



## **Combined Report**

**On**

## **The Impact of Drought and Health/Nutrition Crisis in Waghimra and north Wollo Zones**

**Data source:** Woldia University Survey team

**Summarized by:** woldia university technology transfer and community service directorate

Date: December/2017 E.C.

**Executive Summary:** Both Waghimra Zone and Bugna Woreda in the Amhara Region of Ethiopia are experiencing severe challenges related to drought, food insecurity, malnutrition, health crises, and inadequate sanitation. In Waghimra Zone, the ongoing drought is exacerbating food shortages, health issues, and displacement. Similarly, Bugna Woreda faces high levels of malnutrition, particularly among children, and lacks adequate healthcare infrastructure. Immediate interventions are necessary to address urgent needs and improve living conditions, while long-term solutions should focus on resilience-building, healthcare improvements, and food security.

*Study 1: Health and Nutrition Crisis in Bugna Woreda*

Cluster	Total population	Number of under 5 children	Screened children for sever acute malnutrition	Level of acute malnutrition		Number of Death			Priority Diseases	Sanitation Issues	Water Issues	Food Security
				SAM	Complicated SAM	maternal	Child	by				
							famine					
<b>Kobe</b>	22225	2990	2405	207	9	1	3		Malaria, AGE, Scabies, Pneumonia, AFI	No purification; 2-day queues for water	Springs, 4-hour journey, no purification techniques	One meal/day; reliant on RPSN
<b>Birko</b>	35989	3696	3053	374	7	6	1		Malaria, AGE, Scabies, Pneumonia, AFI	No purification; 3-day queues for water	Springs, 3-hour journey, no purification techniques	One meal/day; same food shortage
<b>Ayina</b>	25489	3451	3014	193	20	2	0		Malaria, AGE, Scabies, Pneumonia, AFI	No purification; 3-day queues for water	Springs, 3-hour journey, no purification techniques	One meal/day; food shortage continues
<b>Kidus Harbie</b>	17642	2388	2079	180	5	6	1		Malaria, AGE, Scabies, Pneumonia, AFI	No purification; 2-day queues for water	Springs, 1-hour journey, no purification techniques	One meal/day; limited food available
<b>Total</b>	<b>101345</b>	<b>12525</b>	<b>10551</b>	<b>894</b>	<b>31</b>	<b>15</b>	<b>4</b>					

**NB:** The case is only for children aged less than 5 years, SAM(sever acute mal nutrition)

*Study 2: Impact of Drought in Waghimra Zone*

District	Total Population	Affected Population	Livestock Losses	Crop Losses (ha)	Total Damaged Land (ha)	Level of acute mal nutrition			Malaria Cases	Diarrhea Cases	Mental Health Issues
						SAM Cases	MAM Cases	PLW Cases			
Sekota City Administration	60,163	8,976	-	844	14,880	193	1,924	1,292	145	14%	Substance abuse, suicide attempts
Tsagbji	41,175	29,552	-	17,749.9	18,556	1,569	2,113	1,728	506	-	Increased mental distress
Dehana	113,040	44,679	-	12,547.5	120,996	1,171	4,775	4,319	3,593	-	Increased substance abuse
Gazgibila	88,595	23,393	337	8,566	82,288	504	3,839	3,227	3,783	-	High stress, trauma
<b>Total</b>	302,973	106,600	337	39,707.4	236,720	3,437	12,651	10,566	8,027	-	Widespread psychosocial issues

### Key Recommendations for Both Studies

Priority level	Action	Waghimra Zone	Bugna Woreda
1	<b>Food Aid</b>	Distribute balanced food packages and therapeutic feeding for malnutrition cases	Provide food assistance and establish therapeutic feeding programs for malnourished children
2	<b>Healthcare Support</b>	Strengthen healthcare facilities with medicines and mobile clinics	Improve healthcare services by providing medical supplies and setting up mobile clinics
3	<b>Water &amp; Sanitation</b>	Address water scarcity with purification and supply systems	Introduce water purification methods and improve water access
4	<b>Psychosocial Support</b>	Provide psychosocial services and vocational training	Offer mental health support and increase community awareness
5	<b>IDP Support</b>	Relocate IDPs to better settlements	Establish temporary shelters and provide necessary support
6	<b>Livelihood Recovery</b>	Provide seeds, farming tools, and veterinary care	Increase agricultural support, including seed distribution and tools
7	<b>Community Resilience</b>	Implement disaster risk reduction programs	Enhance disaster preparedness and community resilience

**NB:** the approach should be center based holistic program(food aid + medical assistance water support)

## **Conclusion**

Both Waghimra Zone and Bugna Woreda face severe drought-related crises, leading to food insecurity, malnutrition, poor health conditions, and inadequate sanitation. Immediate interventions in food distribution, healthcare, water purification, and psychosocial support are urgently required. Long-term solutions must focus on improving agricultural productivity, healthcare infrastructure, and disaster resilience to ensure sustainable recovery for both regions.

# **STUDY 1: RAPID ASSESMENT REPORT**


**On**

**The Impact of Drought and Health/Nutrition Crisis in north Wollo Zones**

By Woldia University Team

December 2024

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**ወልድያ ዩኒቨርሲቲ**



**"ጥራት ያለው ትምህርት ለሁሉም"**

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# The Impact of Drought and Health/Nutrition Crisis in north Wollo Zones

## EXECUTIVE SUMMARY

The Ayina Bugna famine assessment of 2024 provides a comprehensive analysis of the socio-economic and health challenges faced by Bugna woreda in Ethiopia's Amhara region. The report highlights the critical issues in water, food security, and healthcare across key clusters—Kobe, Birko, Ayina, and Kidus Harbie—emphasizing the severe impacts on the community's well-being. Communities primarily rely on seasonal water springs, which often dry up during winter, leading to long access times and a lack of purification techniques. This exacerbates sanitation and health issues. Food security has deteriorated, with most households reducing their meals from two per day to one due to shortages caused by flooding, sleet, and political instability. Food distribution programs have been inactive for over a year, leaving the population dependent on emergency aid. The healthcare sector is critically under-resourced, with high rates of malnutrition, malaria, and other diseases. Stabilization centers lack essential supplies, ambulance services are unavailable, and chronic illnesses are poorly managed. The cumulative effects of these challenges have led to significant mortality rates among children and pregnant women, heightened psychological distress, and ongoing vulnerability within the community.

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## 1 INTRODUCTION

Bugna (Amharic: būgnā, not pronounced "buña") is a woreda in the Amhara Region of Ethiopia, named after the former district. Located in the northwest corner of the Semien Wollo Zone, Bugna is bordered by Meket to the south, the Debub Gondar Zone to the west, the Wag Hemra Zone to the north, and the Lasta woreda to the east. The main town, 'Ayne, is 54 kilometers from Lalibela and 234 kilometers from Woldia, the main zonal city. A 1994 survey found Bugna extremely impoverished, with even better-off farmers sometimes migrating and children leaving school during migration seasons. Despite enduring serious famine for decades, elders recall a time between 1952 and 1968 when there was surplus grain production, and almost 85% of the land was covered with trees in 1935. Deforestation increased after land nationalization, as people began cutting trees and selling firewood. Bugna is culturally affiliated with the neighboring Agaws in the Wag Hemra Zone, with common inter-marriage practices. While there was no villagization under the Derg, thousands were forcibly resettled in Welega and Bale in 1979 and 1985.

According to the 2007 national census by the Central Statistical Agency of Ethiopia (CSA), Bugna had a total population of 75,486, a decrease of 55.94% from the 1994 census, with no urban inhabitants identified. The woreda has a population density of 57.93 persons per square kilometer, lower than the Zone average of 123.25. The majority of the inhabitants practiced Ethiopian Orthodox Christianity (99.19%), with a small Muslim population (1.59%). In 2022, the population was projected to be 90,524. Health sector data for the district reveals a total population of 101,340, including 13,722 children under five and 13,053 children aged six to 59 months. The district is divided into 16 Kebles, served by four health centers and 12 health posts. A significant number of children, 11,386, were screened for malnutrition using the Mid-Upper Arm Circumference (MUAC) method, identifying 1,047 cases of Severe Acute Malnutrition (SAM) and 6,885 cases of Moderate Acute Malnutrition (MAM). This data underscores the urgent need for nutritional interventions and support programs to address the high prevalence of malnutrition in the district.

## 2 Methodology

### Methodology Discussion

The methodology section outlines the approach used for data collection, sampling, and analysis to assess the famine's impact on Bugna woreda. This comprehensive methodology ensures a holistic understanding of the crisis by incorporating diverse perspectives, quantitative data, and qualitative insights. Here's a detailed discussion of the methods:

#### 2.1 Data Collection Methods

The study employed a comprehensive data collection methodology combining qualitative and quantitative methods to assess the impacts of famine and malnutrition. Structured and semi-structured interviews with stakeholders, focus group discussions (FGDs) with community representatives, direct observations in health centers and households, and anthropometric measurements (MUAC) to assess malnutrition were conducted. Audio recordings were used to ensure accurate documentation, while purposeful sampling targeted key informants such as youth, elders, women, health professionals, and political leaders. This approach provided diverse perspectives and reliable data but faced challenges such as potential bias, time consumption, and cultural sensitivity. Despite these limitations, the methodology offers a well-rounded understanding of the situation, guiding immediate and long-term interventions.

### 3 RESULT

#### 4 KOB CLUSTER COMMUNITY DATA



**Figure 1 Kob FGD and Interview**

#### 4.1 Water and Sanitation

The key water resource for the community is water springs, which unfortunately tend to dry up during the winter season. On average, the distance to these water sources is about a four-hour journey, with individuals often facing a queue of around two days, known locally as "werefa."

There are no water purifying techniques in place, leading to significant water shortages and serious sanitary issues. The minimum standard water requirement for an individual is 7.5 liters, highlighting the critical need for improved water management and purification solutions in the community.

#### 4.2 Food Security

The community primarily relies on farming, animal breeding, trade, and employment for their income. Traditionally, they have had two meals a day, but due to a recent food shortage, most of the community is now surviving on just one meal a day.

Respondents to our semi-structured questionnaires identified flooding, sleet (ice pellets), Snow melted rain, and political instability as the main causes of the food shortage. There have been no food distribution programs in the community for the past year and four months, despite the community being dependent on the Rural Productive Safety Net (RPSN) program.

However, since September 4, 2017, various organizations such as the World Food Programme (WFP), UNICEF, and ORDA have initiated emergency supply programs, particularly targeting children suffering from malnutrition.

### **4.3 Health and Psychological Impact**

The Kobe Health Center serves a catchment population of 22,225 people. Within its cluster, there are three health posts located in Felfelik, Zeblo, and Debre Egzi. The population includes 2,990 children under the age of five, out of which 2,405 have been screened for malnutrition. Among these, 207 cases of Severe Acute Malnutrition (SAM) were identified, with nine cases being complicated SAM within just three days. Unfortunately, the health center lacks essential materials for formula milk preparation or dilution, leading to mothers refusing admission to the Stabilization Center (SC) due to the absence of a feeding program for caregivers. The SC has only one room for all cases, equipped with basic items like blankets, foam, and hygiene materials. There is also a shortage of necessary medical supplies such as NG tubes, IV cannulas (sizes 22 and 24), RESOMAL, and antibiotics.

Adult-onset malnutrition primarily affects the elderly and individuals with chronic illnesses such as HIV, tuberculosis (TB), and diabetes mellitus (DM). The top five diseases reported at the health center over the past three months, based on logbook reviews and consultations with health professionals, are malaria, acute gastroenteritis (AGE), scabies, pneumonia, and acute febrile illness (AFI), which includes conditions like urinary tract infections (UTI), acute otitis media (AOM), typhoid fever, and dyspepsia.

Malaria is particularly prevalent in the Kobe Health Center's catchment area, which is endemic to the disease. Over the past six months, more than ten patients have been diagnosed and treated for malaria daily, despite a shortage of antimalarial drugs and testing kits. No preventive actions have been taken for over two years. Scabies is another significant concern, with no medication

available at all. For the other top five diseases, there is a notable shortage of antibiotics and other medications.

The emergency setup at the health center includes crystalloids, D40%, a glucometer and its strips, a pulse oximeter, and a portable oxygen concentrator for referrals. However, there has been no ambulance service for the past year and four months, leading to tragic outcomes such as the death of a laboring mother in August 2016 Year of Mercy due to the lack of referral transport. Additionally, community data indicates that within two months, three children in Debre Egzi Keble died due to famine.

The health center is also an Antiretroviral Therapy (ART) site, serving 71 patients. However, there is a shortage of HIV kits and prophylaxis for opportunistic infections (OI). Adult-onset malnutrition among HIV patients has increased due to the recent famine, and there is no feeding program in place. The health center also faces a shortage of medications for chronic conditions, with 11 patients suffering from diabetes mellitus (DM), 70 from hypertension (HTN), and 20 from bronchial asthma (B. Asthma).

**Table 1 Kob Cluster Data**

<b>No.</b>	<b>Description</b>	<b>Quantity</b>
1	Total Population	22,225
2	Number of Health Post	3
3	Children under the age of 5	2,990
4	Number of Screened for malnutrition	2,405
5	Severe Acute Malnutrition (SAM) identified	207
6	complicated SAM	9
7	number of rooms for Stabilization Center (SC)	1
8	Maternal Death at Debre Egzi Keble	1
9	Children Death Due to Famine at Debre Egzi Keble	3



Figure 2 Kob Health center SC

## 5 BIRKO CLUSTER COMMUNITY DATA



**Figure 3 Birko FGD**

### 5.1 Water and Sanitation

The community primarily relies on water springs as their key water resource. Unfortunately, most of these springs tend to dry up during the winter season. On average, accessing these water sources requires a three-hour journey, with individuals often facing a queue of around three days.

There are no water purifying techniques in place, leading to significant water shortages and serious hygiene issues. The minimum standard water requirement for an individual ranges from 7.5 to 15 liters, underscoring the critical need for improved water management and purification solutions in the community.

### 5.2 Food Security

The community primarily relies on farming, animal breeding, trade, and employment as their main sources of income. Traditionally, the community has been able to have two meals a day. However, due to a recent food shortage, most of the community members are now surviving on just one meal a day.

Respondents to our semi-structured questionnaires identified flooding, sleet (ice pellets, locally known as Snow melted rain, and political instability as the main causes of the food shortage.

There have been no food distribution programs in the community for the past year and four months, despite the community being dependent on the Rural Productive Safety Net (RPSN) program.

Since September 4, 2017, various organizations such as the World Food Programme (WFP), UNICEF, and ORDA have initiated emergency supply programs, particularly targeting children suffering from malnutrition. These efforts have provided some relief, but the community continues to face significant challenges due to the ongoing food shortage.

### **5.3 Health and Psychological Impact**

The Birko Health Center serves a catchment population of 27,294 people. Within its cluster, there are three health posts located in Birkuakua, Laydiba and Gulha. The population includes 3,696 children under the age of five, out of which 3,053 have been screened for malnutrition. Among these, 374 cases of Severe Acute Malnutrition (SAM) were identified, with seven cases being complicated SAM. Unfortunately, the health center lacks essential materials for formula milk preparation or dilution, leading to mothers refusing admission to the Stabilization Center (SC) due to the absence of a feeding program for caregivers. The SC has only one room for all cases, equipped with basic items like blankets, foam, and hygiene materials. There is also a shortage of necessary medical supplies such as NG tubes, IV cannulas (sizes 22 and 24), RESOMAL, and antibiotics.

Adult-onset malnutrition primarily affects the elderly and individuals with chronic illnesses such as HIV, tuberculosis (TB), and diabetes mellitus (DM). The top five diseases reported at the health center over the past three months, based on logbook reviews and consultations with health professionals, are malaria, acute gastroenteritis (AGE), scabies, pneumonia, and acute febrile illness (AFI), which includes conditions like urinary tract infections (UTI), acute otitis media (AOM), typhoid fever, and dyspepsia.

Malaria is particularly prevalent in the Birko Health Center's catchment area, which is endemic to the disease. Over the past six months, more than ten patients have been diagnosed and treated for malaria daily, despite a shortage of antimalarial drugs and testing kits. No preventive actions have been taken for over two years. Scabies is another significant concern, with no medication

available at all. For the other top five diseases, there is a notable shortage of antibiotics and other medications.

The emergency setup at the health center includes crystalloids, D40%, a glucometer and its strips, a pulse oximeter, and a portable oxygen concentrator for referrals. However, there has been no ambulance service for the past year and four months, leading to tragic outcomes such as the death of six laboring mothers due to the lack of referral transport (four in Birko and two in Laydiba Kebles). Additionally, community data indicates that within the past two months, one child in Gulha Keble died due to famine.

The health center is not an Antiretroviral Therapy (ART) site. It also faces a shortage of medications for chronic conditions, with 20 patients suffering from hypertension (HTN) and five from bronchial asthma (B. Asthma).

**Table 2 Birko Cluster Data**

<b>No.</b>	<b>Description</b>	<b>Quantity</b>
1	Total Population	35,984
2	Number of Health Post	2
3	Children under the age of 5	3,696
4	Number of Screened for malnutrition	3,053
5	Severe Acute Malnutrition (SAM) identified	374
6	complicated SAM	7
7	number of rooms for Stabilization Center (SC)	1
8	Maternal Death at 4 in Birko and 2 laydiba kebels	6
9	Children Death Due to Famine at Gulha Keble	1



Figure 4 Birko Health Center SC

## 6 AYINA CLUSTER COMMUNITY DATA



**Figure 5 University team at Ayina Health Center Entrance**

### 6.1 Water And Sanitation

The community primarily relies on water springs as their key water resource. Unfortunately, most of these springs tend to dry up during the winter season. On average, accessing these water sources requires a three-hour journey, with individuals often facing a queue of around three days.

There are no water purifying techniques in place, leading to significant water shortages and serious hygiene issues. The lack of clean water exacerbates the community's health challenges, making it crucial to implement improved water management and purification solutions.

### 6.2 Food Security

The community primarily relies on farming, animal breeding, trade, and employment as their main sources of income. Traditionally, the community has been able to have two meals a day. However, due to a recent food shortage, most of the community members are now surviving on just one meal a day.

Respondents to our semi-structured questionnaires identified flooding, sleet (ice pellets, locally known as Snow melted rain, and political instability as the main causes of the food shortage. There have been no food distribution programs in the community for the past year and four months, despite the community being dependent on the Rural Productive Safety Net (RPSN) program.

The lack of food distribution programs has exacerbated the situation, leaving the community in a vulnerable state. The dependency on the RPSN program highlights the need for consistent and reliable support to ensure food security. The recent interventions by various organizations, such as the World Food Programme (WFP), UNICEF, and ORDA, have provided some relief, particularly for children suffering from malnutrition. However, the community continues to face significant challenges due to the ongoing food shortage and the absence of a sustainable solution.

### **6.3 Health and Psychological Impact**

The Ayina Health Center serves a catchment population of 25,489 people. Within its cluster, there are four health posts located in Ayina Mickael, Ayina Geter, Meskele Kirstos, and Daria. The population includes 3,451 children under the age of five, out of which 3,014 have been screened for malnutrition. Among these, 193 cases of Severe Acute Malnutrition (SAM) were identified, with 20 cases being complicated SAM. Unfortunately, only six of these cases were admitted to the Stabilization Center (SC) due to a lack of essential materials for formula milk preparation or dilution. Mothers often refuse admission to the SC because of the absence of a feeding program for caregivers. The SC has only one room for all cases, equipped with basic items like blankets, foam, and hygiene materials. There is also a shortage of necessary medical supplies such as NG tubes, IV cannulas (sizes 22 and 24), RESOMAL, and antibiotics.

Adult-onset malnutrition primarily affects the elderly and individuals with chronic illnesses such as HIV, tuberculosis (TB), and diabetes mellitus (DM). There are 57 patients with HIV in the catchment area. The top five diseases reported at the health center over the past three months, based on logbook reviews and consultations with health professionals, are malaria, acute gastroenteritis (AGE), scabies, pneumonia, and acute febrile illness (AFI), which includes conditions like urinary tract infections (UTI), acute otitis media (AOM), typhoid fever, and dyspepsia.

Malaria is particularly prevalent in the Ayina Health Center's catchment area, which is endemic to the disease. Over the past six months, more than ten patients have been diagnosed and treated for malaria daily, despite a shortage of antimalarial drugs and testing kits. No preventive actions have been taken for over two years. Scabies is another significant concern, with no medication available at all. For the other top five diseases, there is a notable shortage of antibiotics and other medications.

The emergency setup at the health center includes crystalloids, D40%, a glucometer and its strips, a pulse oximeter, and a portable oxygen concentrator for referrals. However, there has been no ambulance service for the past year and four months. There is no data on maternal deaths in the Ayina cluster, but community data indicates that within the past two months, two children in Mekele Kirstos and Daria Keble died due to famine. One of the children who died in Daria was a two-year-old male who was on the Outpatient Therapeutic Program (OTP).

The health center is an Antiretroviral Therapy (ART) site, serving 327 patients. There were two deaths in the past September and October months due to starvation, as reported by health professionals and the community. The health center also faces a shortage of medications for chronic conditions, with 153 patients suffering from hypertension (HTN), 28 from bronchial asthma (B. Asthma), and 58 from diabetes mellitus (DM).

**Table 3 Ayina Cluster Data**

<b>No.</b>	<b>Description</b>	<b>Quantity</b>
1	Total Population	25,489
2	Number of Health Post	4
3	Children under the age of 5	3,451
4	Number of Screened for malnutrition	3,014
5	Severe Acute Malnutrition (SAM) identified	193
6	complicated SAM	20
7	number of rooms for Stabilization Center (SC)	1
8	Mother death due to famine at Ayina Town	2
9	Children Death Due to Famine at Gulha Keble	0



**Figure 6** Ayina Health Center SC

## 7 KIDUS HARBIE CLUSTER COMMUNITY DATA



**Figure 7 University Team at Kidus Harbie**

### 7.1 Water and Sanitation

The community primarily relies on water springs as their key water resource. Unfortunately, most of these springs tend to dry up during the winter season. On average, accessing these water sources requires a one-hour journey, with individuals often facing a queue of around two days.

There are no water purifying techniques in place, leading to significant water shortages and serious sanitary issues. The lack of clean water exacerbates the community's health challenges, making it crucial to implement improved water management and purification solutions.

### 7.2 Food Security

The community primarily relies on farming, animal breeding, trade, and employment as their main sources of income. Traditionally, the community has been able to have two meals a day. However, due to a recent food shortage, most of the community members are now surviving on just one meal a day.

Respondents to our semi-structured questionnaires identified flooding, sleet (ice pellets, locally known as Snow melted rain, and political instability as the main causes of the food shortage. There have been no food distribution programs in the community for the past year and four months, despite the community being dependent on the Rural Productive Safety Net (RPSN) program.

The lack of food distribution programs has exacerbated the situation, leaving the community in a vulnerable state. The dependency on the RPSN program highlights the need for consistent and reliable support to ensure food security. The recent interventions by various organizations, such as the World Food Programme (WFP), UNICEF, and ORDA, have provided some relief, particularly for children suffering from malnutrition. However, the community continues to face significant challenges due to the ongoing food shortage and the absence of a sustainable solution.

### **7.3 Health and Psychological Impact**

The Kidus Harbie Health Center serves a catchment population of 17,642 people. Within its cluster, there are two health posts located in Quaro and Debre Roha. The population includes 2,388 children under the age of five, out of which 2,079 have been screened for malnutrition. Among these, 180 cases of Severe Acute Malnutrition (SAM) were identified, with five cases being complicated SAM. Unfortunately, the health center lacks essential materials for formula milk preparation or dilution, leading to mothers refusing admission to the Stabilization Center (SC) due to the absence of a feeding program for caregivers. The SC has only one room for all cases, equipped with basic items like blankets, foam, and hygiene materials. There is also a shortage of necessary medical supplies such as NG tubes, IV cannulas (sizes 22 and 24), RESOMAL, and antibiotics.

Adult-onset malnutrition primarily affects the elderly and individuals with chronic illnesses such as HIV, tuberculosis (TB), and diabetes mellitus (DM). The top five diseases reported at the health center over the past three months, based on logbook reviews and consultations with health professionals, are malaria, acute gastroenteritis (AGE), scabies, pneumonia, and acute febrile illness (AFI), which includes conditions like urinary tract infections (UTI), acute otitis media (AOM), typhoid fever, and dyspepsia.

Malaria is particularly prevalent in the Kidus Harbie Health Center's catchment area, which is endemic to the disease. Over the past six months, more than ten patients have been diagnosed and treated for malaria daily, despite a shortage of antimalarial drugs and testing kits. No preventive actions have been taken for over two years. Scabies is another significant concern, with no medication available at all. For the other top five diseases, there is a notable shortage of antibiotics and other medications.

The emergency setup at the health center includes crystalloids, D40%, a glucometer and its strips, a pulse oximeter, and a portable oxygen concentrator for referrals. However, there has been no ambulance service for the past year and four months, leading to tragic outcomes such as the death of eight laboring mothers within the past year due to the lack of referral transport. The most recent death occurred just one week ago after a home delivery and subsequent bleeding due to lack of transportation. Additionally, community data indicates that within the past two months, one child in Quaro Keble died due to famine.

The health center is not an Antiretroviral Therapy (ART) site. It also faces a shortage of medications for chronic conditions, with 32 patients suffering from hypertension (HTN), nine from bronchial asthma (B. Asthma), and none from diabetes mellitus (DM).

**Table 4 Kidus Harbie Cluster Data**

<b>No.</b>	<b>Description</b>	<b>Quantity</b>
1	Total Population	17,642
2	Number of Health Post	2
3	Children under the age of 5	2,388
4	Number of Screened for malnutrition	2,079
5	Severe Acute Malnutrition (SAM) identified	180
6	complicated SAM	5
7	number of rooms for Stabilization Center (SC)	1
8	Maternal Death at 6 in Quaro and 2 other kebeles	6
9	Children Death Due to Famine at Quaro Keble	1



**Figure 8 Kidus Harbie Health Center SC**

## 8 Conclusion and Recommendation

The document provides a comprehensive assessment of the Ayina Bugna famine in 2024, detailing the social, economic, and health-related challenges faced by the Bugna woreda in Ethiopia's Amhara region. It highlights critical issues across key clusters, including Kobe, Birko, Ayina, and Kidus Harbie, emphasizing the urgent needs in water and sanitation, food security, and healthcare.

### **Key Findings:**

#### **1. Water and Sanitation:**

- Communities primarily rely on water springs, many of which dry up during winter.
- Long distances and wait times to access water are common, with no water purification techniques in place.
- Serious hygiene and sanitation issues exacerbate health challenges.

#### **2. Food Security:**

- Most residents have reduced their meals from two per day to one due to food shortages.
- Flooding, sleet, and political instability are the main causes of food scarcity.
- Despite dependency on the Rural Productive Safety Net (RPSN) program, no food distribution has occurred for over a year.

#### **3. Healthcare:**

- High prevalence of malnutrition, with significant cases of Severe Acute Malnutrition (SAM) among children.
- Malaria, scabies, and acute gastroenteritis are the most common diseases, with shortages of essential medications and supplies.
- Lack of preventive measures for malaria for over two years.
- Ambulance services are unavailable, resulting in preventable deaths.

- Stabilization centers lack materials for treating malnutrition, leading to low admission rates.
- Chronic conditions like HIV, tuberculosis, diabetes, and hypertension are poorly managed due to resource shortages.

#### **4. Community Impact:**

- High mortality rates among children and pregnant women due to malnutrition and lack of healthcare facilities.
- Psychological and social stress is evident across all clusters.

### **Recommendations**

#### **1. Water and Sanitation:**

For immediate relief, it is essential to deliver water through water tankers, ensuring at least 7.5 liters per individual per day. This will help address the urgent water shortage and sanitary issues faced by the community.

- Implement sustainable water purification systems.
- Develop community-based water management programs to reduce access time and improve availability during dry seasons.
- Increase awareness and training on hygiene and sanitation practices.

#### **2. Food Security:**

For immediate relief, it is essential to distribute food from various governmental, non-governmental, Woldia University, Amhara University Forum and international organizations according to the World Health Organization (WHO) standards for individual nutritional needs. This will help address the urgent food shortage and improve the overall well-being of the community.

- Resume and scale up food distribution programs, especially through the RPSN.
- Introduce agricultural support initiatives, including flood-resistant crops and livestock management.

- Enhance disaster preparedness and mitigation programs to address the impacts of flooding and other natural disasters.

### **3. Healthcare:**

- Provide immediate supplies of essential medications, including antimalarials, antibiotics, and nutritional supplements.
- Equip stabilization centers with formula preparation materials and caregiver feeding programs.
- Reintroduce ambulance services and improve referral systems for emergencies.
- Expand preventive measures for malaria, including insecticide-treated nets and community health education.

### **4. Integrated Support Programs:**

- Establish long-term partnerships with organizations like WFP, UNICEF, and ORDA to ensure consistent aid delivery.
- Invest in infrastructure development, such as health centers, roads, and communication networks.
- Conduct regular assessments to monitor progress and adjust interventions as needed.

## Suggested Aid Items for Ayina Bugna Following Rapid Assessment

### 1. Water and Sanitation

#### 1.1 Required Water

Absolute minimum requirement of water per individual 7.5 liters (WHO standard)

No	Cluster	Affected population in the cluster (by water stress)	Affected population in the cluster (by water stress) who have transportation access	Absolute minimum requirement of water per individual per day	Required water in a day (by liter)	Means of water deliver
1	Kob	22,225	3286	7.5	24,645	Transport from Lalibela Water track
2	Birko	35,984	4096	7.5	30,720	Transport from Lalibela Water track
3	Ayina	25,489	4234	7.5	31,755	Transport from Lalibela Water track
4	Kidus Harbie	17,642	0	7.5	0	Transport from Lalibela Water track
5	Total	101340			89120	

**N.B** Water tanker should be installed in each cluster at least 2 tanker which contain 30,000 liter

#### 1.2 required item for water quality

No	Cluster	Affected population in the cluster (by sanitary issue)	Required sanitary materials (goods)	Minimum required by number per month per individual	Quantity
1	Kob	22,225	Water purification (chlorine dioxide)		
			Soap	1 for cloth	22,225 (in number)
				1 for body	22,225 (in number)
			Pads (menses)	1 Pack	5,000 pack (estimated 5,000 are reproductive age females in the cluster)
2	Birko	35,984	Water purification (chlorine dioxide)		
			Soap	1 for cloth	35,984 (in number)
				1 for body	35,984 (in number)

			Pads	1 pack	7,000 pack (estimated 7,000 are reproductive age females in the cluster)
3	Ayina	25,489	Water purification tablet (chlorine dioxide)		
			Soap	1 for cloth	25,489 (in number)
				1 for body	25,489 (in number)
			Pads	1 pack	6,000 pack (estimated 6,000 are reproductive age females in the cluster)
4	Kidus Harbie	17,642	Water purification tablet (chlorine dioxide)		
			Soap	1 for cloth	17,642 (in number)
				1 for body	17,642 (in number)
			Pads	1 pack	4,000 pack (estimated 4,000 are reproductive age females in the cluster)
5	Total	101340			

## 2. Food supply

**Kob cluster** (Based on observations, 60% of the total population requires immediate intervention and support)

No	Food basket	Affected population in the cluster	Individual Requirement per month	Total
1	Staple food, wheat or teff flour by kg.	13,335	15	200025
2	Pulses, beans or chick pea by kg.	13,335	1.5	20002.5
3	Veg. oil by liter	13,335	3	40005
4	Iodized salt by kg.	13,335	0.25	3333.75
5	Sugar by kg.	13,335	1	13335

**Birko cluster** (Based on observations, 60% of the total population requires immediate intervention and support)

No	Food basket	Affected population in the cluster	Individual Requirement per month	Total
1	Staple food, wheat or teff flour by kg.	21,591	15	323865
2	Pulses, beans or chick pea by kg.	21,591	1.5	32386.5
3	Veg. oil by liter	21,591	3	64773
4	Iodized salt by kg.	21,591	0.25	5397.75
5	Sugar by kg.	21,591	1	21591

**Ayina cluster** (Based on observations, 50% of the total population requires immediate intervention and support)

No	Food basket	Affected population in the cluster	Individual Requirement per month	Total
1	Staple food, wheat or teff flour by kg.	12,745	15	191175
2	Pulses, beans or chick pea by kg.	12,745	1.5	19117.5
3	Veg. oil by liter	12,745	3	38235
4	Iodized salt by kg.	12,745	0.25	3186.25
5	Sugar by kg.	12,745	1	12745

**Kidus Harbie cluster** (Based on observations, 40% of the total population requires immediate intervention and support)

No	Food basket	Affected population in the cluster	Individual Requirement per month	Total
1	Staple food, wheat or teff flour by kg.	7,057	15	105855
2	Pulses, beans or chick pea by kg.	7,057	1.5	10585.5
3	Veg. oil by liter	7,057	3	21171
4	Iodized salt by kg.	7,057	0.25	1764.25
5	Sugar by kg.	7,057	1	7057

### 3. Health Service

Kob health center

By Proxy GAM rate = 15% of SAM children expected be admitted to SC

No	Required item	No. Children to SC	Item				
1	SC set up	31	Shed/room	Foam	Blanket	Bedsheet	Materials for Formula Dilution
			6 rooms	31	31	62	5 Stove, 5 Fermuz and 31 Nickel
		Feeding for care givers (10days stay)	Flour (31*0.5Kg=15.5 Kg per day)*10=155Kg	Pulses (0.05Kg*31 =1.55Kg)Kg per day)*10=15.5Kg	Vegetabile oil=0.1liter *31=3.1 per day)*10=31 liter		
2	Drugs and supplies for SC	31	F75, F100, RUTF	Ampicillin, Gentamycin , ceftriaxone	IV cannulas no 22/24	NG-TUBES(F r8-12)	
	Drugs and supplies for top 5 diseases	malaria	Artemether-Lumefantrine, Chloroquine, Quinine, Primaquine and Artesunate				
		AGE	Oral Rehydration Salts (ORS), RESOMSAL,Zinc supplements, Antibiotics (e.g., Ciprofloxacin, Metronidazole),				
		Scabies	Permethrin cream (5%), BBL, Ivermectin				
		pneumonia	Antibiotics (e.g., Amoxicillin, Azithromycin, Ceftriaxone for severe cases)				
3	Drugs and supplies for emergency	Crystalloids, D40%, Paracetamol, Diazepam					
4	Drugs and supplies for chronic illness	Anti-HTN (Amlodipine, Nifedipine, HCT), (Phenytoin, Phenobarbitones					
5	Transportation and referral linkage	Ambulance					
6	Onsite Training for Health Professional						

## Birko health center

By Proxy GAM rate = 15% of SAM children expected be admitted to SC

No	Required item	No. Children to SC	Item				
1	SC set up	57	Shed/room	Foam	Blanket	Bedsheet	Materials for Formula Dilution
			12 rooms	57	57	114	10 Stove, 10 Fermuz and 57 Nickel
		Feeding for care givers (10days stay)	Flour (57*0.5Kg=28.5 Kg per day)*10=285Kg	Pulses (0.05Kg*57=2.85Kg per day)*10=28.5 Kg	Vegetabile oil=0.1liter *57 =5.7 per day)*10=57 liter		
2	Drugs and supplies for SC	57	F75, F100, RUTF	Ampicillin, Gentamycin, ceftriaxone	IV cannulas no 22/24	NG-TUBES( Fr8-12)	
	Drugs and supplies for top 5 diseases	malaria	Artemether-Lumefantrine,Chloroquine, Quinine, Primaquine and Artesunate				
		AGE	Oral Rehydration Salts (ORS), RESOMSAL,Zinc supplements				
		Scabies	Permethrin cream (5%), BBL, Ivermectin				
		pneumonia	Antibiotics (e.g., Amoxicillin, Azithromycin, Ceftriaxone for severe cases)				
3	Drugs and supplies for emergency	Crystalloids, D40%, Paracetamol, Diazepam					
4	Drugs and supplies for chronic illness	Anti-HTN (Amlodipine, Nifedipine, HCT), (Phenytoin, Phenobarbitones					
5	Transportation and referral linkage	Ambulance					
6	Onsite Training for Health Professional						

## Ayina health center

By Proxy GAM rate = 15% of SAM children expected be admitted to SC

No	Required item	No. Children to SC	Item				
1	SC set up	29	Shed/room	Foam	Blanket	Bedsheet	Materials for Formula Dilution
			6 rooms	29	29	58	5 Stove, 5 Fermuz and 29 Nickel
		Feeding for care givers (10days stay)	Flour (29*0.5Kg=14.5Kg per day)*10=145Kg	Pulses (0.05Kg*29=1.45 Kg per day)*10=14.5Kg	Vegetabile oil=0.1liter *29=2.9 per day)*10=29 liter		
2	Drugs and supplies for SC	29	F75, F100, RUTF	Ampicillin, Gentamycin, ceftriaxone	IV cannulas no 22/24	NG-TUBES(Fr 8-12)	
	Drugs and supplies for top 5 diseases	malaria	Artemether-Lumefantrine, Chloroquine, Quinine, Primaquine and Artesunate				
		AGE	Oral Rehydration Salts (ORS), RESOMSAL, Zinc supplements Antibiotics (e.g., Ciprofloxacin, Metronidazole),				
		Scabies	Permethrin cream (5%), BBL, Ivermectin				
		pneumonia	Antibiotics (e.g., Amoxicillin, Azithromycin, Ceftriaxone for severe cases)				
3	Drugs and supplies for emergency	Crystalloids, D40%, Paracetamol, Diazepam					
4	Drugs and supplies for chronic illness	Anti-HTN (Amlodipine, Nifedipine, HCT), (Phenytoin, Phenobarbitones					
5	Transportation and referral linkage	Ambulance					
6	Onsite Training for Health Professional						
7	Mobile Clinic						

## Kidus Harbie health center

By Proxy GAM rate = 15% of SAM children expected be admitted to SC

No	Required item	No. Children to SC	Item				
1	SC set up	27	Shed/room	Foam	Blanket	Bedsheet	Materials for Formula Dilution
			6 rooms	27	27	54	5 Stove, 5 Fermuz and 29 Nickel
		Feeding for care givers (10days stay)	Flour (27*0.5Kg=13.5Kg per day)*10=135Kg	Pulses (0.05Kg*27=1.35Kg per day)*10=13.5Kg	Vegetable oil=0.1liter *27=2.7 per day)*10=27 liter		
2	Drugs and supplies for SC	27	F75, F100, RUTF	Ampicillin, Gentamycin, ceftriaxone	IV cannulas no 22/24	NG-TUBES( Fr8-12)	
	Drugs and supplies for top 5 diseases	malaria	Artemether-Lumefantrine, Chloroquine, Quinine, Primaquine and Artesunate				
		AGE	Oral Rehydration Salts (ORS), RESOMSAL, Zinc supplements Antibiotics (e.g., Ciprofloxacin, Metronidazole),				
		Scabies	Permethrin cream (5%), BBL, Ivermectin				
		pneumonia	Antibiotics (e.g., Amoxicillin, Azithromycin, Ceftriaxone for severe cases)				
3	Drugs and supplies for emergency	Crystalloids, D40%, Paracetamol, Diazepam					
4	Drugs and supplies for chronic illness	Anti-HTN (Amlodipine, Nifedipine, HCT), (Phenytoin, Phenobarbitones					
5	Transportation and referral linkage	Ambulance					
6	Onsite Training for Health Professional						

**NB:** The document calls for immediate, coordinated actions to alleviate the dire situation in Bugna woreda and build resilience against future crises.

## **Study 2: STUDY 1: RAPID ASSESMENT REPORT**

**On**

**The Impact of Drought and Health/Nutrition Crisis in Waghimra Zone**

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**December, 2024 G.c.**

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## **1. Executive Summary**

The recent outbreak of drought in the Waghimra Zone has caused severe hardships for the local population, significantly impacting food security, health, psychosocial problems, and livelihoods. This rapid assessment report outlines the key findings regarding the drought's effects and identifies urgent interventions required to mitigate these impacts. Immediate interventions should focus on addressing food shortages, health issues, and displacement, while strengthening community resilience through sustainable solutions

## **.2. Introduction**

Wag-Himra Zone is one of the 12 zones of the Amhara Regional State, located 420 km from Bahir Dar and 720 km from Addis Ababa. It has 7 rural districts and 2 cities under its administration. Among these, 4 woredas Sekota City Administration, Tsagbji, Dehana, and Gazgibila are severely affected by drought. This rapid assessment was conducted from April 11, 2017, to April 15, 2017, in the purposefully selected areas of Sekota City Administration, Dehana, Tsagbji, and Gazgibila.

The drought in the selected districts has different phases, ranging from job loss to severe health issues due to a lack of daily food. The major causes of starvation include flooding and landslides resulting from excessive rainfall during the summer season, instability due to ongoing and past conflicts, and displacement from various regions, such as Wolega, Metema, Maikadra, and Benishangul-Gumuz.

Waghimra Zone, located in the Amhara Region of Ethiopia, is facing one of the most severe droughts in recent history. The primary type of drought affecting the region is excessive rainfall, which has led to widespread crop failures, loss of livestock, and acute food shortages. This assessment was conducted to evaluate the impact of the drought on the affected communities and to identify critical areas for immediate intervention.

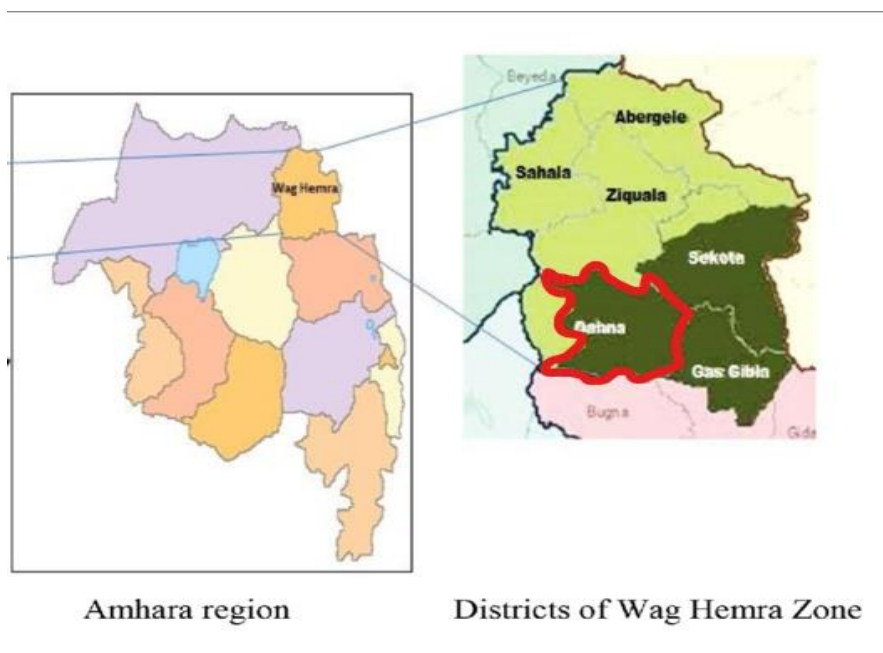


Figure 9: Map of Waghimera

Table 5: Disaster Affected Districts selected for study

Name of District	Total Population	Affected population
<b>Sekota City Administration</b>	60163 (M=28160 F=32057)	8976 (M=4480, F=4496)
<b>Tsagibji</b>	41175 ( M=20836, F= 203339)	29552
<b>Dehana</b>	113,040 ( M=55793 F= 57247	44679
<b>Gazgibla</b>	88595 ( M=45171, F=43424)	23393
<b>Total</b>	302973	106600

### 3. Methodology

The approach used to conduct this rapid assessment is the Survey Methodology.

**Sampling:** The team purposely selected four districts—Dehana, Tsagibji, Gazgibla, and the Sekota City administration from the Waghimra Zone, using the extent of harm as a criterion. Additionally, IDP sites in Sekota town were included in the study.

**Data Collection Methods:** The rapid assessment team organized by Woldia University, consisting of members from different departments, conducted household surveys using

interviews, focus group discussions (FGDs), observations, audio and audiovisual recordings, and anthropometric measurements. Both primary and secondary data were collected. We gathered secondary data from health facilities, health offices, disaster risk management (DRM) offices, and women and social affairs offices at both the district and zonal levels.

In conducting the assessment, health officers from the Sekota city administration, along with representatives from the Women and Child Office, Youth and Sports Office, Agriculture Office, Education Office, the Sekota city mayor, the Zone vice Administrator, and community representatives, actively participated in the rapid assessment team.

## 4. Key findings

### 4.1. Population Affected

The following table shows that Dehana District has the highest number of affected people, with 44,679 individuals impacted by the drought. Tsagibji and Gazgibla follow, with 29,552 and 23,393 affected people, respectively, while Sekota City Administration has the fewest, with 8,976 individuals affected. Overall, the total affected population across all four districts is 106,600.

*Table 6: drought-affected population group in Waghimra Zone*

Name of District	Affected population
<b>Sekota City Administration</b>	8976
<b>Tsagibji</b>	29552
<b>Dehana</b>	44679
<b>Gazgibla</b>	23393
<b>Total</b>	106600

### 4.2 Livelihood/Food insecurity

#### ***Crop Failures, and Land Destruction***

*The drought has devastated agricultural production in the Waghimra Zone, particularly in Sekota City Administration, Dehana, Tsagibji, and Gazgibla. Excessive rainfall has led to the destruction of farmlands through erosion and landslides, resulting in poor crop yields and, in*

many cases, total crop failure. Staple crops, mainly teff, barley, beans, and wheat, have been particularly affected, leaving farmers without sufficient food supplies.

*Table 7: Destruction*

District	Total farmland	Damaged land	Planned for harvest	Damaged harvest
SCA	1880	844 (44.9%)	23154	14880
Dehana	27277.2	12547.5 (46%)		120,996
Gazgibla	18621.7	8566 (46%)		82288
Tsagibji	98610.5	17749.9 (18%)		18556
<b>Total</b>	146389.4	39707.4 (27%)	-	236720

### ***Livestock Losses***

A vital resource for the local economy and food security, livestock (cattle and goats), irrigational farm land has also been negatively hit by the intense rains. Significant livestock loss has occurred in rural regions as a result of animal mortality brought on by heavy rains as well as a lack of water and forage. The situation of food insecurity has been made worse by the fact that many households have lost both their main source of income and food.

*Table 8: Livestock loss by district due to drought*

District	Total livestock loss
SCA	44
Dahina	134
Gazgibla	106
Tsagibji	53
<b>Total</b>	337

NB: Sekota city administration

### ***Household Food Insecurity***

Many households in the Waghimra Zone are experiencing severe food shortages due to significant crop and livestock losses caused by the drought. The inability of local markets to meet food demands has led to an increased dependence on external food aid. This has resulted in

a sharp rise in malnutrition rates, particularly among vulnerable groups such as children pregnant and lactating women, and the elderly. Additionally, food prices have surged due to limited supply and inflation, leaving impoverished populations unable to afford basic necessities.

#### **Bedridden ART patient,**

*“I wanted a bolus of injera to take my medication; I missed it for a long time.” This illustrates how the situation is very dire in affected households. One impoverished mother finally went to kebele office with her child and stated “Mr. Kebele chairman, please take and give care to my child, as you are a government. I prefer to die elsewhere, but please give life to my child”*

### **4.3. Hygiene and Sanitation Facilities**

In the Waghimra Zone, there are serious problems with water and sanitation. For instance, there are issues with water scarcity in the Sekota City government. People must therefore travel for almost two hours to gather water from the source river. Despite the city's various water potentials, capacity issues prevent them from being fully utilized. Furthermore, during the time of our observation, Sekota town lacked any trash removal systems. One might imagine how serious the sanitation and hygiene issues might be in other isolated districts if they continue in Sekota, the zonal city.

### **4.4. Health Implications**

#### **4.4.1 Malnutrition**

Malnutrition is a critical concern in the Waghimra Zone, particularly among children, pregnant and lactating, and elders. Acute food shortages and a decline in dietary diversity have led to increased cases of severe acute malnutrition (SAM) and moderate acute malnutrition (MAM). Health facilities are overwhelmed and struggling to provide adequate care due to limited resources. Health professionals report that malnourished individuals diagnosed with MAM often return as SAM cases due to a lack of food at home. Due to drought induced malnutrition, a total of 18 death of children is reported so far.

The drought has placed immense pressure on the already strained healthcare infrastructure in the Waghimra Zone. **Health facilities face severe shortages of essential medicines and nutritional supplies, including F75, F100, Plumpy Nuts, and Plumpy Sups, which are**

**critical for treating SAM and MAM cases.** Additionally, **there is a lack of antibiotics like ceftriaxone and vancomycin needed to treat complications arising from malnutrition and disease outbreaks.** The increased demand for healthcare services has overwhelmed the limited resources, leading to recorded deaths from nutrition-related complications, as confirmed by a health facility quality officer. As a result, the cases of Malnutrition are often above the capacity of health facilities (Teferi Hailu Memorial Hospital, for example, has only 6 beds for SAM).

*Table 9: Malnutrition cases of affected districts*

District	Cases	Level of malnutrition	
	(SAM)	(MAM)	(PLW)
Sekota City	193	1924	1292
Tsagbji	1569	2113	1728
Gazgibla	504	3839	3227
Dehana	1171	4775	4319
<b>Total</b>	<b>3437</b>	<b>12651</b>	<b>10566</b>

*SAM: Severe acute malnutrition; MAM: Moderate Acute malnutrition; PLW: Pregnant and lactating Women*

#### 4.4.2 Disease outbreaks

The drought has severely affected water quality, forcing many communities to rely on unsafe water sources such as streams and groundwater. This has contributed to a surge in waterborne diseases like diarrhea and WASH-related illnesses such as trachoma. Outbreaks of malaria have also been reported due to poor environmental conditions. About 4413 of the total affected population in the Zone are children. Limited access to clean drinking water and inadequate sanitation facilities has further exacerbated the spread of these diseases.

*Table 10: Disease outbreaks in the affected communities*

District	Cases		
	Malaria	Trachoma	Diarrhea
Sekota City	145	33.8%	-
Tsagbji	506		
Gazgibla	3783		
Dehana	3593		
<b>Total</b>	<b>8027</b>		

#### **4.4.3. Psychosocial problems**

Youth in the Waghimra Zone face significant psychosocial challenges due to hunger, unemployment, and inadequate infrastructure. These issues are interconnected, creating a cycle of suicide attempts and drug addiction. Hunger and food insecurity lead to chronic stress, anxiety, depression, and poor cognitive performance. Unemployment exacerbates feelings of hopelessness, loss of self-worth, and social isolation, often driving young people toward illegal activities. These conditions contribute to mental health crises, including suicide, driven by despair and rejection. Substance abuse becomes a temporary escape, leading to addiction, impaired decision-making, and worsening economic and social outcomes.

One young respondent noted, “Drug addiction is expanding as many use drugs as a coping mechanism for food hunger. Besides, some young individuals commit suicide, preferring death to living in the misery of hunger.” The absence of adequate support systems, limited access to mental health services, and the stigma surrounding mental health issues further exacerbate these problems. Poor infrastructure restricts access to job opportunities, leaving young people without productive outlets for growth and development, fostering frustration, exclusion, and despair.

These compounded challenges threaten not only the well-being of youth but also the broader stability and development of the community. Additionally, internally displaced persons (IDPs) are particularly vulnerable to psychosocial problems, as some are forced to live in inadequate conditions, such as latrine rooms.

### **4.5. Coping Mechanisms and Community Resilience**

#### **4.5.1 Local Coping Strategies**

Despite the severe impact of the drought, communities in Waghimra Zone have shown resilience through traditional coping mechanisms. These include reducing meal sizes, begging, and relying on social support networks. However, these strategies are increasingly insufficient as the drought persists.

#### 4.5.2 Migration to Urban Areas

In search of better opportunities and living conditions, many individuals have migrated to urban areas. This influx has put additional pressure on urban infrastructures and services, leading to increased competition for resources and employment. The migrants often find themselves in precarious living situations, with limited access to support. Other people also used to become commercial sex workers, drug abuse, handing over their children, and suicide as means of escaping the drought.

#### 4.5.3 Community Initiatives

Local communities have also initiated various programs to support vulnerable groups. These initiatives include community-based food distribution. Strengthening this community-led intervention can enhance resilience and mitigate the drought's impact. A woman in Mekenziba claimed “We contribute injera, floor, Kolo, and others to the most affected neighbors, but this is insufficient and sustainable. The problem is beyond our carrying capacity.” This highlights how absolute poverty is rooted

### 5. Recommendations

#### 5.1 Immediate Interventions

##### 5.1.1 Food Distribution

**Immediate food aid distribution and nutritional support (therapeutic feeding for SAM and MAM cases) are critical to address the acute food shortages faced by households.** Efforts should be made to provide nutritionally balanced food packages (F-75, F-100, plumpy nut, plumpy sup, TSFP), with a focus on vulnerable groups such mainly children, PLW, and elders. These could be handled by government offices (agriculture, and health), NGOs working on health and agriculture, universities, local community.

##### 5.1.2 Healthcare Support

Enhancing healthcare services to address the increased demand is crucial. This involves supplying health facilities with essential medicines Electro light reagents (Amoxicillin 240mg/5ml, Ceftriaxone 1g, Vancomycin. Diluent, Proteases, Cleaning fluid E) and nutritional supplements, training healthcare workers complicated management of acquit malnutrition (CMAM), Diagnostic and quality assurance of Malaria and establishing mobile health clinics to reach remote areas. Besides, Sanitation and wash services should be part of the support. City administration in collaboration with zone and other actors (Woldia University, NGOs, and) should take the responsibility.

### **5.1.3 Psychosocial Support**

Potential solutions to address youth psychosocial challenges include expanding food assistance programs to combat hunger and providing vocational training, funding, loans, and startup support to create sustainable employment opportunities. Investing in road infrastructure, education, healthcare, and recreational facilities can enhance access to resources and productive outlets for youth. Establishing accessible counseling services and support groups can help address mental health issues such as depression, addiction, and suicidal thoughts. Additionally, promoting youth participation in decision-making and community improvement programs can foster a sense of empowerment and inclusion, helping to break the cycle of despair and build resilient communities.

### **5.1.4 Providing special support for IDPS**

It is mandatory and serious issue to help the affected IDPs to change their residence from latrines to other and improved settlements. This task can be managed by City administration in collaboration with Woldia University, and Zone administration.

## **5.2 Long-term Interventions**

### **5.2.1 Support for Livelihoods**

Providing support to restore and diversify livelihoods can help affected households recover. This includes distributing seeds and farming tools for farmers, providing veterinary services for livestock, and promoting alternative income-generating activities, such as credit facilities for

unemployed part of the community to enhance entrepreneurship. This task has to be taken by Waghimra zone in collaboration with districts, city administration, Woldia University, and other actors.

### **5.2.2 Strengthening Community Resilience**

Building community resilience through capacity-building projects and support for local initiatives is vital. This can be achieved by promoting community-based disaster risk reduction programs, enhancing social safety nets, and fostering community-led development projects (Give specific examples Mengistu). Woldia University has to take this responsibility in collaboration with NGOs, Government organization, and local communities.

### **5.2.3 Monitoring and Evaluation**

Establishing robust monitoring and evaluation mechanisms is important to track the progress of interventions and ensure their effectiveness. Regular assessments and feedback loops can help adapt and improve strategies to better meet the needs of the affected population.

## **Appendixes**

Children affected by malnutrition









from Telaje

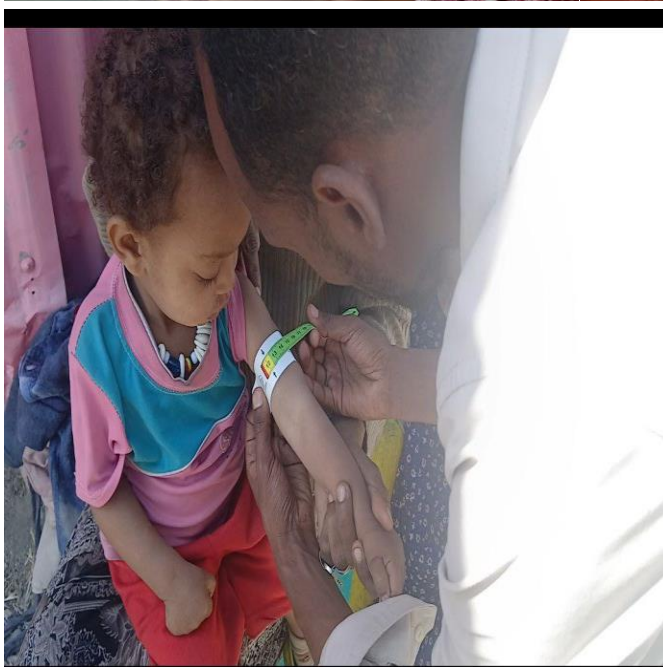


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tsagbji (mekon HC)





Elderly affected by malnutrition





## Observational findings







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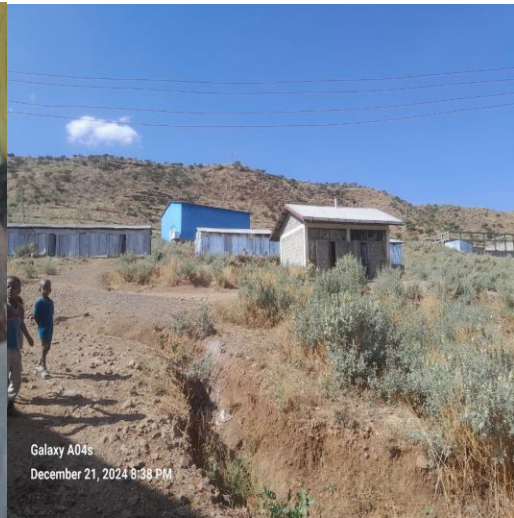
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## Woldia University assessment team Discussion with different stake holders



