

JOINT ASSESSMENT
IN INTERNALLY DISPLACED PEOPLE CAMPS
IN WAJID DISTRICT

BAKAAR YAR , BAKAAR WEYN, DHUREY

Action Contre la Faim
FSAU
UNICEF
WFP
WorldVision

20 & 21 January 2004

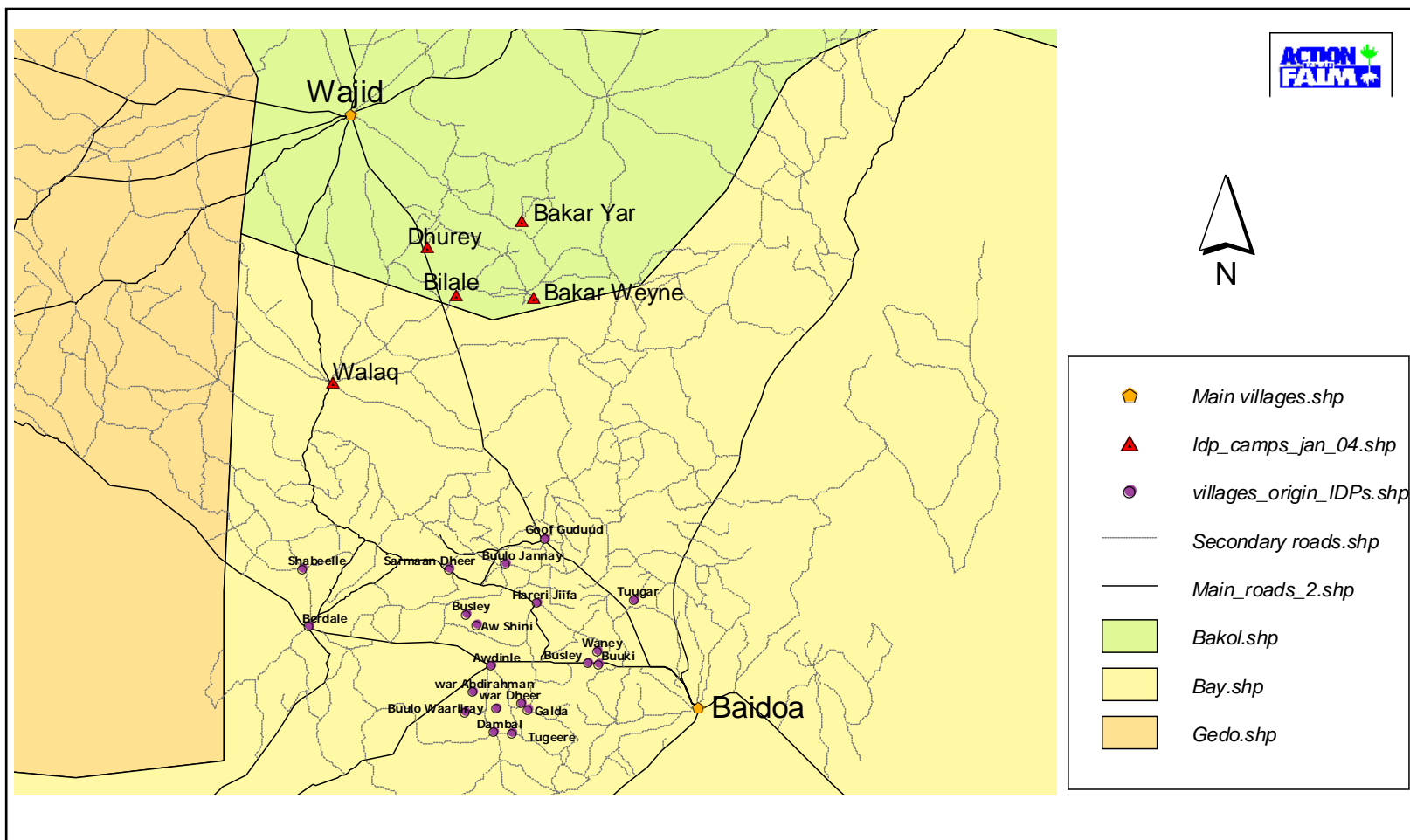
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1. INTRODUCTION

Since the beginning of October 2003, the conflict that is been going on around Baidoa since March 2002, entered in a new phase. Militia started to attack villages located in the north of Baidoa. Numerous reports collected from the local population mentioned the systematic burning of the villages, looting or destruction of the grain stores and arbitrary execution of the inhabitants including women and children.

This wave of atypical violence against the part of the population traditionally protected from inter clan conflicts, children and women, initiated an important internal displacement. The majority of the Harin population sought refugees in Wajid district, Bakool, considered as a safe haven.



1.1 Background

The first two camps which have been considered by the international community are Walaq and Bilale. A rapid assessment was conducted in Bilale on the 20th of November and in Walaq on the 21st of November 2003, by ACF, WFP and WorldVision. The conclusions of the assessment led to

- a family ration food distribution (WFP)
- a resettlement kit distribution (ACF)
- a UNIMIX distribution for the under five years old children (ACF)
- the chlorination of Walaq well (ACF)
- a mobile clinic service (WorldVision)

Resettlement kits, UNIMIX, chlorine and medicines were provided by UNICEF.

Another camp was set up in Wajid town, but the international community did not intervene there since the majority of the people were from Wajid town. The few people actually coming from Baidoa area moved end of December to Walaq and Bilale to benefit from the support of the agencies.

Meanwhile were reported new camps in the area :

- in the same area than Walaq and Bilale : Bakaar Yar, Bakaar Weyn and Dhurey.
- North of Wajid, in Garsaley area : Caarshamnow, Calemow and Garsaley

Several agencies visited Bakaar Yar, Baakar Weyn and Dhuray (UNICEF, UN-OCHA, ICRC). They highlighted the problems of these families to the rest of the agencies.

During the 11th of January 2004 Bay and Bakool inter-agencies meeting was raised the issue of these 3 camps.

Although all the agencies were concerned by the situation of those IDP, they were also fully aware that some families might have been attracted in the area by the support already given to Walaq and Bilale.

A strong concern of the agencies working in the area is to avoid that families stay in the camps, expecting distributions, even when security allow them to go back to their village.

Besides, the pulling aspect of the international support should be closely monitored:

- some families seem to still be moving from Baidoa area to Wajid district aiming at the food more than fleeing insecurity
- some food unsecured population of Wajid district have joined the IDP camps to benefit from the international support

Therefore was decided during this inter-agency meeting to make a joint-assessment with the following focus :

- assess the nutritional status of the population of the 3 camps of Bakaar Yar, Bakaar Weyn and Dhuray
- assess the medical situation
- assess the water quality and availability
- assess the global hygien and sanitation
- assess the food security situation
- understand where those families were really coming from, why they really came and what were their plan for the future

The objective of this assessment is to allow each agency to define

- whether it is considered relevant to intervene in these locations
- and if yes, what kind of program to develop.

1.2 Assessment teams

4 teams were created

- 1 nutritional team which conducted a nutritional assessment
- 1 medical team which made quick consultations of a large part of the population
- 1 water and sanitation team which did an extensive assessment of the water supplies (quality and quantity) and sanitation situation
- 1 food security team that conducted specific questionnaires on origin, causes of displacement, family members location, food availability, coping mechanism, hygien, ...

2 FOOD SECURITY

The Bay region is the sorghum basket of Somalia. Rainfall is limiting factor for crop production. Livelihood is based on more farming and less on livestock. Agro-pastoral is the main food economy group. Livelihood of the agro-pastoral farming has relation with pastoral and urban food economy groups within the Bay region.

Drought, famine and insecurity are the major risk factors affecting the agro-pastoral community of the Bay region.

During the month of October 2003, clan fighting erupted in the Baidoa district of the Bay region. Mass migration (women and children) came from Baidoa district into Wajid in search of safe heaven and food end of October 2003.

The clan fighting in the Baidoa district resulted suspension of the major agricultural activities, loss and destruction of property and food stocks, looting and burning of villages. Agro-pastoral food economy group with less livestock was the most affected.

These IDPs from surroundings villages of Baidoa district (Gof mareer, Dambal,, Buuko, Bulo Burudow, Lafale, Wanay (Doynunay), Wanay (Gofgadud)) and others flee the fighting and settled to Wajid villages-close clan affiliated relations. These IDPs in the camps actually depend on gift from relatives, collecting of construction material and wild fruits.

There is a big competition among the residents and IDPs in bush product collection. As a result the prices of bush products dropped down. Therefore the income generated from bush product cannot cover the daily needs.

The original villages of the IDPs in Wajid are already experiencing food shortages. They have exhausted their stocks before onset of the 2003/04 Deyr season. The actual IDPs settled in Wajid flee from original villages without any stocks with them. They (IDPs) rely on their clan affiliated in Wajid for the actual livelihood. The host villages in Wajid felt burden on supporting the IDPs. For that reason most of the household started reducing number of daily meals from three to one due to shortfall food reserves. Food shortage and hot weather of the Jilaal may exasperate the poor livelihood of the actual IDPs in Wajid camps. Moreover, households are expected to be food insecure until the next Gu 2004 crop harvest. The affected community have no other means than depending on food aid for the coming 7-8 months. Furthermore, they are not sure the safety of their original villages.

3 WATER AND SANITATION

3.1 Methodology

All the data on wells and rainwater catchments (dimensions, capacity, etc) have been collected by the ACF WS team who visited all the water points reported in the maps.

A portable field instrument (WTW 340i) has been used for the measurement of the EC (electro conductivity) of the water. Coordinates of all the locations have been taken with a Garmin GPS. The maps reported in the document have been realized using a GIS software.

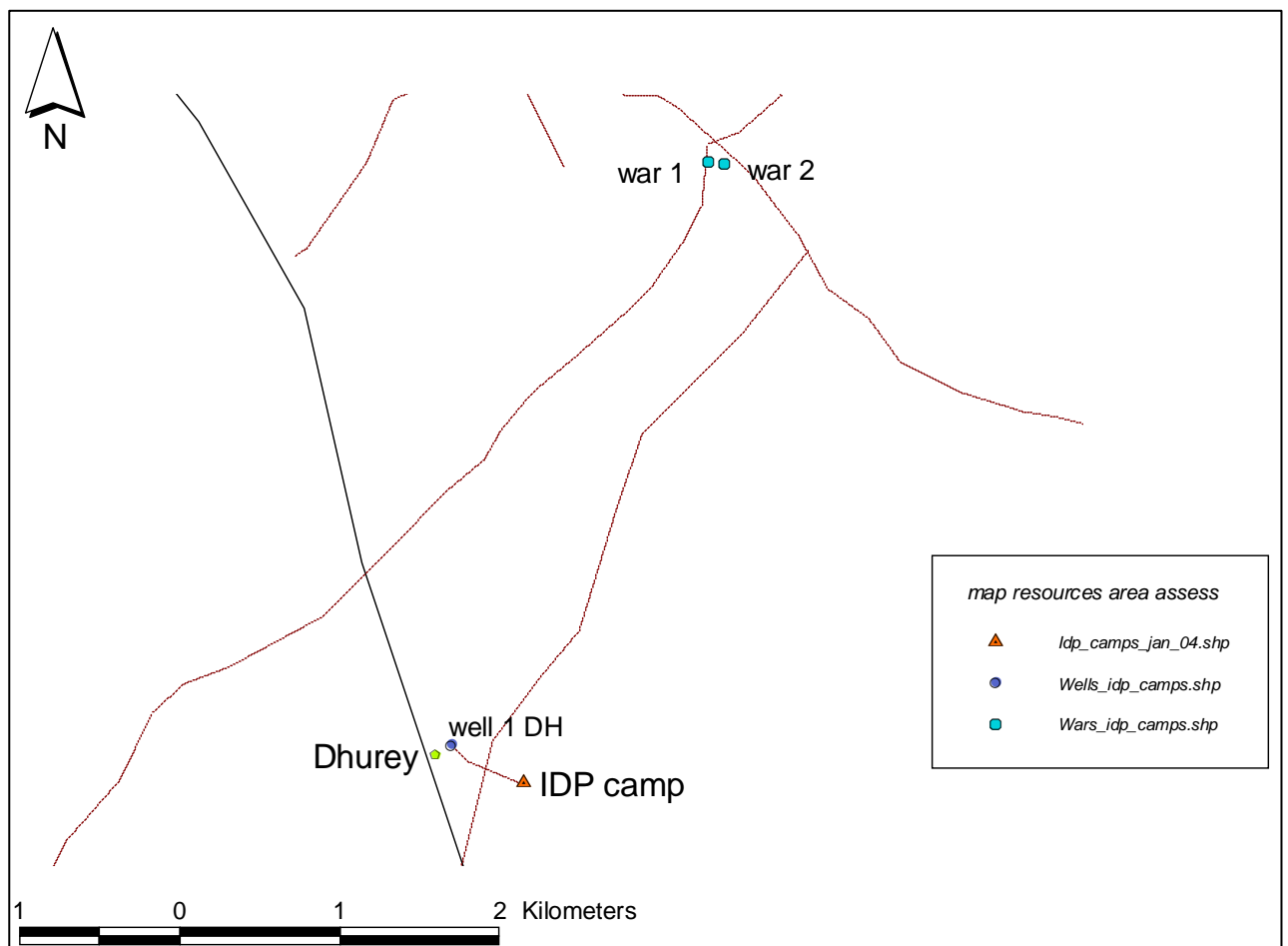
Turbidity of the water has been tested with a DelAgua kit for bacteriological analysis.

The data on average daily water consumption, main uses of the water, number of jerry cans and presence of soap in the household, have been obtained by direct observation and discussion with residents of the camps.

The data on percentage of diarrhoea affected children and mortality causes have been taken from the results of the health and nutrition assessment.

3.2 Dhurey IDP camp

The IDP's of the Dhurey camp can rely on the two main water points of the area, the well in the Dhurey village and the two water catchments (war 1 and 2 in the map).



(map 1. water resources of the Dhurey area and location of the IDP camp)

Dhurey well	
Water table (m)	11.4
Total depth (m)	11.7
EC (mS/cm)	6.2
NTU	10

Distance from IDP camp	Km
to the well	0.5
to the War 1	5.1
to the War 2	5.2

The well has a small capacity at this time of the year and it is mainly used by the residents of the village. From the interviews realised in the camp, no one reported to be using the well.

The two water catchments are located at around 5 km from the camp. The smaller dried up last week and since then the bigger one (war 1 in the map) has been opened. Though for this season the number of users is highly increased, the capacity of the water catchment should satisfy the water demand of the camp up to the next rainy season.

The distance to go to the water catchment and return to the camp is usually covered in 2 hours, and people go one or two times per day according to the need and to the number of jerry cans they have. An average of **3,5 litres of water per person is daily used** mainly for drinking, cooking and children body washing.

The water catchment in use at the moment (War 1) is fenced and though animal should not access the area, the guardians don't control cows and goats that can easily access the fencing area to drink directly in the water.

Hygiene practices are affected by the limited availability of water and the total lack of soap. No latrines are present in or near the camp and people use open spaces in the bush at a distance of maximum 50 metres from the huts.

Diarrhoea is affecting the 23% of the children under five.

3.3 Bakar Yar IDP camp

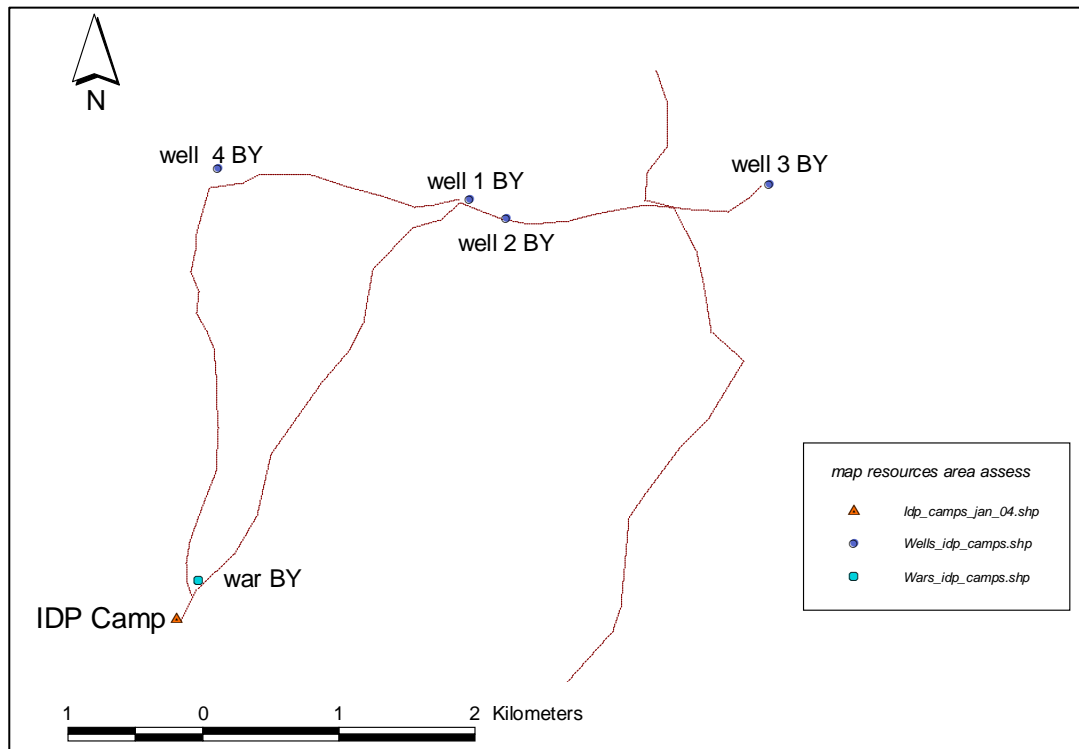
Several wells are located in the nomadic area in which the IDP camp is located. The four main wells are between 4 and 7 Km of distance from the camp. There is also one war at 400m from the camp, but it went dry in December.

Among the four, one well (the n. 2 on the map) is not in use because of the very high salinity content of its water. The other three are traditionally used for the nomadic livestock of the area. Additionally, the number 4 and 1 are now used by the IDP's of the camp.

Bakar Yar well	N.1	N.2	N.3	N.4
Water table (m)	11.4	8	5.2	5.7
Total depth (m)	11.7	11	6.3	9.7
EC (mS/cm)	6.2	12.1	3.5	5.3
NTU	10	20	10	10

Both the wells, N.1 and N.4, are in a good status of maintenance, are fenced and have a good capacity even during the dry season (measures taken on the 21st of January).

The EC value is high (over 5 mS/cm) in both wells but in average with the values of the water in the area.



(map 2. water resources of the Bakar Yar area and location of the IDP camp)

Residents of the camp can normally access the water point n.1 and n.4 (max two hours to go and come back) two times per day. Two or three jerry cans of three or five litres are present in each household and an **average of 4,7 litres of water per person is daily available** mainly for drinking, cooking and children body washing.

Even if the quantity of water is limited to less than 5 litres per day per person, hygiene practices are better than in the other camps, especially for the children washed up to three times per day.

Women fetching water in the morning, can wash themselves daily near the well.

No soap is available and no latrines are present in the camp.

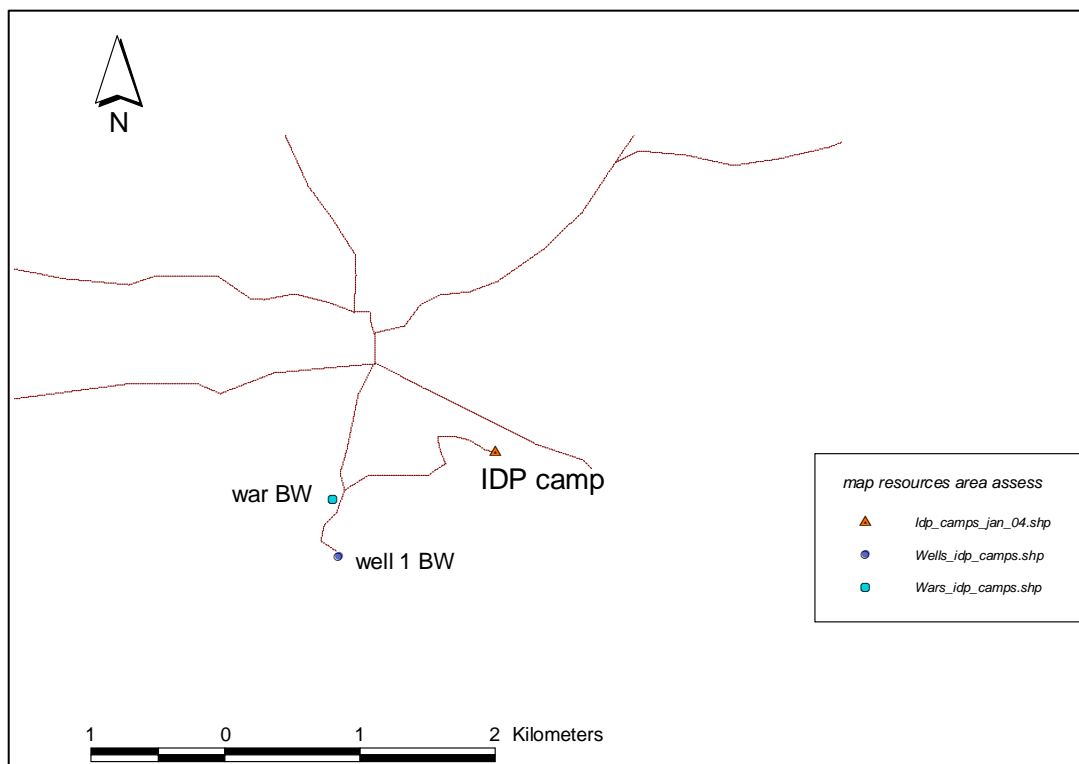
The percentage of **children under five with diarrhoea** during the last 2 weeks is **38%**.

3.4 Bakar Weyne IDP camp

Among the three assessed camps, Bakar Weyne is the only one in a **real situation of emergency** for water. The only source in the area is the war of the Bakar Weyne village, but it already got dry.

This water catchment in fact is normally used by maximum 50 families of the area and under the overload of the new users from the camp, it quickly dried up.

The few thousands litres left on the bottom of the water catchment will not last for more than 10 days (since assessment on the 20th of January) and the water left on the bottom of the water catchment is extremely dirty.



(map 3. water resources of the Bakar Weyne area and location of the IDP camp)

Distance to other water sources	Km
to Kurte	14
to Arbasale	> 20
to Bakar Yar well area	19

Because of the small size of the water catchment, up to today people have been collecting very small quantities per day, being allowed to access the catchment only once per day.

An **average daily consumption of 2 litres of water per person** has been calculated for the residents of the camp. The water is mainly used for drinking and cooking and in a very small quantity for hand washing and children body washing.

This quantity will even decrease in the next weeks since the water catchment is now almost dry and no alternative sources are present in the area.

The lack of water is seriously affecting the health condition of the IDP's of this camp. The **percentage of children under five with diarrhoea during the last 2 weeks is 48%**.

7 out of the 23 deaths of children under five (30% of the cases) during the last month have been caused by diarrhoea.

Residents of the Bakar Weyne village and of the camp are digging a well at a distance of 2 Km from the camp. On the day of the assessment (20th of January) at a depth of 12,7 m, they still have not reached the water table but the soil extracted starts to be wet.

Though the digging of the well could be successful and water could be tapped very soon, it would be hazardous to rely on it as a solution for the camp.

After the drying of the water catchment, the closest alternative water point is at 14 Km. Since this distance could be covered in three hours, residents of the camp should spend at least six hours per day to fetch water and transport small quantities that would not increase the 2 litres per day of consumption.

People could most likely decide for **a further displacement** from the camp to a new location closer to another water point. Several scenarios are possible in the following days:

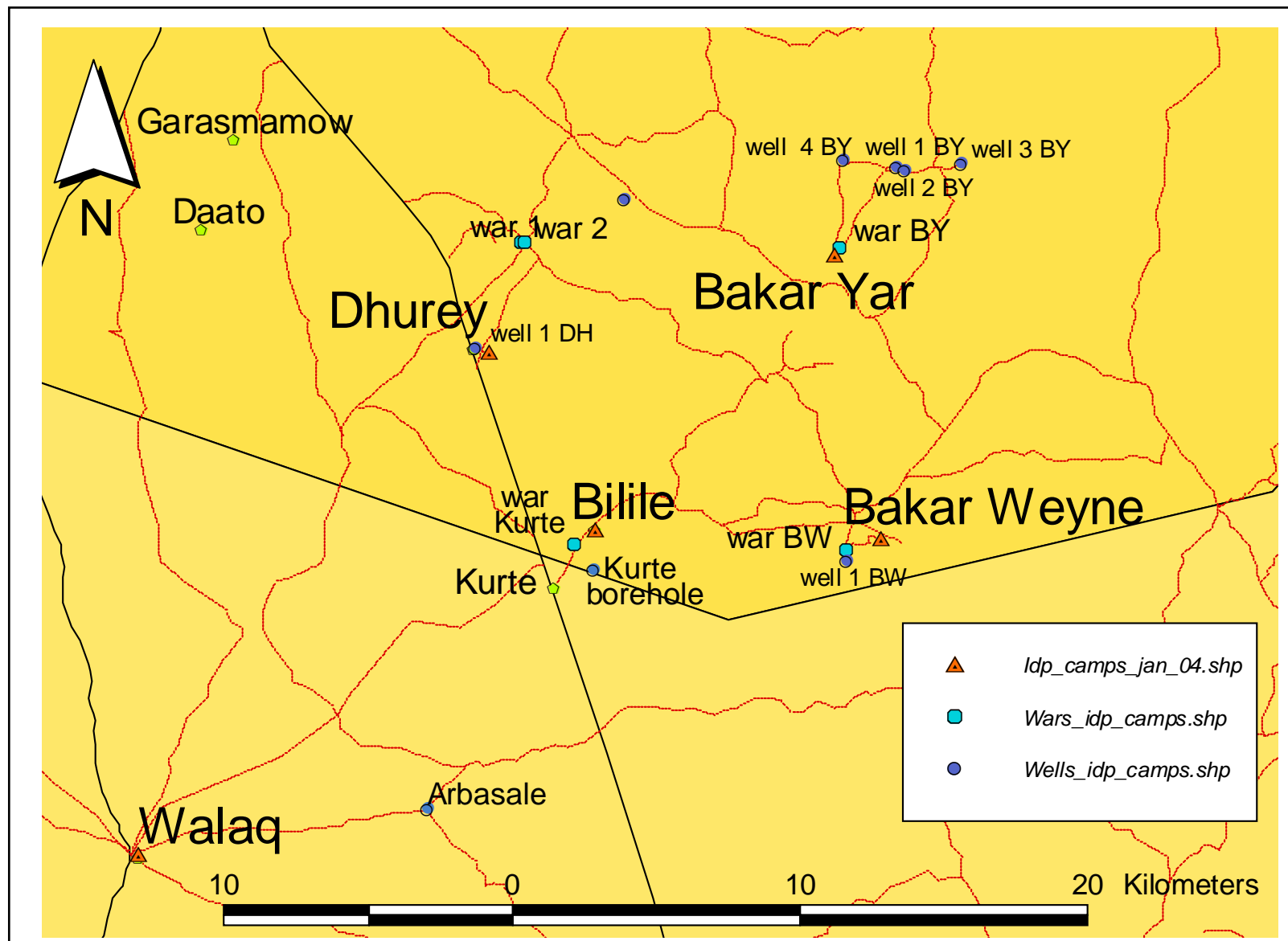
People could move to join either the Bilile IDP camp or the Bakar Yar IDP camp area.

In the first case, the Kurte water catchment (see map.4 attached), already overloaded for 200 extra users from the camp of Bilile, could not satisfy the water demand of all the people.

The water borehole in Kurte could work for everybody, but at the moment the generator is hidden in the village because of the risk of looting. A strong position should be taken as soon as possible by UNICEF (who rehabilitated the borehole and donated the equipment) to get back the generator.

In the case people should move to the Bakar Yar area, the two wells in use at the moment from the resident of that camp (N.1 and N.4 in the map.2) could be enough to satisfy the total water need. This possibility should anyway be verified evaluating the capacity of the two main wells with a pumping test.

A third possibility of movement could happen towards Arbasale, located at more than 20 Km from the actual position of the camp, between Kurte and Walaq.



Map.4 Global view on the water resources of the assesses area

4 MORTALITY & MORBIDITY RATES: HEALTH ASSESSMENT

The Health Assessment was carried out through two types of questionnaires:

- 1) Nutrition-Health questionnaire by the 8 measuring teams which included:
 - Morbidity: cases by cause ARI, Diarrhoea, Fever, Measles
 - Mortality: deaths by cause ARI, Diarrhoea, Fever, Measles (related to nb of under-5-children in each household)
 - Vaccination and Vitamin A coverage
- 2) Focussed Health questionnaire carried out by a team of 3 medical officers:
 - Questions were precisely focussed on determining the Morbidity and Mortality by cause and time
 - Every mother was asked how many children she had: present in the camp, away, or dead (last month or before/ and cause).
 - Observations about general Hygiene and Health (examining sick children; actively looking for signs of disease; assessing the household hygiene).

4.1 Daily Under-Five Mortality:

The following table 3 shows the Under-5-Children Mortality, reported by the Medical team:

Table 3

Camp	Total Nb of Under-5-Children Deaths during last month	Total Nb Under-5-Children in all Households	Daily Under-5-Mortality (N/10000/day)
Bakarweyne	2	114	5.6
Dhurrey	1	109	2.9
Bakaryare	0	96	0.0
Total	3	319	3.0

The U5-Mortality is very high, especially in Bakar Weyne (Emergency level).

Indeed the Alert cut-off is 2/10000/day and the Emergency cut-off is 5/10000/day.

Bakar Weyne shows the highest levels of mortality and morbidity. It can be stressed that the camp with the highest prevalence of Diarrhoea and Skin Infections is also the one where water is lacking the most and where hygiene is most neglected

4.2 Morbidity and other factors related to U5-Mortality:

The high Mortality can be explained by the classical "IDP and Refugees Main Mortality Risk factors", which are ALL found in these camps (Table 4):

Table 4

Risk Factor	Indicator	Findings
High global acute malnutrition	> 15% GAM	17.2%
High prevalence of ARI, Diarrhoea, Fever	Prevalence	All over 30%
Low Measles and Vit.A coverage	Coverage < 20% (average in Bakool)	Measles vaccination: 16.4%; Vitamin A: 0%

⇒ All these factors are cumulated in this under-5-population as shown in the following table:

Table 5

Characteristics	Total	Percentage
Total screened	543	100%
Male / Female	280 / 263	52% / 48%
Children 6-23 / 24-59 months	223 / 320	41% / 59%
Global Acute Malnutrition	93	17.2%
Severe Acute Malnutrition	17	3.1%
Diarrhoea	198	36%
ARI	184	34%
Fever	213	39%
Measles Vaccination	Card (38)	7%
	Mothers' recall (51)	9.4%
	None (454)	83.6%
Measles Prevalence	9	1.7%

The following table shows the disease prevalence per camp:

Table 6

IDP Camp	Total children		Diarrhoea		ARI		Fever		Measles	
	No	%	No.	%	No.	No.	%	%	No.	%
Bakar Weyne	175	32.2	75	43	67	38	86	49	2	1
Dhurey	172	31.7	50	29	56	33	63	37	5	3
Bakar Yar	196	36.1	73	37	61	31	64	33	2	1
Total	543	100	198	37	184	34	213	39	9	1.7

The prevalence patterns of ARI, Diarrhoea, Fever, Measles are very high (as shown in table 6), compared to the average reported for Somalia in general. **The Mortality related to these diseases is, logically, also very high: the 3 deaths are reported to be due to high fevers and severe diarrhoeas** (same explanation for the 3 deaths by different families).

Indeed, the Mortality related to these diseases is **increased by 2 factors**:

- High Acute Malnutrition rates
- Presence of 2 or more diseases per child: very likely because the disease rates of ARI, Diarrhoea and Fever are over 30% each

The medical team also checked for other diseases, less linked to mortality, but which are very good indicators of hygiene, such as skin infections, especially **scabies**. Out of all the households assessed (43 in Bakar Weyne, 52 in Dhurey, 35 in Bakar Yar), the number of scabies cases observed were **12** in Bakar Weyne, **0** in Dhurey, **0** in Bakar Yar => this is another reflection of the lack of water (as the high number of diarrhoeas). Indeed the quantity of water per household is usually considered as the best indicator for hygiene.

4.3 Mother-Child Health – estimation of Infant Mortality- :

As shown in the following tables (7 & 8), the Average Nb Children per household is very low, and the number of children (mostly under 5) who have died, compared to the total number of children born alive is very high. This shows the “chronic emergency” long-term health system failure in Somalia, regarding Infant-Child Health and Pregnancy Follow-up

Table 7

IDP Camp	Nb Mothers	Nb Deliveries	Average Deliveries/mother	Nb Alive	Average Children/ mother
Bakar Weyne	43	195	4.5	114	2.6
Dhurey	41	162	4.0	109	2.6
Bakar Yar	35	138	3.9	96	2.7

Table 8

IDP Camp	Nb Deliveries	Nb Deaths	Nb Alive	U5-Mortality Estimation
Bakar Weyne	195	81	114	41.5 %
Dhurey	162	53	109	32 %
Bakar Yar	138	42	96	30.4 %

4.4 General Health situation by camp:

4.4.1 Bakar Weyne camp:

Generally, the health conditions of under-5-children in this camp are the worse of the 3 IDP camps visited during the assessment, although the situation appears to be better than what is was in Walaq IDP camp according to the assessment carried out in November 2003. The team was mainly concerned about the high rates of diarrhoea (watery and bloody), skin infections (scabies), and Upper Respiratory Tract Infections (URTI) in this camp. No measles cases were seen or reported.

The high rates of diarrhoea are most likely due to the lack of water in this camp. The volume of water available in the area is extremely low, and dirty, because the water catchment (waar) is nearly dry. Poor general hygiene and diarrhoea are the consequence of this lack of water. **There is a real risk of diarrhoea outbreak in the next weeks, if an alternative source of water is not found.**

Food is not available in the camp, so the IDPs need to go to the closest village to sell firewood, in exchange for food (mainly sorghum and sugar). The inability of families to provide enough food for the children could be contributing to the high morbidities seen in the camp.

4.4.2 Dhurey camp:

The general health situation of children and adults is much better than in all the other camps. Very few diseases were seen or reported. The main diseases reported were diarrhoea and URTI. Community Health Workers from the World Vision/UNICEF supported Health Post in Dhurey village visited the camp prior to this assessment to treat the sick inmates. The mortality rates reported are not as high as in Bakar Weyne camp.

Water is available at a reasonable distance from the camp. The sanitation and hygiene standards particularly for the children are fairly good. The highest priority seems to be lack of food, although malnutrition was not so clinically evident among the children.

4.4.3 Bakar Yar camp:

The general health situation is not as good as in Dhurey, but better than in Bakar Weyne. The main diseases are diarrhoea and URTI, but not at such alarming rates as in Bakar Weyne. The mortality rates are also low. Accessing water does not seem to be a problem for the IDPs in this camp, which could explain the lower diarrhoea rates and the better standard of hygiene. There is concern however about inadequacy and diversity of food. Anaemia, a consequence of inadequate consumption of food rich in iron and parasitic infection, also seems to be prevalent.

5 ANTHROPOMETRIC ASSESSMENT:

Table 1: Nutritional status (W/H z scores) according to IDP Camp

IDP Camp	Total No. of children		> -2 Z-score		< -2 and \geq -3 Z-score		< -3 Z-score or *oedema		Global/Total malnutrition	
	No	%	No.	%	No.	%	No.	%	No	%
Bakarweyn	175	32.2	128	73.1	33	18.9	14	8.0	47	26.9
Dhurey	172	31.7	150	87.2	19	11.1	3	1.7	22	12.8
Bakaryar	196	36.1	171	87.2	24	12.2	1	0.5	25	12.7
Total	543	100	449	82.7	76	14.0	18	3.3	94	17.3

* No oedema cases were seen in all 3 camps.

The teams also performed a MUAC assessment to compare the nutritional status with the other camps previously assessed only by this method.

Table 2: Nutritional status (MUAC) according to IDP Camp

Location (camp)	Height (cm)	N	MUAC (Mid-Upper Arm Circumference)									
			< 110 mm		\geq 110-<120		\geq 120-<125		\geq 125-<135		\geq 135	
			N	%	n	%	n	%	n	%	n	%
Bakar-weyne	65-75	90	15	16.7%	13	14.4%	14	15.6%	31	34.4%	17	18.9%
	75-110	128	8	6.3%	10	7.8%	16	12.5%	41	32.0%	53	41.4%
	Subtotal	218	23	10.6%	23	10.6%	30	13.8%	72	33.0%	70	32.1%
Bakar-yare	65-75	69	3	4.3%	7	10.1%	12	17.4%	23	33.3%	24	34.8%
	75-110	129	0	0.0%	1	0.8%	8	6.2%	31	24.0%	89	69.0%
	Subtotal	198	3	1.5%	8	4.0%	20	10.1%	54	27.3%	113	57.1%
Dhurrey	65-75	53	1	1.9%	5	9.4%	14	26.4%	13	24.5%	20	37.7%
	75-110	82	0	0.0%	2	2.4%	8	9.8%	20	24.4%	52	63.4%
	Subtotal	135	1	0.7%	7	5.2%	22	16.3%	33	24.4%	72	53.3%
3 CAMPS	TOTAL	551	27	4.9%	38	6.9%	72	13.1%	159	28.9%	255	46.3%

The results presented in the tables above indicate that the nutrition situation in all 3 camps appears to be critical. According to the WHO classification, when the results of a weight for height assessment in children 6-59 months (65-110cm) reveal over 15% global acute malnutrition rate, or a 10-15% acute malnutrition rate with aggravating factors, this is an indication that the situation is serious.

Diarrhoea, upper respiratory tract infections, and fever (possibly associated with malaria) seem to be common health problems in all three camps. More than forty three percent of the child population assessed in Bakar Weyne had diarrhoea, 35% had ARI, 49% had fever, and 1% had measles. In Dhurey, 29% had diarrhoea, 33% had ARI, 37% had fever and 3% had measles while in Bakar Yar, 37% had diarrhoea, 31% had ARI, 33% had fever and 1% had measles.

5.1 Nutrition detailed analysis

5.1.1 Methodology

Weight for height measurement of all children under five in all three camps

Caregiver's recall of selected diseases, vaccination against measles, and vitamin A supplementation.

In-depth interviews of randomly selected households to obtain qualitative information relating to health, care, and food security.

5.1.2 Variables to be examined

Age – All children U5. The age of a child to be determined from the mother/caregiver's recall, the under fives card, or from a local events calendar when the birth date is not stated.

Weight – Electronic will be used to weigh children to the nearest 0.1 kg or 100g.

Height – Children will be measured barefooted and bareheaded using height measuring boards graduated to the nearest 0.5cm. Children with height < 85 cm will be measured lying, while those equal to or >85 cm will be measured standing.

Oedema – Children will be examined for the presence of bilateral pedal oedema. The occurrence of pitting as a result of thumb pressure on the foot or leg for 3 seconds will be considered nutritional oedema.

Diarrhoea – Mothers/caregivers will be interviewed regarding any episode of three or more loose, watery stools in a day, within the preceding two weeks.

Acute Respiratory Infections (ARI) – collected by asking the mother/caregiver whether the child had “*oof wareen or wareento*”, a local term for pneumonia, two weeks prior to this assessment. This will be validated, by further asking if the child had cough, fever and rapid breathing.

Fever – Mother/caregiver’s recall of child having fever two weeks prior to this assessment.

Measles immunisation status – from mother/caregiver’s recall, or record on the child’s vaccination card.

Measles prevalence – Ask the mother/caregiver whether the child had measles within the last one month.

Vitamin A supplementation – from mother/caregiver’s recall, or recorded from the child’s vaccination card.

Place of origin – Ask mother/caregiver the village/settlement where they displaced coming from.

Mortality – a household was defined as a group of people living together and sharing food from the same pot. Being a polygamous community, unless in exceptional situations, the respondent was the female.

5.1.3 Analysis of data collected

Characteristics of the Study Population

Of the 536 households interviewed, Five hundred and forty three (543) children were assessed, out of which 280 (52%) were boys and 263 (48%) girls, with a sex ratio of 1.1.

Table 1: Distribution of sample by age groups (in months) and sex

Age categories	Boys		Girls		Total		Sex ratio
	No.	%	No.	%	No.	%	
6 – 11	27	9.6	45	17.1	72	13.2	0.6
12 – 23	78	27.9	76	28.9	154	28.4	1.0
24– 35	67	23.9	47	17.9	114	21.0	1.4
36– 47	49	17.5	44	16.7	93	17.1	1.1
48– 59	59	21.1	51	19.4	110	20.3	1.2
Total	280	52	263	48	543	100	1.1

5.1.4 Anthropometric analysis

The prevalence of total and severe acute malnutrition in children is 17.3% (CI 13.2% - 22.6%) and 3.3% (CI 2.0% - 5.3%) respectively. The situation in the three IDP camps in Wajid district appears to be critical according to the WHO classification (1999).

Table 2: Malnutrition prevalence using W/H z-score categories by sex

Sex	Total children		> -2 Z-score		< -2 and \geq -3 Z-score		< -3 Z-score or oedema	
	No	%	No.	%	No.	%	No.	%
Male	280	48	231	82.5	39	13.9	10	3.6
Female	263	52	218	82.9	37	14.1	8	3.0
Oedema	0	0	0	0	0	0	0	0
Total	543	100	449	82.7	76	14.0	18	3.3

A total of 17.5% of the boys and 17.1% of girls were malnourished. Further analysis indicates that there is no association between sex and global acute malnutrition ($p=0.9$).

Table 3: Nutrition status (W/H z scores) according to age group

Age group mths	Total No. of children	\geq -2 Z-score		< -2 and \geq -3 Z-score or oedema		< -3 Z-score or oedema		Total Malnutrition	
		No.	%	No.	%	No.	%	No.	%
6 – 11	72	54	75.0	15	20.8	3	4.2	18	25
12 – 23	154	122	79.2	25	16.2	7	4.6	32	20.8
24– 35	114	94	82.5	15	13.2	5	4.4	20	17.6
36– 47	93	76	81.7	14	15.1	3	3.2	17	18.3
48– 59	110	103	93.6	7	6.4	0	0	7	6.6
Total	543	449	82.7	76	14.0	18	3.3	94	17.3

More than twenty two percent (22%) of the children aged 6-23 months were malnourished while 14% of the children aged between 24-59 months were malnourished. Further analysis suggests association between age group and global acute malnutrition ($p=0.04$).

Table 4: Nutritional status (W/H z scores) according to IDP Camp

IDP Camp	Total No. of children		> -2 Z-score		< -2 and \geq -3 Z-score		< -3 Z-score or *oedema		Global/Total malnutrition	
	No	%	No.	%	No.	%	No.	%	No	%
Bakarweyn	175	32.2	128	73.1	33	18.9	14	8.0	47	26.9
Dhurey	172	31.7	150	87.2	19	11.1	3	1.7	22	12.8
Bakaryar	196	36.1	171	87.2	24	12.2	1	0.5	25	12.7
Total	543	100	449	82.7	76	14.0	18	3.3	94	17.3

* No oedema cases were seen in all 3 camps.

5.1.5 Health situation and immunisation coverage

Table 4: Disease prevalence according to IDP Camp

IDP Camp	Total children		Diarrhoea		ARI		Fever		Measles	
	No	%	No.	%	No.	No.	%	%	No.	%
Bakarweyn	175	32.2	75	43	67	38	86	49	2	1
Dhurey	172	31.7	50	29	56	33	63	37	5	3
Bakaryere	196	36.1	73	37	61	31	64	33	2	1
Total	543	100	198	37	184	34	213	39	9	1.7

Table 5: Disease prevalence, immunization and vitamin A coverage

Age group - Mnth	Total No.	Diarrhoea- last 2 wks		ARI – last 2 wks		Fever – last 2 wks		Measles – last 1 mnth		Measles vaccination- last 6 mnth		Vit A Supplement - last 6 mnth	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
6 – 11	72	36	50	30	42	31	43	5	7	10	14	0	0
12 – 23	154	64	42	53	34	59	38	3	0.5	26	17	3	2
24– 35	114	47	41	45	39	52	46	1	0.9	24	21	1	1
36– 47	93	24	26	18	19	31	33	0	0	12	13	1	1
48– 59	110	27	25	38	35	40	36	0	0	17	15	0	0
Total	543	198	37	184	34	213	39	9	1.7	89	16	5	1

The overall incidence of diarrhoea, ARI and Fever among under-fives was 37%, 34% and 39% respectively, with high episodes observed in the first two years of age. Diarrhoea, ARI and Fever were found to be significantly associated with wasting in children ($p=0.00$).

Based on mother's recall and U5 card verification, only 16% of the children had been vaccinated for measles, and only 1% had received vitamin A supplements in the last six months.

6 RECOMMENDATIONS

6.1 Food Security

- ✓ Free food distribution is recommended until peace prevail their original villages.
- ✓ The food distributions should be progressively substituted by Food for Work programs (wars, roads, ...)
- ✓ Shelter
- ✓ Cooking utensils
- ✓ Agricultural inputs (Seeds, farm tools)-if peace is restored before onset of 2004 Gu season.

6.2 Health

- ✓ **Organise outreach clinics particularly in Bakarweyne and Bakaryare camps.**
- ✓ Organise measles vaccination for children 6 months to 12 years, and vitamin A supplementation in all three camps
- ✓ Organise mass de-worming of all children 1-5 years in all three camps
- ✓ Organise health education around issues relating to infant and young child feeding, sanitation and personal hygiene.

6.3 Nutrition

Although malnutrition rates in Dhurey and Bakaryare camps are not as high as in Bakarweyne, in the context of the high prevalence of communicable diseases and food insecurity, provision of food and non-food items in all three camps should be considered as an immediate priority in order to prevent high mortality rates in the camps

- ✓ Distribution of family rations and Supermix for U5 children in all three camps (with careful consideration to the consequences of such an intervention, in a food insecure district)
- ✓ Set up SFP (wet initially) in strategic location to benefit all camps in the district.
- ✓ Organise referral system for severely malnourished children to the MSF-B TFC in Huddur.
- ✓ Distribute family kits in all three camps (especially pots, plates, cups, spoons, mosquito nets, and soap).

6.4 Water and Sanitation

6.4.1 Dhurey

Since the water catchment has a big capacity and should last up to the next rains, no emergency intervention is needed at the moment to increase the availability of water. A daily consumption of 3,5 litres of water per person is very limited but does not constitute an indicator of emergency, since the water catchment could be used up to the next rainy season even increasing the consumption by the population of the camp.

Even if no emergency intervention is needed in the short term, the following point should be taken in consideration:

- ✓ more care should be taken in the protection of the water catchment to protect the water by the direct contact with animals
- ✓ distribution of soap and increase of availability of water (through facilitating the transport) is the most economic and effective way to reduce the risk of diarrhoea epidemics and skin diseases
- ✓ the rehabilitation of the well in Dhurey, the enlargement of the two wars and the digging of latrines could improve the situation in the camp and could be considered in the frame of food for work or cash for work activities in support of the area.

6.4.2 Bakar Yar

The sanitation situation in the camp is not alarming and no emergency intervention is needed in the short term to increase the quantity of water. The following point should anyway be taken in consideration

- ✓ distribution of soap is the most economic and effective way to reduce the risk of diarrhoea epidemics and skin diseases

- ✓ the rehabilitation of the wells and the digging of latrines could improve the sanitation situation in the camp and could be considered in the frame of food for work or cash for work activities in support of the area.
- ✓ the two wells in use for the camp could be chlorinated as a preventive measure in case of any possible waterborne disease epidemic.

6.4.3 Bakar Weyne

The emergency situation needs to be addressed as soon as possible to avoid the probable displacement of the IDP's and increase the quantity of water available per person per day.

If the borehole in Kurte could be put into function again in a short time, water could be supplied daily to the camp by water trucking or, maintaining a low profile in the intervention, using donkey carts contracted with food/cash for work.

Since the water catchment in Kurte is almost dry under the overload of the people from the Bilile camp (see map.4 in annex), the opening of the borehole would also help the people from the camp of Bilile and the residents of Kurte itself.

Supply water to the camp from Kurte is not a long term sustainable solution but can be considered until the well near the camp is completed. Food/cash for work activities should be implemented to **support the digging of the well.**

The sanitation situation of the camp is of course dramatic and digging of latrines and **distribution of soap** should be considered **as soon as the problem of lack of water is solved.**