

# KPC survey report Gambella refugee camps

## Pugnido



Dec, 2017

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## Acronyms

|       |   |
|-------|---|
| ARRA  | Agency for Refugee and Returnee Affairs       |
| CHW   | Community Health workers                      |
| CI    | Confidence Interval                           |
| ECHO  | European commission Humanitarian organization |
| EHA   | Environmental health agent                    |
| HH    | Household                                     |
| IRC   | International rescue committee                |
| KPC   | Knowledge Practice and Coverage               |
| UNHCR | United Nations Higher Commission for Refugees |
| WASH  | Water sanitation and hygiene                  |

## **Excutive summary**

The International Rescue Committee (IRC) is a non-Governmental Organization operating in Ethiopia to provide relief services to refugees, victims of drought, disease outbreak and war affected populations.

Gambella region is one of the nine regional state of Ethiopia the region is located in western part of the country and has international boundary with south Sudan, Based on CSA the region total population is approximately 362,806 following south Sudanese conflict the region hosts 365,473 south Sudanese refugees in seven different refugee camps located in Gambella regional state

The surveyed camp is among seven camps of south Sudanese found in Gambella peoples national regional state and hosts 66,427 population according to December, 2017 UNHCR update.

The Aim of this study is to measure the performance of intervention against the project indicator and there by determine the outcome as a result of project implementation in the community of Pugnido refugee Camp.

A community based cross sectional quantitative survey was conducted among households of Pugnido refugee camps from 11-15 December 2017. Data was collected by using UNHCR standard questionnaire. The questionnaire contains specific questions that provide answers to measureable indicators under current grants for core IRC performance indicators.

The average water supply for domestic consumption per capita per day in Pugnido refugee camp according to this study is 14.3 L/C/D and the principal sources of water supply for same camp is 100% tap stand.

54% of the households observed have soap for hand washing and the remaining 46% had no soap specific for hand washing.

- The IRC and IPs working on Hygiene promotion and health communication in the camp under study should use methods ranked by the community as best methodology like Home visit and CHC.
- During development of IEC material consideration of Pictures and audio material is vital according to this study following their ability to read.
- As 10 % latrine is observed full decommissioning and replacement should be planned.

## **1 Background:**

The International Rescue Committee (IRC) is a non-Governmental Organization operating in Ethiopia to provide relief services to refugees, victims of drought, disease outbreak and war affected populations

Gambella region is one of the nine regional state of Ethiopia the region is located in western part of the country and has international boundary with south Sudan, Based on CSA the region total population is approximately 362,806 following south Sudanese conflict the region hosts 365,473 south Sudanese refugees in seven different refugee camps located in Gambella regional state

Since 2011, IRC Ethiopia country program, Gambella field office started implementing different emergency rapid response and development projects for both host community and refugee in Gambella region. Currently under its refugee program, the IRC is implementing water supply hygiene promotion and sanitation in Pugnido, Pugnido II and Tierkidi refugee camps and water supply in Kule Refugee camp. Moreover operation of water supply Nguenyiel refugee camp water production is also handled by IRC. These programs in different camps are funded by UNHCR UN-OCHA, ECHO& UNICEF on different duration beginning from January 2017 to December 2017. This project focused on water supply expansion, water supply system operation and maintenance including, construction of sanitation facilities and hygiene promotion components that targets refugees in all camps namely Tierkidi, Kule, Pugnido and Pugnido II refugee camps.

The surveyed camp is among seven camps of south Sudanese found in Gambella peoples national regional state and hosts 66,427 population according to December UNHCR update.

## 2. Objectives:

### 2.1. General Objective

To measure the performance of intervention against the project indicator and there by determine the outcome as a result of project implementation in the community of Pugnido refugee Camp.

### 2.2. Specific Objectives

To assess the current knowledge, practice, coverage regarding water supply, hand washing practice, latrine coverage, and household refuse disposal.

## 3. Survey Methods Materials

### 3.1. Survey Design and Period

A community based cross sectional quantitative survey was conducted among households of Tierkidi, Pugnido, and Pugnido II and Kule refugee camps from 11-15 December 2017. Data was collected by using UNHCR standard questionnaire. The questionnaire contains specific questions that provide answers to measureable indicators under current grants for core IRC performance indicators.

### 3.2. Sample Size Determination

The sampling frame was based on UNHCR population data which is as per Dec. 2017 update. The sample size was calculated assuming 50% prevalence of general WASH indicators with a precision of +/- 5%, 95% confidence limit for a total of 384 households. The sample size i.e. the number of households to be included in the survey to 'represent' the population of interest was calculated using the following epidemiological formula:

Where;  $n = \frac{t^2 p (1-p)}{d^2}$

t= error risk parameter related to precision (1.96 for an error risk of 5%)

p = estimated prevalence in the population = 50%

d = desired precision =5%

$$= \frac{(1.96)^2 * 0.5 * (1-0.5)}{(0.05)^2} = 384 \text{ (for Pugnido camp)}$$

### 3.3. Sampling Technique and Data Collection Procedure

A systematic random sampling method was employed. A household in this survey is defined as a group of people who are sharing the same shelter, cooking area or cooking pot. The data showing the total number of households existing in the camp is obtained from UNHCR and all households in the camp was considered as a sampling frame. A sampling interval was calculated by dividing the number of households in the camp by the sample size.

| Sub camp   | Zone | HH    | Sample size | Interval |
|------------|------|-------|-------------|----------|
| village 12 | All  | 2200  | 63          | 36       |
| Agnuwah    | All  | 4927  | 137         | 36       |
| New camp   | All  | 3548  | 99          | 36       |
| Old Nuer   | 1    | 653   | 18          | 36       |
|            | 2    | 135   | 4           | 36       |
|            | 3    | 260   | 7           | 36       |
|            | 4    | 156   | 4           | 36       |
|            | 5    | 854   | 24          | 36       |
|            | 6    | 169   | 5           | 36       |
|            | 7    | 19    | 1           | 36       |
|            | 8    | 30    | 1           | 36       |
|            | 9    | 114   | 3           | 36       |
|            | 10   | 619   | 17          | 36       |
|            | 11   | 34    | 1           | 36       |
| Total      |      | 13718 | 384         |          |

### 3.4. Respondents

The basic sampling unit was households and respondents were mainly primary household caregivers. A primary caregiver in this survey is defined as a person who handles the daily chores of the household (preparation of meals, feeding and taking care of children, collection of water, household hygiene etc.). Most of the time, the primary household caregivers were females (mothers/housewives). Where the targeted respondents are absent or if they were unavailable, any knowledgeable person (male age more than 15 years old) present during the interview was interviewed.

### 3.5. Survey Team Training and Data Collection

15 individuals who can speak Nuer and Agnuwa were hired from Gambella and Pungido area in order to collect the data from Pungido, Pungido II Tierkidi and Kule refugee camps. Smart phones were used to collect the data. They trained for two days on the survey including the following: becoming familiar with the tablets and survey questionnaire; obtaining consent from beneficiaries; interviewing techniques; data recording; household selection through a systematic random sampling method; and learning the duties of data collectors and supervisors. Participants practiced interviewing techniques and data recording through role plays during the training. The participants organized them in two teams; there were two teams and four supervisors. Each team was led by two supervisors. Refugee leaders and IRC Environmental Health Agents (EHAs) who know the camp and the boundaries of each zone were assigned for each supervisor as a guide to show them the location of the zones and their boundaries.



## **4. Findings**

### **4.1Demography**

#### **4.1.1 Respondents**

Among 381 participants under this study only 04 of them were male the rest 377were females

#### **4.1.2 Family size**

Regarding the HH size 57% of them have more than 6 families, 31% of them have 4-6 members and the mean family size of Pugnido refugee camp in Dec, 2017 was 7 person per HH

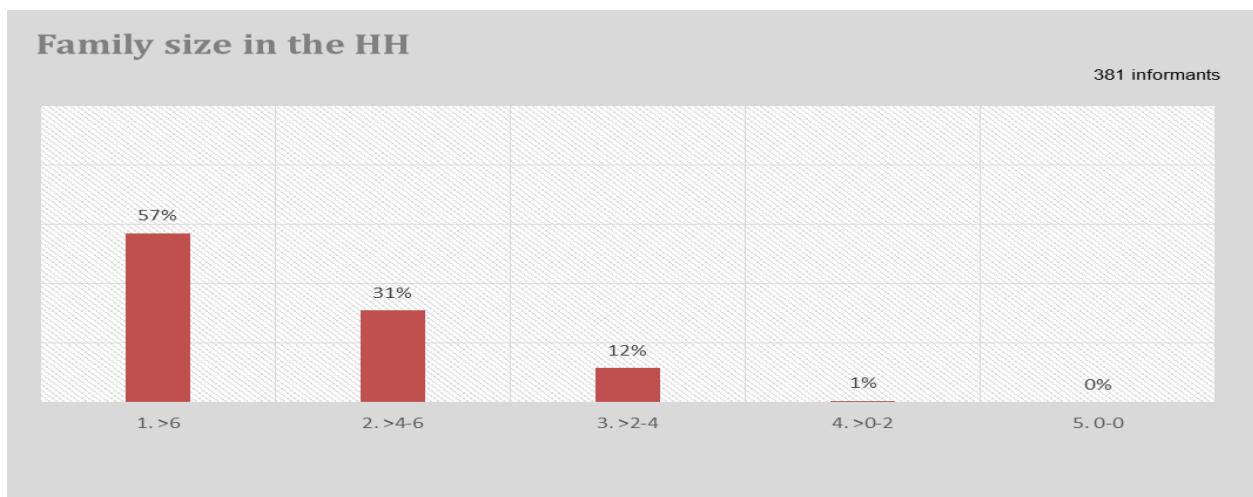


Fig: 1 Family size in Pugnido refugee camp Dec, 2017

#### **4.1.3 Number of under-five years old children with in HH**

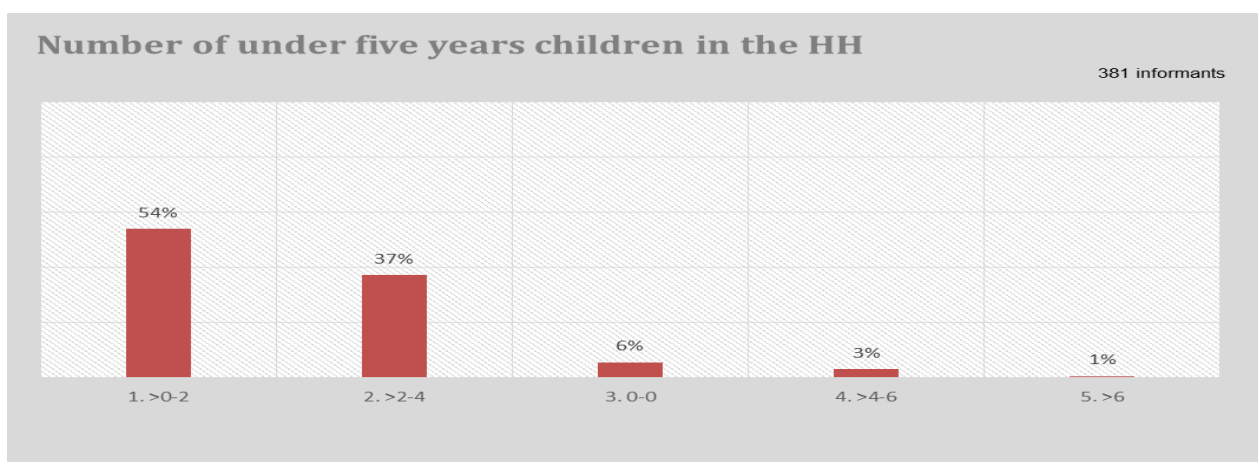


Fig: 2 number of under-five children in Pugnido refugee camp Dec, 2017

## **4.2 Water supply**

The average water supply for domestic consumption per capita per day in Pugnido refugee camp according to this study is 14.3 L/C/D and the principal sources of water supply for same camp is 100% tap stand

### **4.2.1 Accessibility**

Regarding the availability of water supply source closer to the HH 87 % were closed to the House

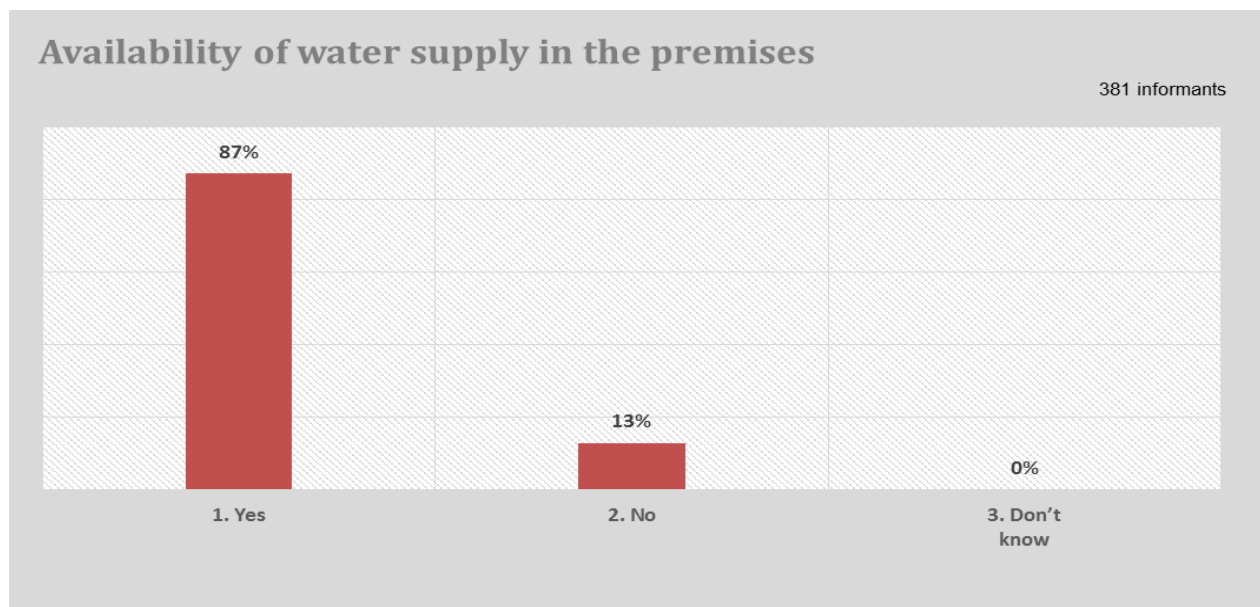


Fig: 3 Water supply source availability with in premises in Pugnido refugee camp Dec, 2017

### **4.2.2 Distance of water point**

Regarding the distance of water point from the resident in minutes 96% of water points take less than 6 minutes one trip to the water point

Table: 1 shows one trip distance of water point in minutes in Pugnido refugee camp

| Time in Minutes | 0 | 0-2 | 2_4 | 4_6 | >6 |
|-----------------|---|-----|-----|-----|----|
| Percentage      | 0 | 67% | 16% | 11% | 4% |

#### 4.2.3 Sufficiency of water supply for domestic use

Water supply for domestic purpose means the water supply that doesn't include animal use and gardening, 46 % of Pungido community doesn't satisfied with amount of water collected for domestic purpose with the main reason mentioned as lack of water supply collection and storage container

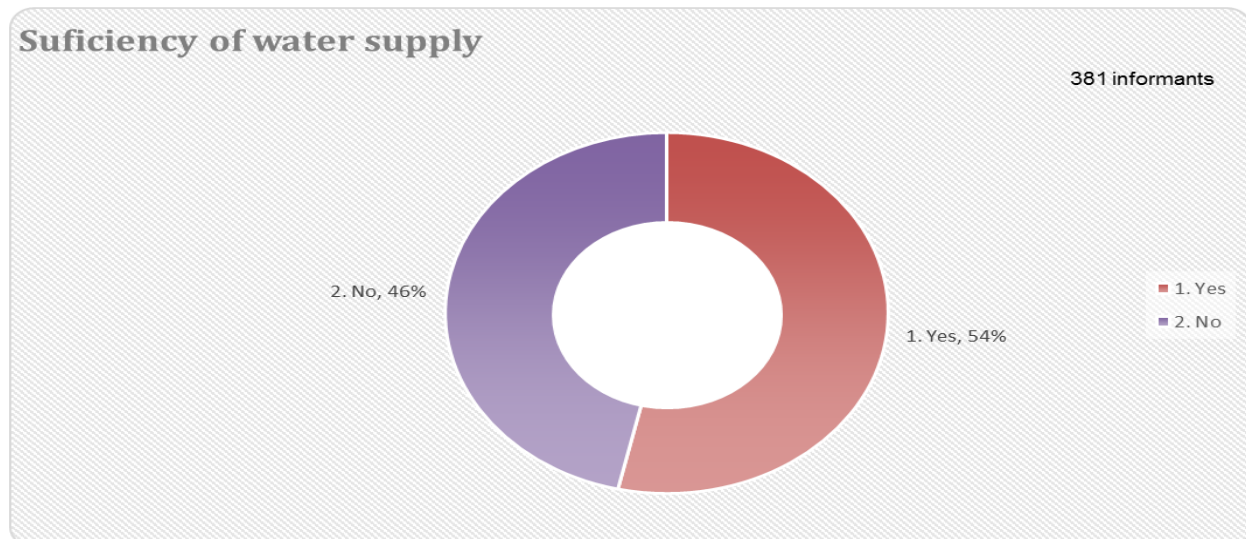


Fig: 4 water supply sufficiency in Pugnido refugee camp Dec, 2017

#### 4.2.4 The main reasons for water supply shortage

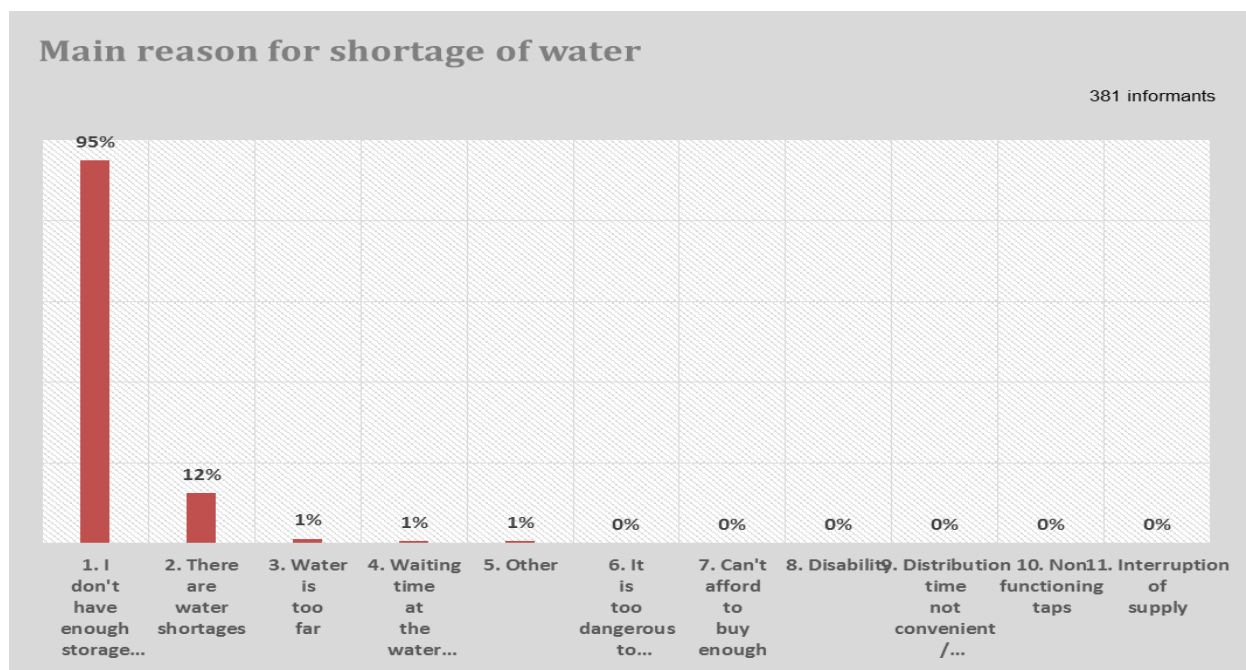


Fig: 5 main reasons for water supply shortage in Pugnido camp Dec, 2017

#### 4.2.5 Safe water collection and management

The role of water supply collection for domestic purpose is 99% the role of females; which 98% adult women 1% child female, and also 1% adult men

Regarding observation water removal from the container for drinking during observation 79 % of dripping the cup in to the container 21 % of them poured in to a cup during observation

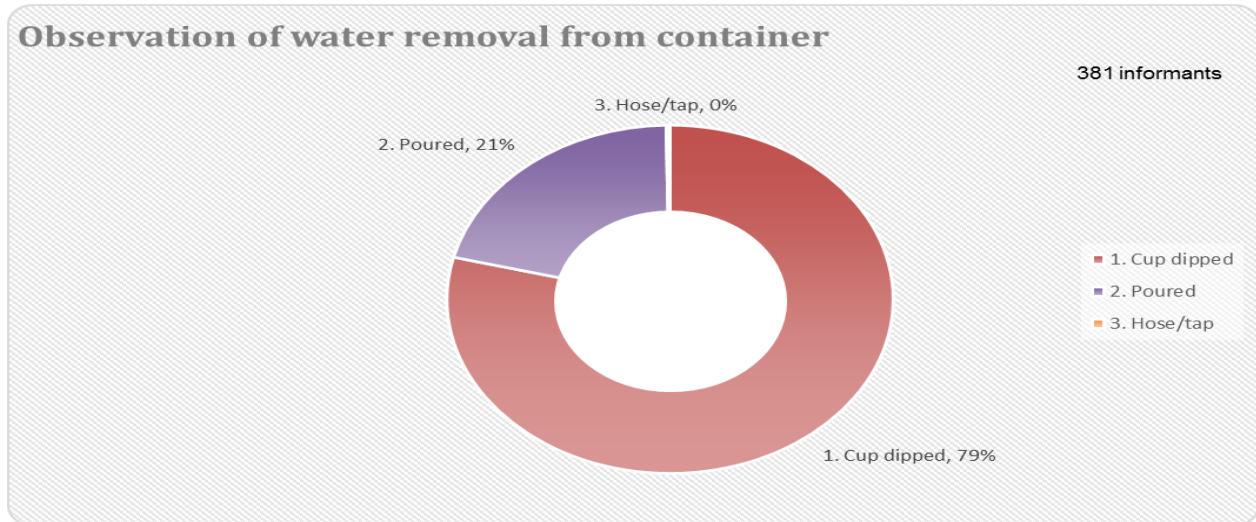


Fig: 6 observation of water removal from container in Pugnido camp Dec, 2017

Regarding cleaning of containers 92% of Pugnido Camp population under this study clean every time when they use

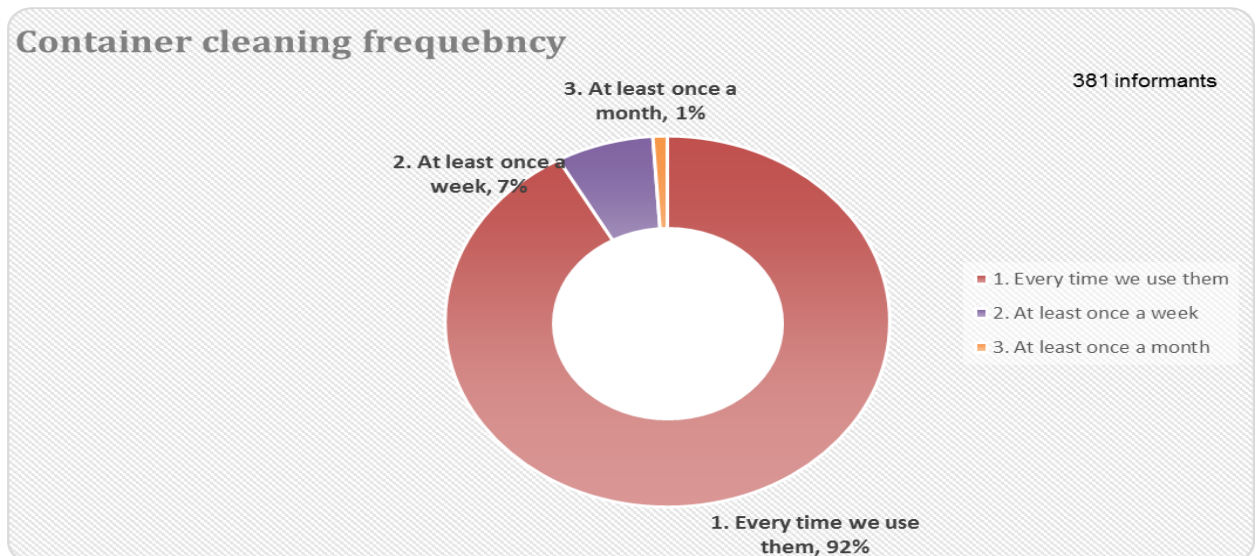


Fig: 7 water supply container cleaning frequency in Pugnido camp Dec, 2017



### 4.3 Hand washing

#### 4.3.1 Soap/ rubbing agent availability

54% of the households observed have soap for hand washing and the remaining 46% had no soap specific for hand washing

Among those who don't have soap during observation the main reason for not available 57% run out of stock and only 4% of them considered soap is not important and also 34% of them cannot find soap

In the absence of soap 89% of them use ash as detergent for hand washing 1% uses sand and the remaining 9% uses water only for hand washing

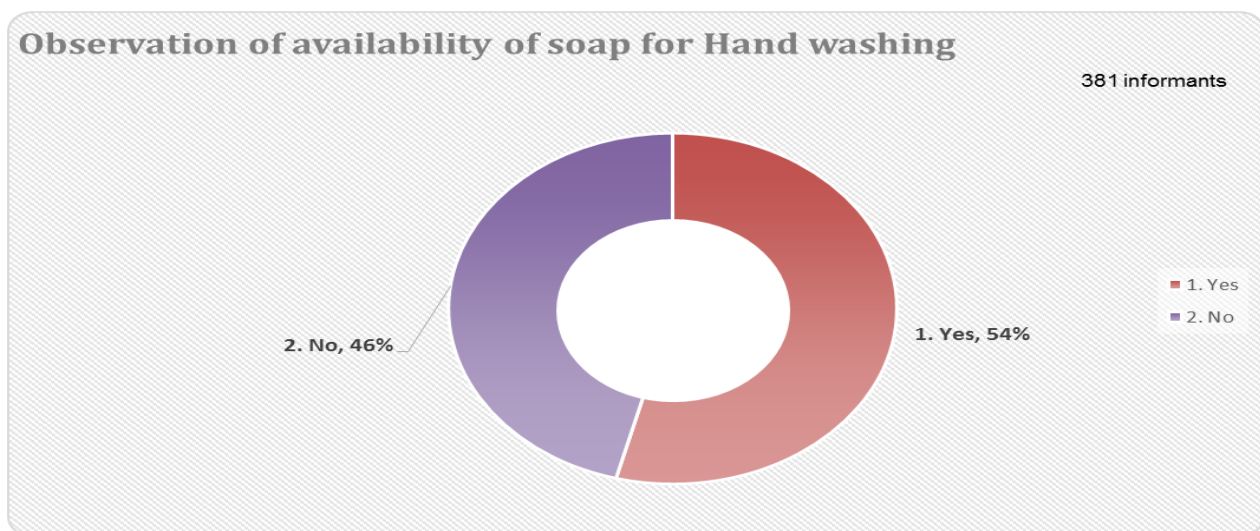


Fig: 8 observation of availability of soap in Pugnido camp Dec, 2017

#### 4.3.2 Knowledge of Critical hand washing times

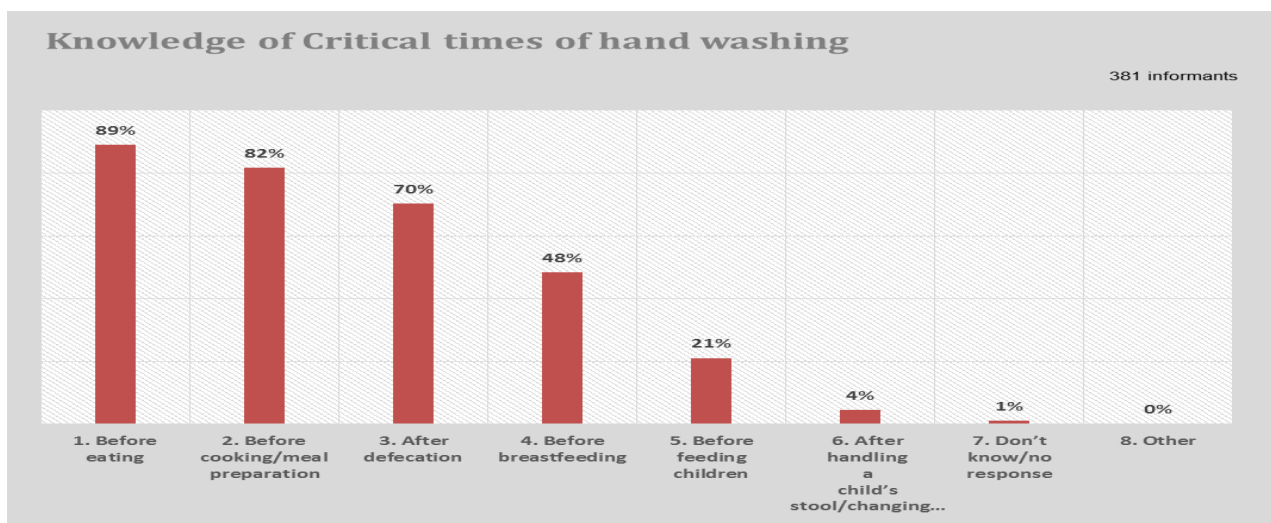


Fig: 9 knowledge of critical times of hand washing in Pugnido camp Dec, 2017

#### 4.3.3 Observation of hand washing facility

44% of HH under this observation have specific place for hand washing among those 77% of facilities have water during observation

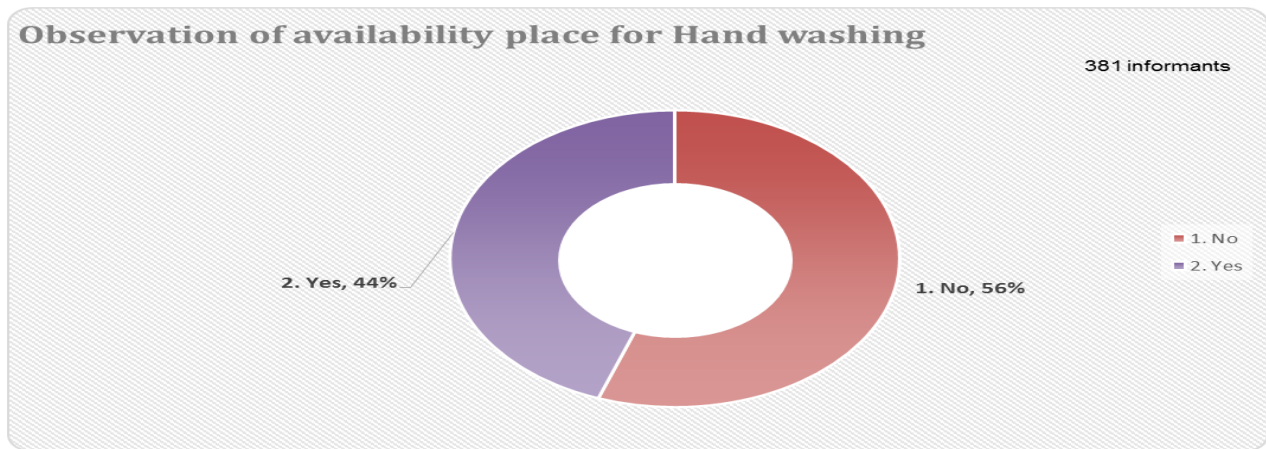


Fig: 10 Availability of specific place for hand washing in Pugnido camp Dec, 2017

#### 4.4 latrine utilization

##### 4.4.1 Defecation practice of adults and children excluding under 5 years old

Regarding defecation behavior of adults only 5 % of them experienced open defecation the remaining 84% used HH latrine, 8% shared others latrine 2% used communal latrine

Concerning night time defecation experience 12 % of adults defecate some times in the bush over night

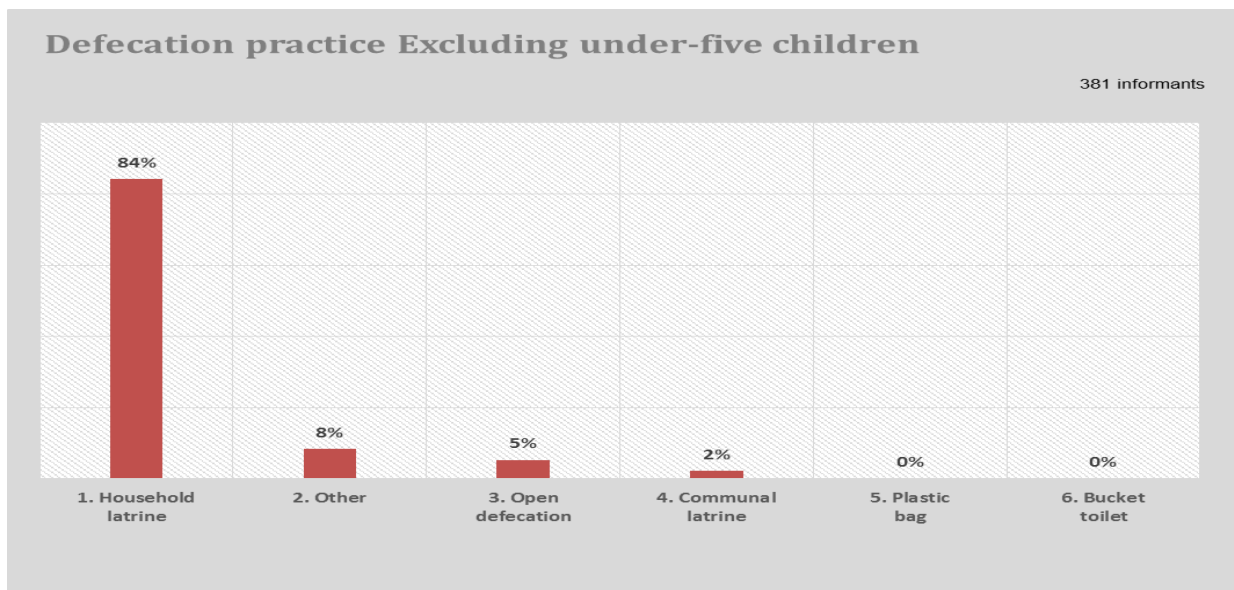


Fig: 11 Defecation practice in Pugnido camp Dec, 2017

#### 4.4.2 Defecation practice of under five children

Regarding defecation practice of under five years old children 24% of them practice open defecation, for those children used open defecation their caretakers 63% buried and 38% collected and disposed in the latrine

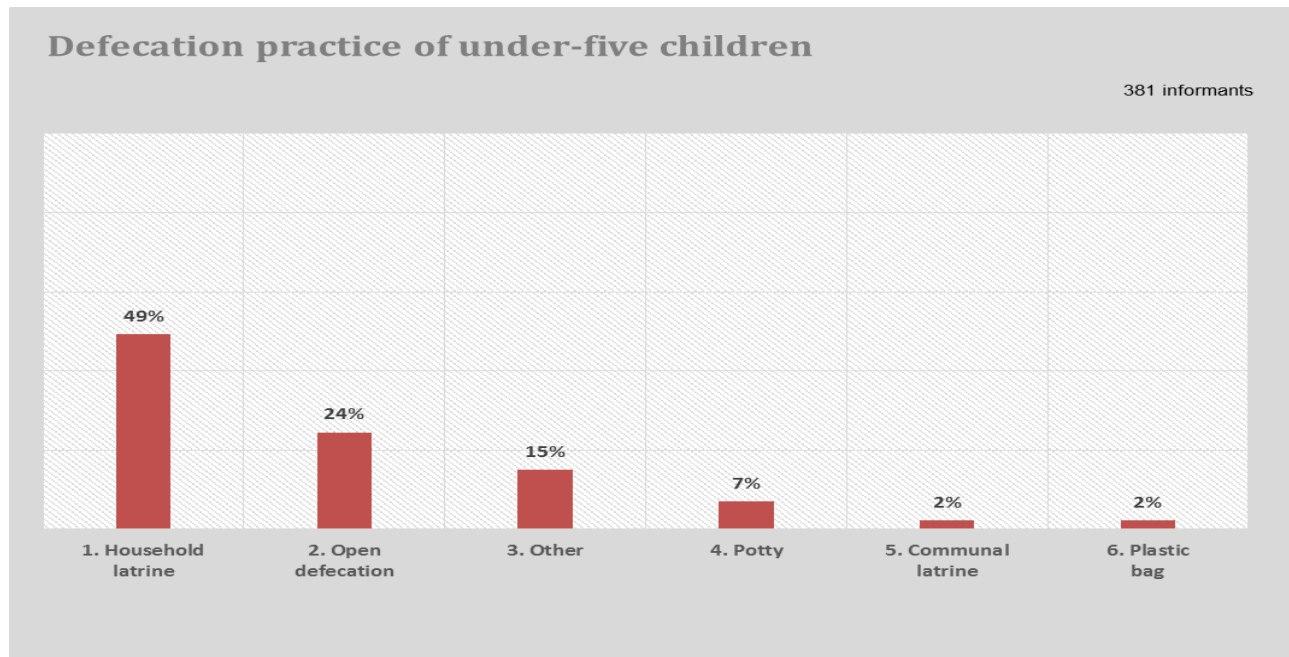


Fig: 12 Defecation practices of under-five children in Pugnido camp Dec, 2017

#### 4.4.3 Latrine privacy

69 % of latrines don't give privacy with the main reason as too close to house, not sex segregated

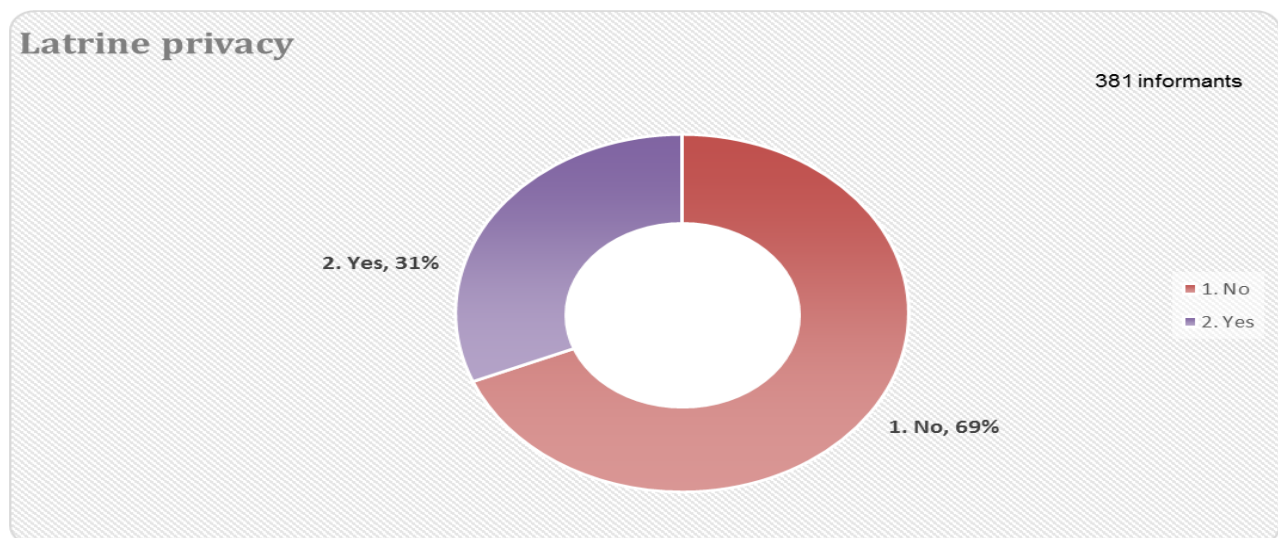


Fig: 13 Latrine privacy in Pugnido camp Dec, 2017

#### 4.4.3 Main reason for Latrine not providing privacy

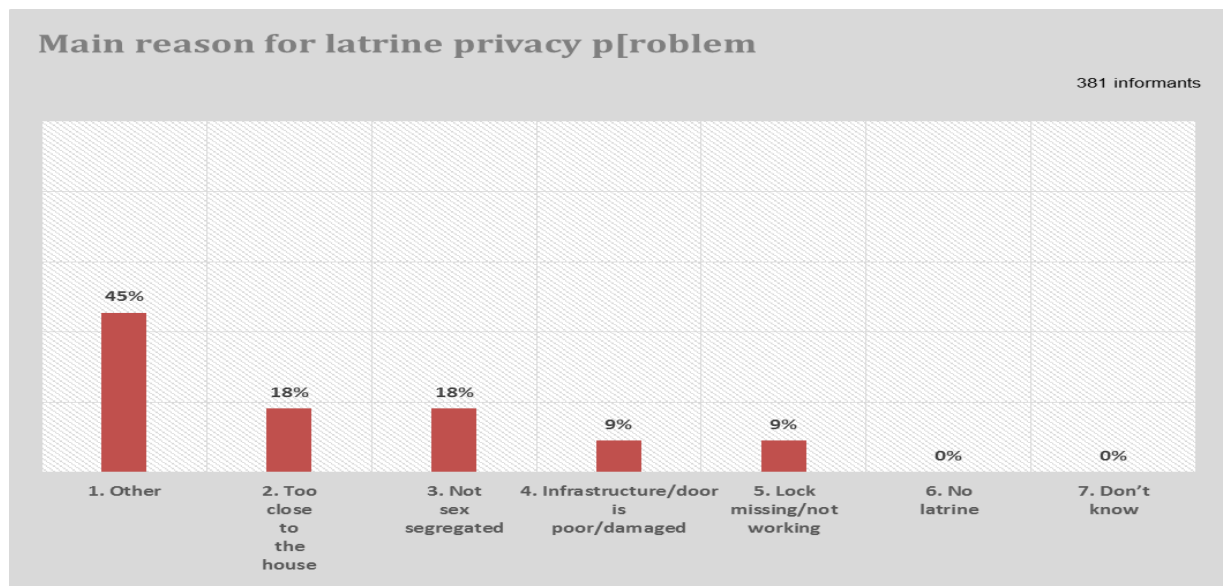


Fig: 14 main reason Latrine not providing privacy in Pugnido camp Dec, 2017

#### 4.4.4 Observation of latrine

During observation of latrines 98 % of latrines were in use where as 90 % was not yet full and only 25% of latrines have lid /cover on drop hole.

Table: 2 Shows observation of latrine in Pugnido Dec, 2017

| Observation | Types of Latrine |             | Latrine in Use |    | Latrine Full |     | Have Lid On drop Hole |     |
|-------------|------------------|-------------|----------------|----|--------------|-----|-----------------------|-----|
| Status      | VIP              | Pit latrine | Yes            | No | Yes          | No  | Yes                   | No  |
| Percentage  | 4%               | 96%         | 98%            | 2% | 10%          | 90% | 25%                   | 75% |



#### 4.5 Bathing

Based on observation only 34% of population under study have designed facility for bathing

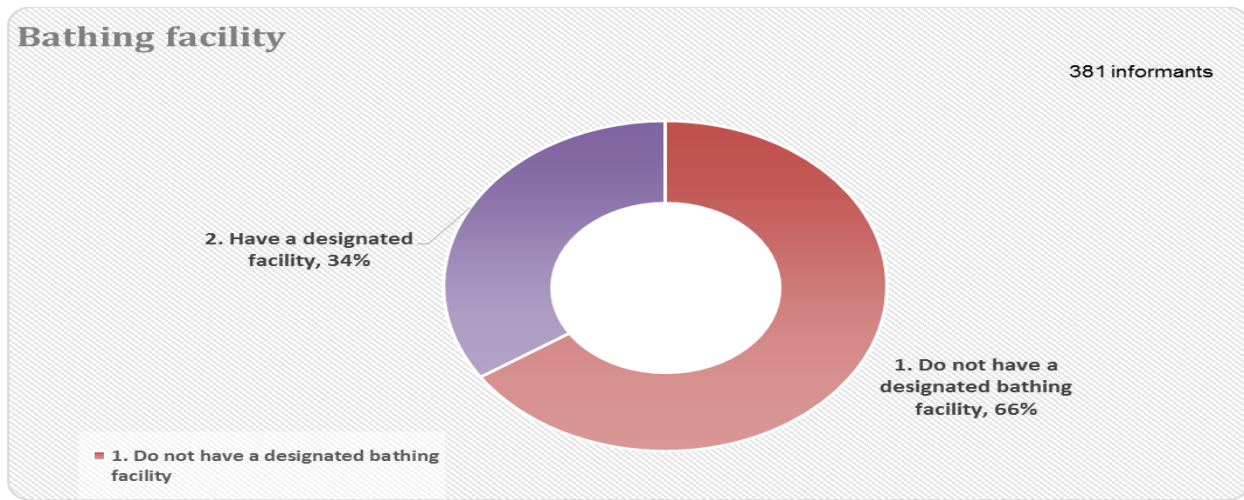


Fig: 15 Availability of bathing facility in Pugnido camp Dec, 2017

#### 4.6 Solid waste management

Regarding solid waste disposal 23% of the community disposed wastes in the HH waste pit where as 62% of them disposes by burning and 61% of HH yard observed clean

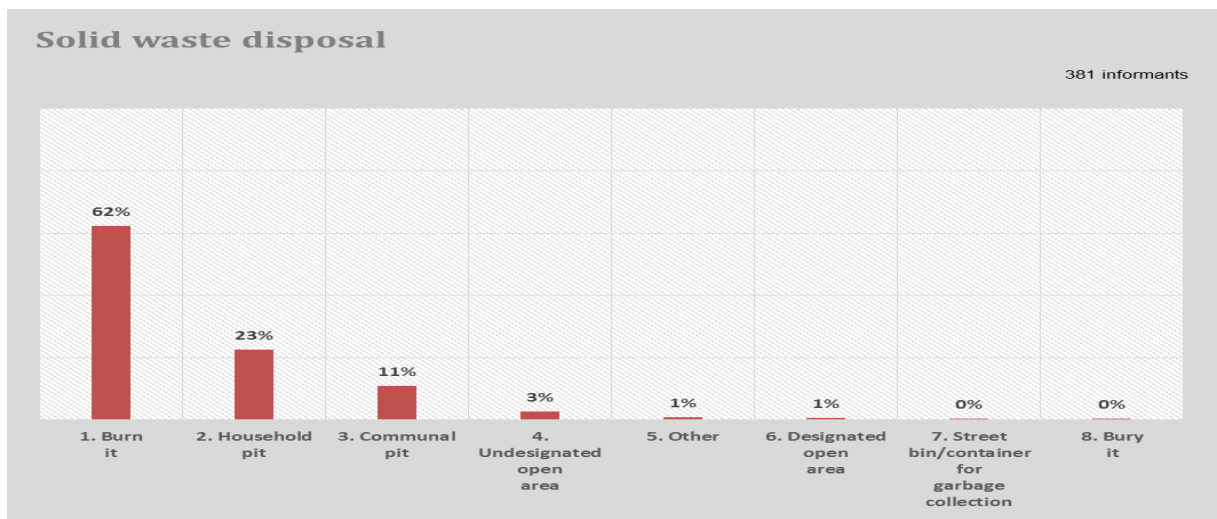


Fig: 16 Disposal of solid waste in Pugnido camp Dec, 2017

#### 4.7 Communication method/Channel

The best communication method ranked as 67% home to home visit, 16% women group discussion and 5% community meeting

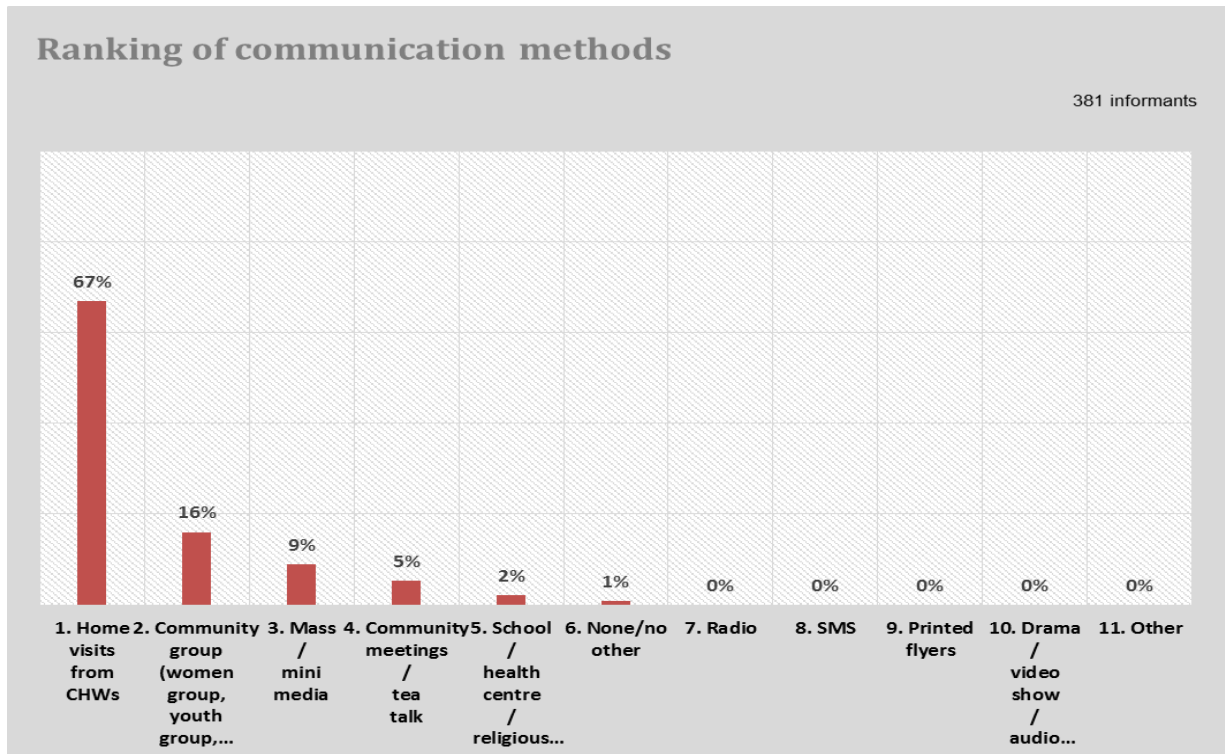


Fig: 17 ranking of best communication method in Pugnido camp Dec, 2017

##### 4.7.1 Household visited by community health workers

66% of HH in Pugnido camp visited by CHW in Dec 2017 and 68% of HH participate on community meeting specific to health and health related discussion

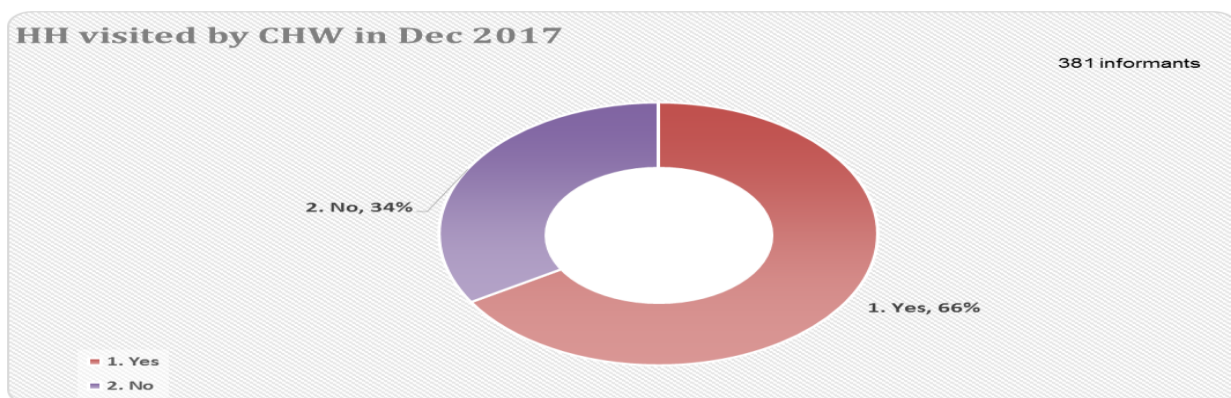


Fig: 18 HH's visited By CHW in Pugnido camp Dec, 2017

#### 4.7.3 Reading ability of the study community/ACCES TO RADIO

56% of the community under this study not capable to read and only 3 % of the community access to radio

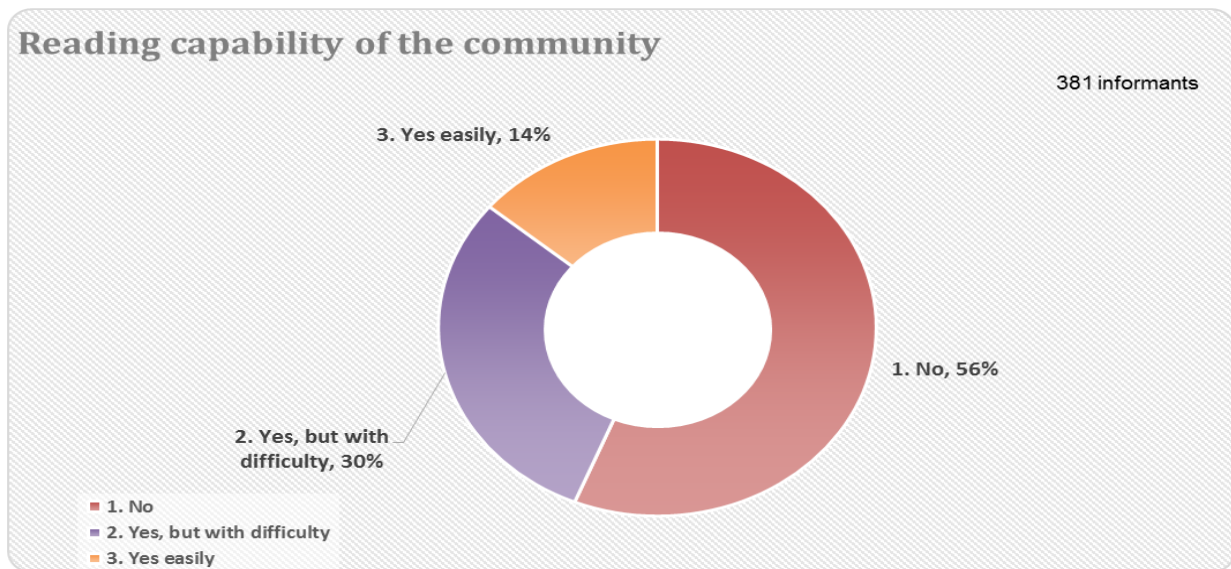


Fig: 19 reading ability of the community in Pugnido camp Dec, 2017

#### 4.8 hygiene items distribution

58 % of the Pugnido community under study received some of hygiene items in Dec2017

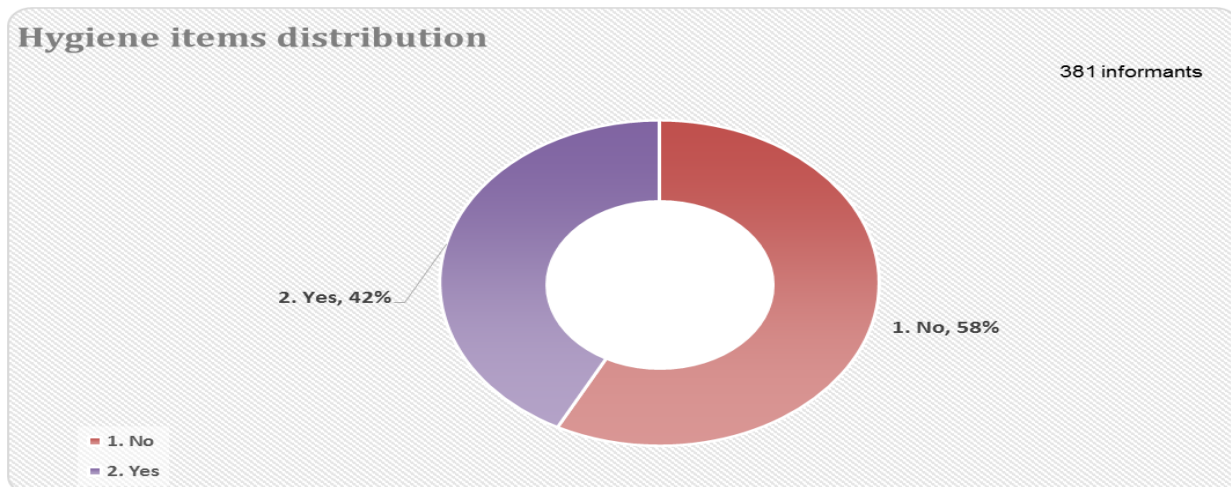


Fig: 20 distributions of hygiene items in Pugnido camp Dec, 2017

## Discussion and recommendation

According to Dec 2016 the water supply consumption per person is 14.6C/L/D and slight progress to 14.3 L/C/D according to Dec, 2017 but the sufficiency of water supply in Households deteriorating from Dec, 2016 to Dec, 2017 from 71.8% to 54% with the main reason lack of water supply container for collection and storage this indicate that even the containers functional in 2016 is known deteriorating in 2017.

Bathing facility is mainly constructed from grass and the coverage may change from season to season as the grass may not serve more than a year as a wall due to temperature

Regarding the latrine coverage and utilization it shows progress from 66.7% to 84% but still some parts of people use open defecation overnight in the bush beside this 24% of under five children practice open defecation.

During observation 92 % of latrine in use and 10 % of household latrines observed full and needs replacement

Regarding solid waste disposal 23% of the community disposed wastes in the HH waste pit where as 62% of them disposes by burning and 61% of HH yard observed clean

The best communication method ranked as 67% home to home visit, 16% women group discussion and 5% community meeting but when we see the community visited by community health workers at house hold and members of family attend community meeting on health issue 63%and 58% respectively

### Recommendations

- The UNHCR, ARRA and The IRC should work hand in hand to solve water supply collection and storage container problems
- The IRC and IPs working on Hygiene promotion and health communication in the camp under study should use methods ranked by the community as best methodology like Home visit and CHC
- During development of IEC material consideration of Pictures and audio material is vital according to this study following their ability to read
- As 10 % latrine is observed full decommissioning and replacement should be planned

