mother/caregiver and used to improve children's nutritional status.

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The EDHS measures children's nutritional status by comparing height and weight measurements against an international reference standard. According to the 2011 survey, 44% of children under five are stunted or too short for their age. This indicates chronic malnutrition. One in five children is severely stunted. Stunting reflects a failure to receive adequate food intake over a long period of time, and is therefore, a measure of chronic malnutrition (EDHS, 2011).

One in ten children under five years is wasted. That is, they are too thin for their height. Wasting reflects the failure to receive adequate nutrition. It is a measure of acute malnutrition. Almost 30% of children under age five are underweight or too thin for their age. Underweight is a composite indicator combining both chronic and acute malnutrition.

Additional nutrition project has significant contribution in reducing the mortality and morbidity associated to malnutrition. The witness from the community indicates that many children are benefited and improved their health condition. This project has been contributing to the healthy growth of the children in the project area that can be easily witnesses by the reduced rate of death associated to malnutrition.

Opinions and suggestions from Mothers and local administration bodies confirm that the contribution of this project in the operation area is very vital and has contributed a lot in the society.

3. Project Description

3.1. Overall objective:-

The overall objective of the project is contributing to the efforts of the regional government for the improvement of the health children under 5 years old.

3.2. Specific objectives:-

SO: #1: The objective of the project is to provide additional nutritional support for 1200 children in a year to reduce the mortality and morbidity of children associated to malnutrition in the target areas in Wukro and Kelte-awlaelo Weredas of Eastern Tigray.

4. PROJECT ACTIVITIES BY SPECIFIC OBJECTIVES

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4.1. Selection and Admission of beneficiaries

Beneficiaries will be selected with a close collaboration of the health extension workers, health centers and Kebeles of the respective distribution centers, Wukro, Agulae and Negash. The selection will be made according to the set of scientific criteria by measuring the MUAC, weight and height of the children in relation to their age. 100 children from each the three distribution centers will be selected to be served for three consecutive months. I.e. there will be 300 moderately malnourished children getting the dry portion for each three months in a year. Therefore, the total number of beneficiary children in a year will be 1200. After the selection is made carefully, every child will be registered in the patient registration book, history card and will get ID card for the three months. This means the beneficiaries are admitted for the three months feeding.

4.2. Dry portion Distribution

After the selection of the appropriate beneficiaries is made, the distribution of the dry portion mixed together (Famix, oil and sugar) will be made to the targeted 300 moderately malnourished children from three distribution centers.

The distribution will be made every week for beneficiaries in Wukro and every two weeks for beneficiaries in Agulae and Negash. The distribution in Wukro is made Monday till Thursday to 25 beneficiaries every day. The distribution in Agulae and Negash is made every Friday made alternatively.

During the distribution, the progress in the weight will be recorded every week in Wukro and every two weeks in Agulae and Negash.

The project will have three staff. I.e. One nurse and two preparation workers

4.3. Physical inspection

One of the activities of this project is the distribution of medicine to the children who are under the project support. The children under the project undergo physical inspection for any kind of illness by the nurse of the project every week. The nurses threat dehydration and vomiting shown in the children by providing them ORS (Oral Rehydrating Salt) and refer them to the health center for further diagnosis. Major diseases going to be observed by the nurse during medical examination of the children will be Dehydration, conjunctivitis, skin disease, Respiratory tract infection, ear infection, eye infection, Pneumonia, chicken fox.

4.4. Health Education

As one and key activity of the project, health education will be given before the distribution of the ingredients to the mothers of the children is made. The health education is given for a group of 20 to 25 mothers gathered together for 20 to 30 minutes.

The main objective of the education is to improve the awareness of the mothers in the handling and treating of their malnourished children so that the health status of the children is improved. The main topics covered during the session are: -

- Preparation of nutritious food and preparation of proper diet,
- Personal and environmental hygiene and sanitation,
- The consequence of unclean water and water born diseases,
- About carbohydrate, protein, vitamin and mineral rich foods,(proper diet in general) ,
- Diseases caused due to lack of proper diet,
- The symptoms of malnutrition,
- Eye diseases and consequences,
- Immunization for both mothers and children
- Control of diarrhea disease and communicative diseases
- Respiratory infection and
- Feeding methods for children

4.5. Sanitation and related

Here serious hygiene and sanitation education service will be given to the mothers. The sanitarian checks daily, the personal hygiene and handling of the children on their arrival to the centre and check their hands, nails and cloths (personal hygiene in general) and then teach their mothers and will inform them what to improve in the future and what improvements they have shown. In addition, the standard and contents of the famix, production and expiry dates of the famix and edible oil will be checked. The sanitarian (nurse) also will check the situation of the store and arrangements in the store, the preparation and distribution rooms in general.

The center will have a demonstration site that the nurse would show to mothers how to wash their hands and their children. The some children will be washed their faces and hands before the distribution as a symbolic way of providing lessons.

5. Implementation Strategies

The project uses an integrated community based support as a strategy in the area of operation. The moderately malnourished children and communities, as a whole will be targeted.

The strategies that the project implements are based on the community based approach and each stakeholder plays its important role in addressing the beneficiaries. Therefore the Kebele leaders (the last strata of the government administration structure), the health extension workers with in the kebeles, the health centers found in the distribution centers, the two districts (Weredas) health will be the prominent stakeholders in implementing this component of the project. All these stakeholders will play their important role. They will be part of screening and selecting the beneficiaries, they will also closely follow the implementation of the project, participate in monitoring the project activities.

The intention of the government towards health service in the towns is to address the problem through provision of prevention service and the final option of curing ,skill training and awareness activities frequently applied by the government concerned office and some very limited local NGOS. Particularly the government pays very big attention towards Mothers and Children Health (MCH).

Here the government concerned body will apply their help through mobilization and closely monitor project activities with the staff of WSDP. Since the main focus of the project is on prevention and awareness creation the government local administration and health offices in both Kelte-awlaelo and Wukro town will have their lion share in effective and efficient implementation of the project.

6. Monitoring and Evaluation of the Program

6.1. Monitoring

Regular assessment of project progress and performance of activities will be carried out though continues monitoring of project and project activities, which will be conducted by workers of every level. ECC-SDCO-Adigrat planning and monitoring team and WSDP technical and administrative workers will ensure that accurate and timely information on the quality and quantity of the project activities and services is regularly collected, analyzed and disseminated

on time. ECC-SDCO planning team and WSDP technical workers will play a pivotal role to ensure that is done systematically, efficiently and effectively. Reports (both financial and physical) will be produced on quarterly and annual base and will be submitted to concerned stakeholders.

6.2. Evaluation

Project evaluation activities will focus on establishing a continuous assessment system. The process will involve conducting a comparative assessment of achievement with plan targets and documenting factors that facilitate or inhibit performance. Quarterly assessment meeting will be held with the concerned bodies of the programs. This meeting will assess project progress and performance in fulfilling the objectives and activities set output for the period. The outcomes, among other things, are expected to contain a list of recommendations based on findings. The report will incorporate goals and objectives of the project, describe findings and achievements, and describe factors that contributed to project out comes and impacts. It will also contain recommendations on the basis of the findings that will be used when planning other similar projects that could be initiated by ECC-SDCO-Adigrat or other agency. ECC-SDCO-Adigrat planning team will produce the evaluation report and submit a copy to donor and other partner organization.

Finally project midterm and final reports will be submitted to concerned Wukro and Kelte-awlaelo offices i.e. Wukro and Kelte-awlaelo offices of health and to donor.

7. BUDGET REQUIREMENT OF THE PROJECT

The total project budget for one year will be **Birr 1,161,539.30 (Euro 37,469.01) at exchange rate of 1 Euro = 31 Birr** and please find the detailed budget break-down attached in this document.

Additional Nutrition Project

Annual Budget Break Down

1. Budget Dry Portion Requirements

N.o	Description	Unit	No children	QTY/week	No weeks per year	Total QTY/year	Unit price in Euro	Unit price in Birr	Total cost in Euro	Total cost in Birr
1	Famix	Kg	300	1.7325	52	27,027.0	0.72	22.24	19,389.69	601,080.48
2	Oil	Kg	300	0.346	52	5,397.60	0.81	25.00	4,352.90	134,940.00
3	Sugar	Kg	300	0.462	52	7,207.20	0.62	19.15	4,452.19	138,017.88
Sub Total-1									28,194.79	874,038.36

2. Budget Required for Materials

S/N	Item requirement	UOM	Total Qty	Unit Cost In Birr	Unit Cost In Euro	Total cost In Birr	Total cost In Euro
1	Uniform	Pcs	3	500.00	16.13	1,500.00	48.39
2	Broom	Pcs	24	60.00	1.94	1,440.00	46.45
3	Soap	Packet	4	1,080.00	34.84	4,320.00	139.35
4	Distribution bags	Pcs	260	36.00	1.16	9,360.00	301.94

5	Perimeter measuring tape	Pcs	3	20.00	0.65	60.00	1.94
6	Card	Packet	1200	1.50	0.05	1,800.00	58.06
7	Swab	Pcs	10	60.00	1.94	600.00	19.35
8	Disinfectant	Pcs	24	90.00	2.90	2,160.00	69.68
Sub Total-2						21,240.00	685.16

3. Budget Required for Medicine

N.o	Description	Unit of measurement	QTY	Unit price In Birr	Unit price In Euro	Total cost In Birr	Total cost In Euro
1	ORS + Zinc	Sachat	1152	8.00	0.26	9,216.00	297.29
Sub Total-3						9,216.00	297.29

4. Budget Required for Transportation

N.o	Description	unit	Ways/week	No of weeks per year	Total Ways/year	Unit price in Euro	Unit price In Birr	Total cost in Euro	Total cost in Birr
1	Transportation	wa	2	52	104	4.84	150.00	503.23	15,600.00

		y							
Sub Total-4					104	4.84	150.00	503.23	15,600.00

5.Salary For Employees

S/No	Position	Qty	Unit Gross monthly salary in Birr	Total Gross monthly salary in Birr	Unit PF 15% in Birr	Total PF In Birr	Total PF In Euro	Annual Total In Birr	Annual Total In Euro
1	Supervisor, nurse	1	5,405.00	5,405.00	810.75	810.75	26.15	79,994.00	2,580.45
2	Preparation, distribution and cleaning team	2	2,853.00	5,706.00	427.95	855.90	27.61	84,448.80	2,724.15
Sub Total-5						1666.65	53.76	164,442.80	5,304.61
							Total cost in Euro	Total cost in Birr	
Total Direct Expenses							34,985.07	1,084,537.16	
Contingency(2%)							699.70	21,690.74	
Cost of WSDP(5%)							1,784.24	55,311.40	
Grand Total							37,469.01	1,161,539.30	