

# WASH PROGRAMME-SOMALILAND



## Barrier Analysis on Ceramic filters (Gabiley)

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### Findings and Recommendations

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**March 2014**

This report contains an introduction to barrier analysis, the purpose for this survey, Methodology used, Findings, Recommendations and Conclusion.

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## 1. Introduction

**Barrier Analysis** is a rapid assessment tool used in community health and other community development projects to identify behavioral determinants associated with a particular behavior. These behavioral determinants are identified so that more effective behavior change communication messages, strategies and supporting activities (e.g. creating support groups) can be developed. It focuses on eight determinants: perceived susceptibility, perceived severity, perceived action efficacy, perceived social acceptability, perceived self-efficacy, cues for action, perception of divine will, and positive and negative attributes of the action. Barrier Analysis can be used at the start of a behavior change program to determine key messages and activities for intervention. It can also be used in an ongoing program focusing on behaviors that have not changed very much (despite repeated efforts) in order to understand what is keeping people from making a particular change (Davis and Thomas 2004, p.1).

In 2012 Concern distributed 540 ceramic filters for 7 target villages in Gabiley region, the aim of the survey is to find out what the barriers of the households not using the ceramic filters are and what motivates those using them.

## 2. Purpose

The following are the constitute the purpose of this survey;

- To find out what motivates users (Doers) of ceramic filters
- To find out the barriers of non-users (Non-doers) of ceramic filters

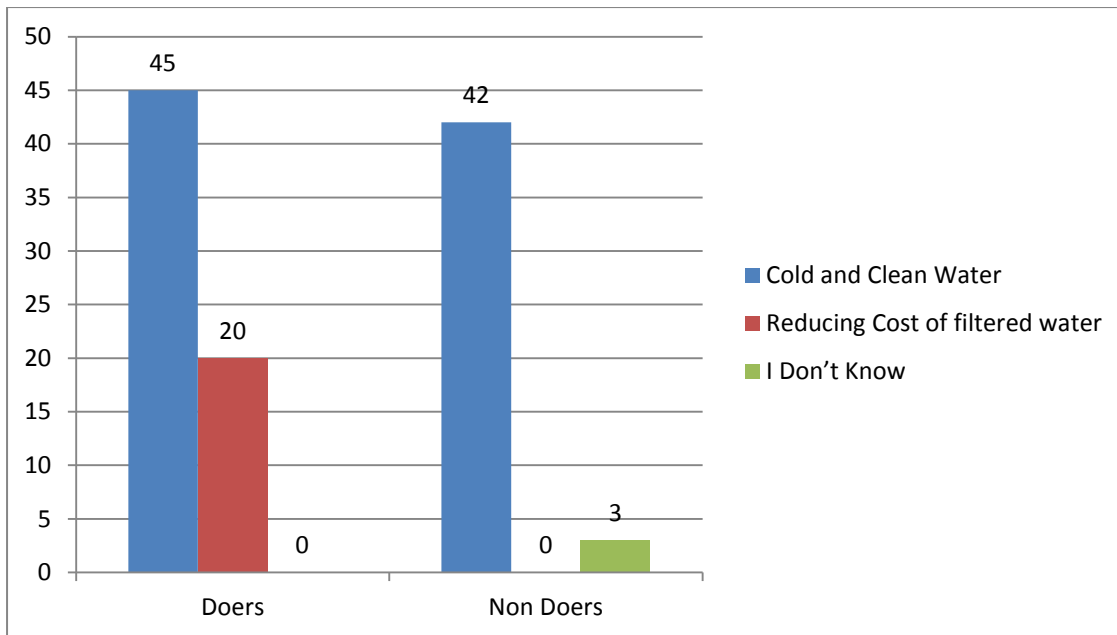
## 3. Methodology

The methodology of the data collection was using qualitative approach by interviewing the households using semi-structured questionnaires. The sampling technique of the survey was purposive quota sampling targeting 45 doers and 45 non-doers which means 45 of those having and using the ceramic filter and 45 of those who are not using the ceramic filter.

## 4. Findings

### I. Perceived Positive Consequences (Advantages)

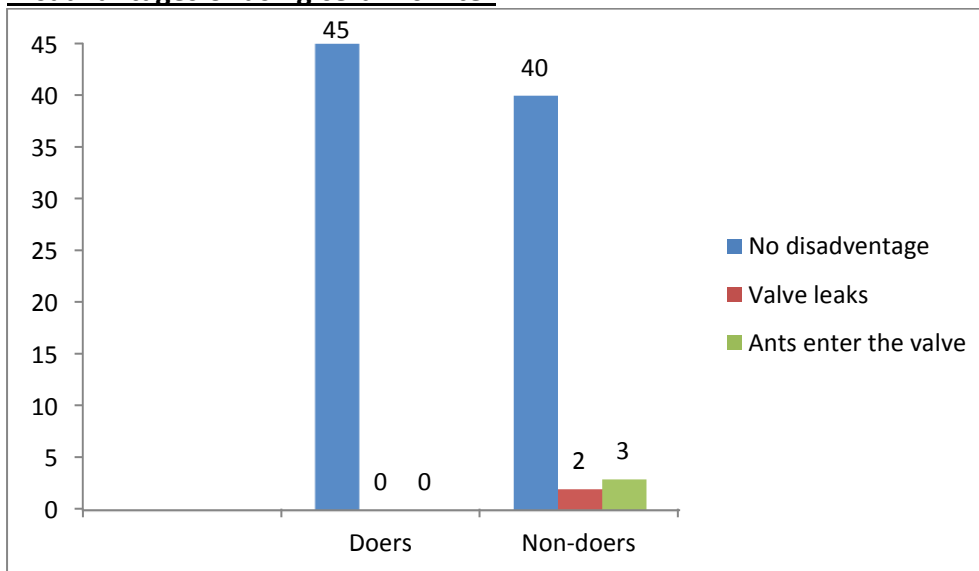
#### Advantages of using ceramic filters



Based on the findings, both Doers and Non Doers recognize that ceramic filters have advantages. **100%** of the doers and **89%** of non-doers stated that ceramic filters make water clean and cold, **44%** of doer's stated that it reduces of cost of buying filtered water which they usually provide for infants less than 1 year.

## II. Perceived Negative Consequences (Disadvantages)

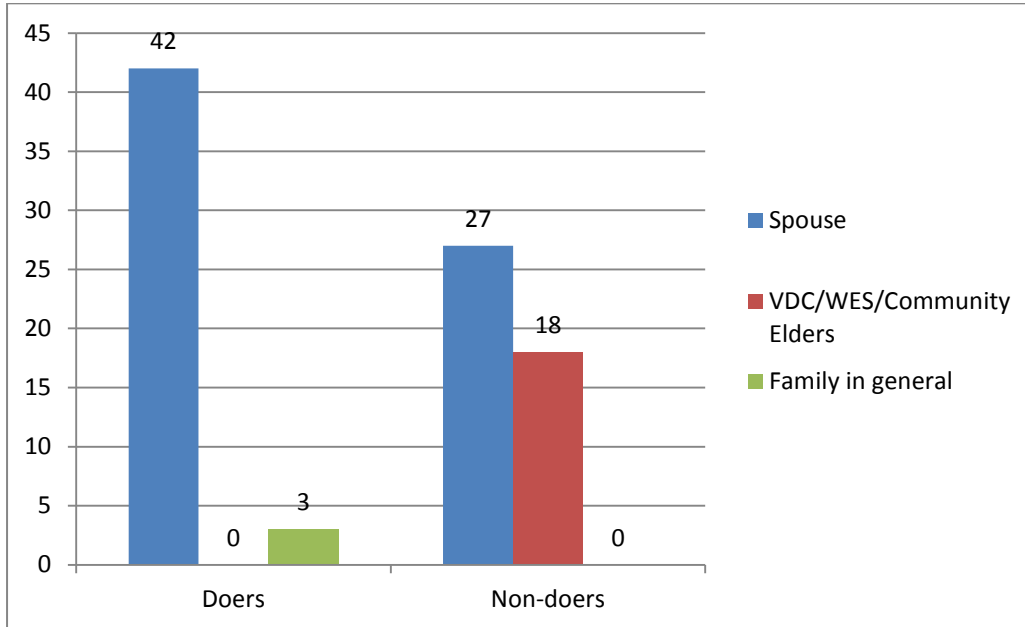
### Disadvantages of using ceramic filter



**100%** of the Doers and **89%** of Non -doers stated that ceramic filters have no disadvantages when used, while **7%** of the non-doers stated that the valve leaks and **4%** said that ants enter the valve.

### III. Perceived Social Norms (Approves/Disapproves)

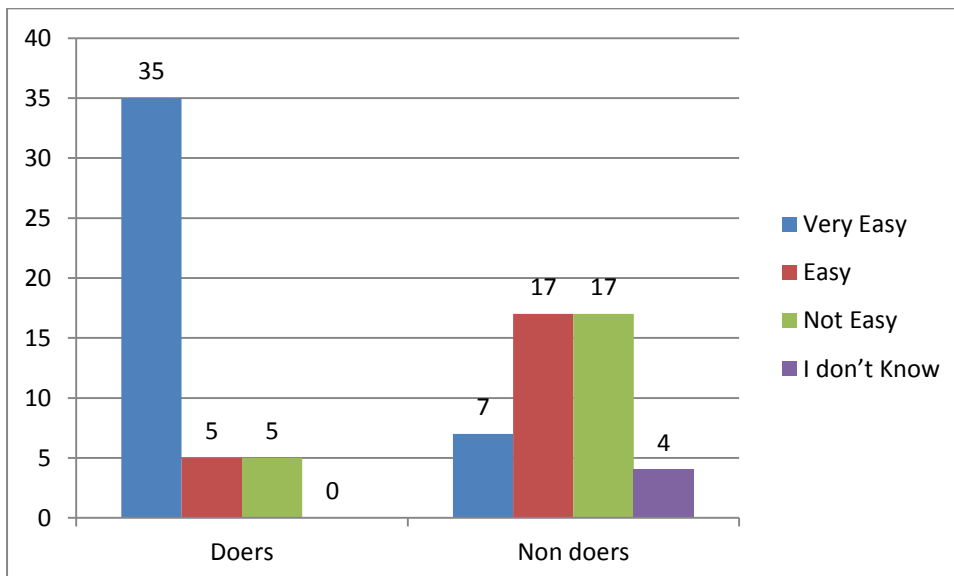
#### Who approves or disapproves use of Ceramic Filters:



**93%** Doers and **89%** of Non-doers that their Spouses approved/disapproved the used of ceramic filters, **31%** of Non-doers said the VDC/WES Committee/Community elders and **7%** of the Doer's said their families in general. This shows us that the Spouse is the most important person who approves or disapproves the use of ceramic filter.

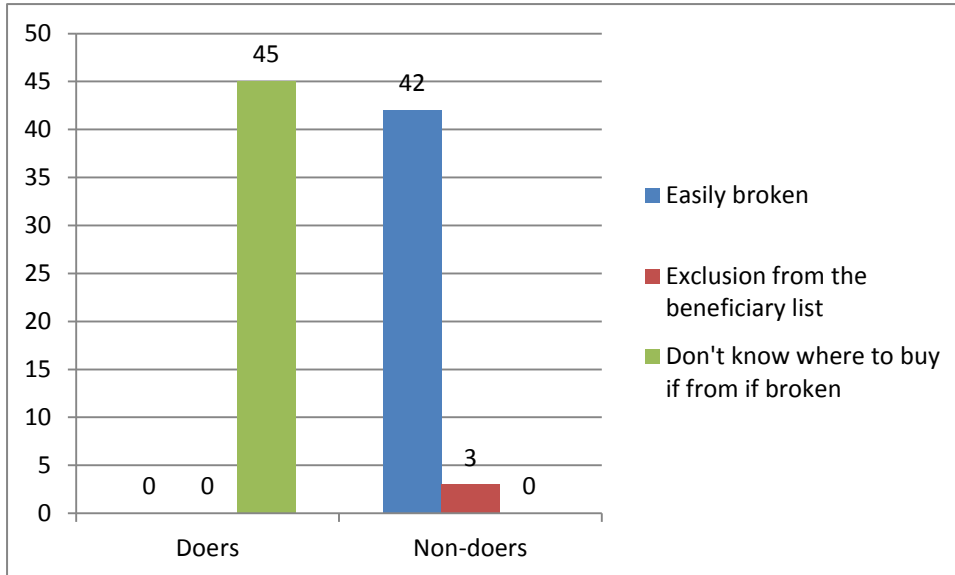
### IV. Perceived Self-Efficacy

#### How easy is getting a ceramic filter?



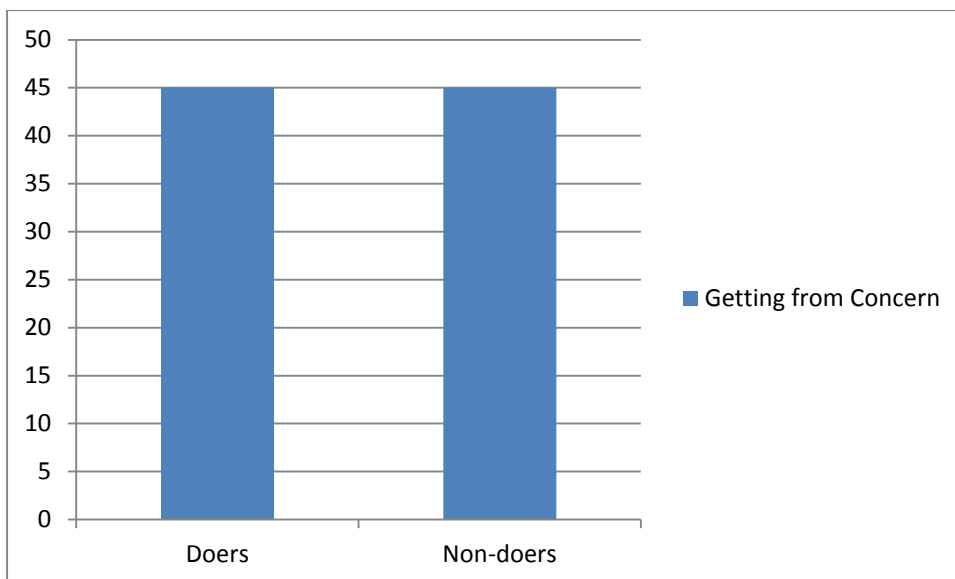
**78%** of Doers said it's very easy, **11%** easy and **11%** not easy while **16%** of Non-doers said it's very easy, **30%** easy, **30%** not easy and **9%** don't know.

**What makes it difficult to get Ceramic filter?**



**100%** of the doers responded that they don't know where to buy the Ceramic filters from while **93%** of the non-doers responded that the Ceramic filters are easily broken while the remaining **7%** said they got excluded from the Concern beneficiary list. Interestingly cost is not the main reason for not getting a ceramic filter but market availability is their main concern. Hence there is need to work with the private sector to make the filters and spare parts available locally.

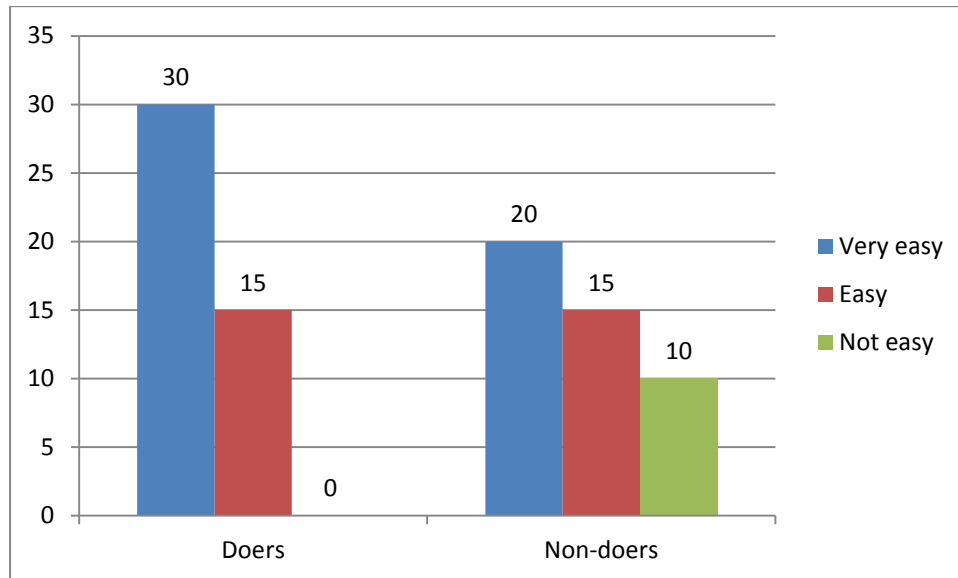
**What makes it easy to get Ceramic filter?**



**100%** of both Doers and Non-doers responded that getting from Concern is the only easy way. This mainly attribute to lack of marketing information to allow households buy/replace their ceramic filters.

### V. Cues for Action

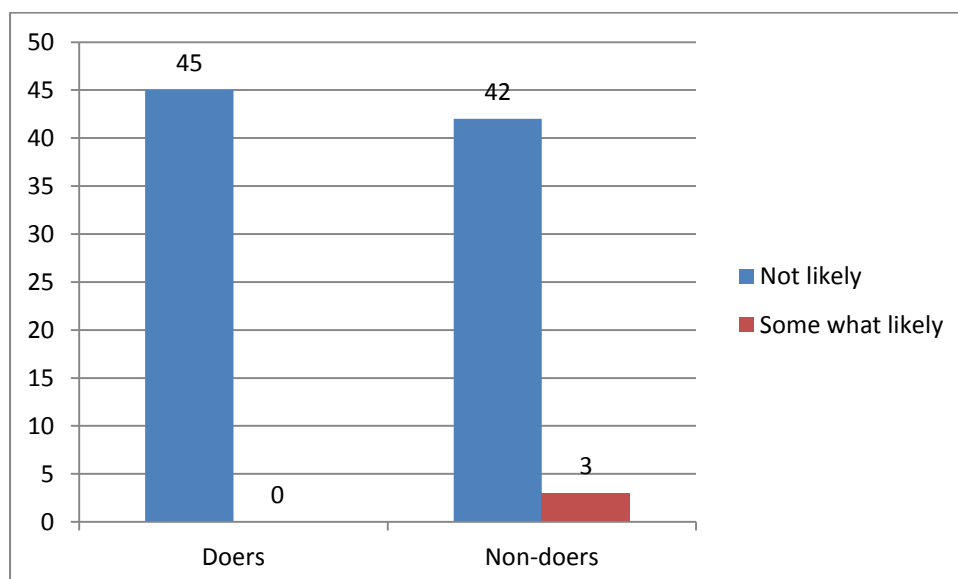
**How easy is it to remember to fill water in a ceramic filter?**



**67%** of the Doers and **44%** of the Non-doers responded that it's very easy to remember to fill the ceramic filters, **33%** of Doers and **34%** Non-doers responded it's easy while the remaining **22%** of the non-doers said it's not easy. Generally this shows that most of the Doers find it easy to remember to refill the ceramic filter while the Non-doers find it not easy to remember to refill perhaps because they haven't used them.

### VI. Perceived Susceptibility

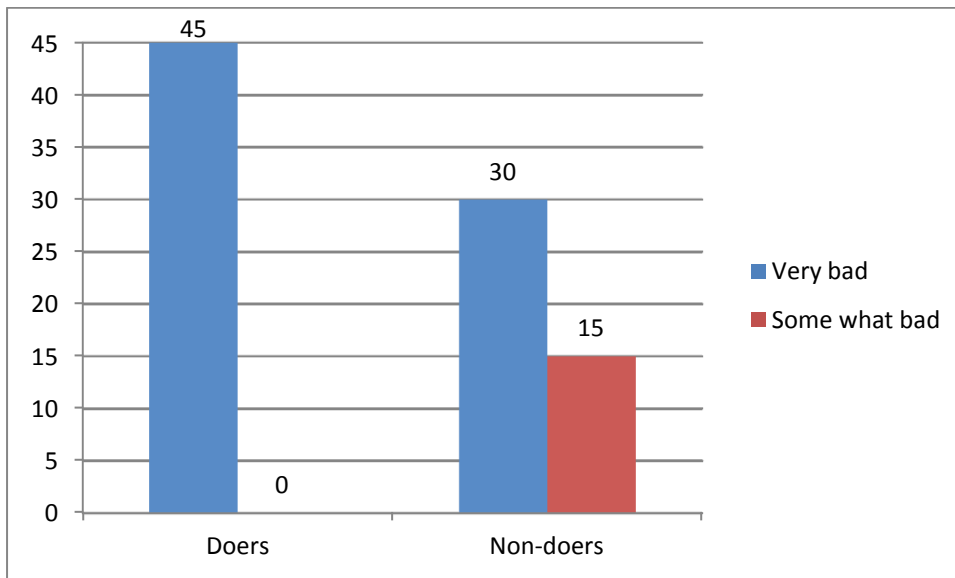
**How likely is it that households which are using ceramic filter will get diarrhoea?**



**100%** of Doers and **93%** of Non-doers responded that it's not likely while only **7%** of the Non-doers responded somewhat likely. This shows that majority of the households know that the use of Ceramic filters can reduce prevalence of diarrhea.

### VII. Perceived Severity

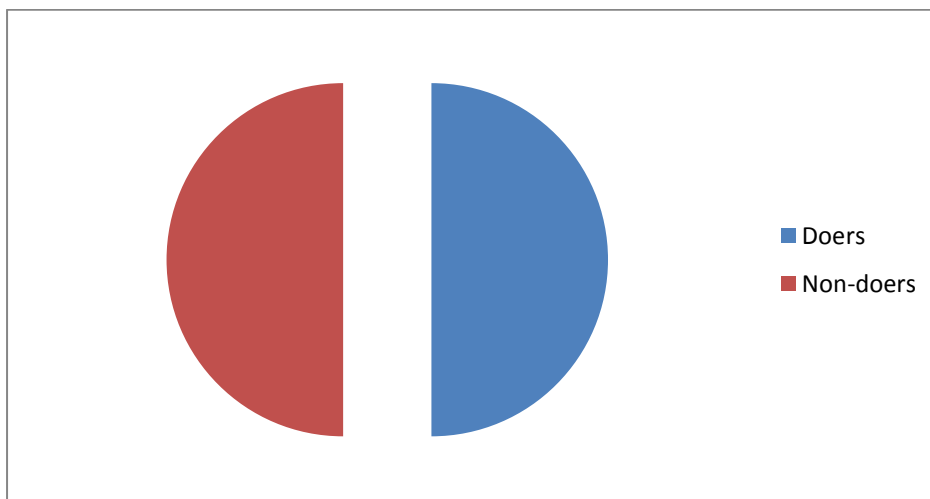
**How bad of a problem would it be if you or a member of your household had diarrhoea?**



**100%** of the Doers and **67%** of Non-doers responded that the effects of diarrhea are very bad to the family while the remaining **33%** of the Non-doers responded somewhat bad. This illustrates that respondents have a good idea about impact of diarrhea.

### VIII. Culture

**Are you aware of any cultural rules or taboos that are for or against the use of Ceramic filters?**





**100%** of both Doers and Non- doers said they don't know of any cultural rules or taboos that are for or against the use of Ceramic filters. This is encouraging since the existing cultures and traditions don't hinder the use of Ceramic filters.

## 5. Recommendations

- Households with children under 5 should be targeted because they are the most affected by diarrhea. This is further reinforced by the findings of this survey which indicated that mothers are more likely to use the ceramic filters for the benefit of infants less than 1 year instead of buying bottled water.
- Work with the private sector (Manufacturers and relevant traders) to market the ceramic filters and make them available close to the beneficiaries e.g. in Gabiley town. At the moment all households only depend on Concern to access the filters and the spare parts and this is mainly due to lack of market information.
- Most of the respondents depended on their spouses on the decision to approve/disapprove the use of Ceramic filters. Hence Heads of households and their spouses should always be consulted when planning to distribute ceramic filters. It also indicates that the same should be considered when providing awareness on the use of ceramic filters.
- Although most of the Doers said they remembered when to fill the filters, there is still need to review the filtration rates of the ceramic filters and guide communities to come up with appropriate times for refilling and emptying their ceramic filters in order to meet their household drinking water needs.
- The Ceramic filters are easily broken mainly due to poor handling; in future households should be educated on the appropriate use of the filters before use to minimize damage.
- The households' concerns include tap leakage and intrusion by ants. Hence the weakness in the taps needs to be shared with the manufacturer and households need to keep the Ceramic filter on a raised plat form.
- Encourage the VDCs to develop bi-laws on the non-use of ceramic filters. E.g. the Ceramic filters could be transferred to other needy households in case they are not being used by the households that have received such filters and related awareness on their use.
- Continuous awareness should be done on the benefits and the appropriate use of the filters such that all households make maximum use of the filters. This will also encourage households to maintain their ceramic filters.

## 6. Conclusion

The findings indicate that communities are willing to use the ceramic filters and could afford to acquire, operate and maintain if given market information. They also acknowledged the value of the ceramic filters in reducing diarrhea prevalence. There is also need to create targeted awareness and educate the households on the appropriate use and handling of the

ceramic filters to minimize damage and be more effective. Therefore we will also work with the manufacturer to address some of the concerns raised by the users to improve its durability and effectiveness. Additionally the manufacturer needs to work with local traders to expand its supply chain to make the ceramic filters and its spare parts locally available. Hence the use of ceramic filters is still a viable option for household water treatment in Gabiley region as long as the above recommendations are implemented.

## 7. References

Davis Jr. and Thomas P., (2004). *Barrier Analysis Facilitator's Guide: A Tool for Improving Behavior Change Communication in Child Survival and Community Development Programs*, Washington, D.C.: Food for the Hungry.

## 8. Annex 01: Questionnaire

<b>Barrier Analysis Questionnaire</b>
<b>BEHAVIOUR: Household usage of ceramic filters in targeted villages as a result of Concern's WASH Program In Gabiley Region</b>

### Scripted introduction

"Hi, my name is \_\_\_\_\_, and I am part of a study team from Concern. We would like to have a look at the use of ceramic filter in your household. This will help Concern in the design of Ceramic filters in future. Our questions will take approximately 30 minutes. Participation in this study is completely voluntary; you can decide to participate or not. No services will be withheld if you decide not to participate. If you decide to participate, everything you say will be kept confidential and your name will not be noted. You do not have to answer any of the questions and can change your mind about participating at any point. I would like to hear your views on this topic. Would you be willing to talk with me?" *Note to interviewer: If not, thank the person for their time and find another person.*

*Iska waran magacaygu waa \_\_\_\_\_ waxaan kamid ahay kooxda ka socota Concern ee xog ururinta. Waxaan eegaynaa isticmaalka biyo miiraha, waxaanay tani Concern ka caawinaysaa inay qaabaynta hawlaha. Waxay qaadanayaan 20-30 daqiiqo. Inaad ka qaybqaadato mid aad adigu go'aansanayso, xogtanu waa mid la xafidayo, magacaagana lama qorayo. Maka raali tahay inaad xogtan bixiso? Hadii kale u mahadnaq qofka oo raadso hadkale.*

### Scripted explanation of the behavior to the interviewee

"Ceramic filters are containers designed to treat water at household level commonly known as Biyo Miire in Somaliland. Non-doers are households that have/haven't received Ceramic filters and are not using them whereas Doers are households that have received ceramic filter and are using them".

*Waxaan uga jeednaa qofka aan samayn ka aan isticmaalin ama aan ka helin Concern Biyo miiraha ka sameeyaa waa ka helay isticmaalana*

<b>Question to distinguish between a Doer and Non- Doer</b> <b>Su'aashani waxay kala saaraysaa qofka sameeya iyo ka'aan samayn</b>
<b>Has your household (or someone employed on behalf of your household) been using a ceramic filter?</b>

**Qoyskaaga cid kamidihi miyuu la siiyay biyo miirihii?**

Yes (Note to interviewer: This should be confirmed by observation)

**Haa ( fadlan hubi adoo eegaya).**

No

**Maya**

Don't know/ will not say

**Garanmaayo/sheegi maayo**

*Note to interviewer: If the interviewee has answered "Yes", and this has been confirmed through observation, then they are a DOER. If the interviewee has answered "No" then they are a NON-DOER. If the interviewee has answered "Don't know" or will not say, then thank them for their time, end the interview, and look for another person.*

*Hadii la waraystuhu haa yidhaa hubi adoo eegaya. Hadii uu la waraystuhu jawaabo maya waa qof aan samayn hadiise uuku jawaabo garanmaayo ama kuu warami maayo waqtigooda uga mahadceli oo soo gabagabee waraysiga. Ka dib warayso qof kale.*

**GROUP:**

**DOER**

**NON-DOER**

<b>Perceived Positive Consequences (Advantages)</b> <b>Cawaaqibka wanaagsan</b>	
<p>Doer</p> <p><b>In your opinion, what are the advantages/benefits of having a ceramic filter?</b></p> <p><i>Fikirkaaga adoo cabiraaya waa maxay faa'iidooyinka uu leeyahay biyo miiruhu.</i></p> <p><i>List all responses. Prompt with "and what else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>	<p>Non-Doer</p> <p><b>In your opinion, what would be the advantages/benefits of having a ceramic filter?</b></p> <p><i>Fikirkaaga adoo cabiraaya waa maxay faa'iidooyinka uu yeelan lahaa u biyo miiruhu? .</i></p> <p><i>List all responses. Prompt with "and what else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>
<b>Perceived Negative Consequences (Disadvantages)</b>	
<p>Doer</p> <p><b>In your opinion, what are the disadvantages/negative consequences of the ceramic filter?</b></p> <p><i>Fikirkaaga adoo cabiraaya waa maxay faa'iido darada uu leeyahay biyo Miiruhu?</i></p> <p><i>List all responses. Prompt with "and what else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>	<p>Non-Doer</p> <p><b>In your opinion, what would be the disadvantages/negative consequences of the ceramic filter?</b></p> <p><i>Fikirkaaga adoo cabiraaya waa maxay faa'iido darada ay leedahay biyo Miiruhu?</i></p> <p><i>List all responses. Prompt with "and what else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>
<b>Perceived Social Norms (Approves/Disapproves)</b>	
<p>Doer</p> <p><b>Who (individuals or groups) do you feel approved/was in favour of your household using a ceramic filter?</b></p> <p><i>Waa'ayo shaqsiyaadka ama kooxda kugu raacsanaa inaad isticmaasho Biyo miiraha?</i></p> <p><i>List all responses. Prompt with "and who else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>	<p>Non-Doer</p> <p><b>Who (individuals or groups) do you feel would approve/would be in favour of your household using a ceramic filter?</b></p> <p><i>Waa'ayo shaqsiyaadka ama kooxda kugu raaci doona inaad isticmaasho Biyo miiraha?</i></p> <p><i>List all responses. Prompt with "and who else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>
<p>Doer</p>	<p>Non-Doer</p>

<p><b>Which of these individuals or groups you have listed are most important to you?</b></p> <p><i>Dadkaa aad taxday kuwee kuugu muhiimsan?</i></p>	<p><b>Which of these individuals or groups you have listed are most important to you?</b></p> <p><i>Dadkaa aad taxday kuwee kuugu muhiimsan?</i></p>
<p>Doer</p> <p><b>Who (individuals or groups) do you feel did not approve/was not in favour of using a ceramic filter in your household?</b></p> <p><i>Waa'ayo shaqsiyaadka ama kooxda kugu diidanaa inaad isticmaasho biyo miiraha</i></p> <p><i>List all responses. Prompt with "and who else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>	<p>Non-Doer</p> <p><b>Who (individuals or groups) do you feel would not approve/would not be in favour of using a ceramic filter in your household?</b></p> <p><i>Waa'ayo shaqsiyaadka ama kooxda kugu diidi doona inaad inaad isticmaasho biyo miiraha</i></p> <p><i>List all responses. Prompt with "and who else?"</i></p> <p><i>Tax dhamaan jawaabaha.. maxay kale</i></p>
<p>Doer</p> <p><b>Which of these individuals or groups you have listed are most important to you?</b></p> <p><i>Dadkaa aad taxday kuwee kuugu muhiimsan?</i></p>	<p>Non-Doer</p> <p><b>Which of these individuals or groups you have listed are most important to you?</b></p> <p><i>Dadkaa aad taxday kuwee kuugu muhiimsan?</i></p>
<p><b>Perceived Self-Efficacy</b></p>	
<p>Doer</p> <p><b>In your opinion, how easy is getting a ceramic filter?</b></p> <p><i>Ra'yigaaga siday u fududahay inaad hesho biyo miiro?</i></p> <p><input type="checkbox"/> Very Easy</p> <p><i>Aad bay ufududahay</i></p> <p><input type="checkbox"/> Easy</p> <p><i>Way fududahay</i></p>	<p>Non-Doer</p> <p><b>In your opinion, how easy would it be in getting a ceramic filter?</b></p> <p><i>Ra'yigaaga siday u fududaan lahayd inaad hesho biyo miiro?</i></p> <p><input type="checkbox"/> Very Easy</p> <p><i>Aad bay ufududahay</i></p> <p><input type="checkbox"/> Easy</p> <p><i>Way fududahay</i></p>

<input type="checkbox"/> Not easy Ma fududa <input type="checkbox"/> Do not know/Will not say Garanmaayo/ sheegi maayo	<input type="checkbox"/> Not easy Ma fududa <input type="checkbox"/> Do not know/Will not say Garanmaayo/ sheegi maayo
Doer <b>In your opinion, what makes it difficult to have/buy a ceramic filter?</b> <i>Fikirkaaga adoo cabiraaya ,maxaa adkayn lahaa in la helo biyo miire la helo.</i>  <i>List all responses. Prompt with “any other reasons.”</i>  <i>Tax dhamaan jawaabaha. Sababo kale waydii</i>	Non-Doer <b>In your opinion, what would make it difficult to have/buy a ceramic filter?</b> <i>Fikirkaaga adoo cabiraaya ,maxaa adkayn lahaa in la helo biyo miire la helo.</i>  <i>List all responses. Prompt with “any other reasons?”</i>  <i>Tax dhamaan jawaabaha. Sababo kale waydii</i>
<b>Perceived Susceptibility</b>	
Doer <b>In your opinion, how likely is it that households which are using ceramic filter will get diarrhoea?</b> <i>Fikirkaaga adoo cabirayaa waa maxay suurto galnimada in reer isticmaala biyo miire uu ku dhici karo shuban?</i> <input type="checkbox"/> Very likely <i>Aad bay suurto gal u tahay</i> <input type="checkbox"/> Somewhat likely <i>Woxogaa waa suurto gal</i> <input type="checkbox"/> Not likely <i>Suurto gal maaha</i>	Non-Doer <b>In your opinion, how likely is it that households which are using ceramic filter will get diarrhoea?</b> <i>Fikirkaaga adoo cabirayaa waa maxay suurto galnimada isticmaala biyo miire uu ku dhici karo shuban?</i> <input type="checkbox"/> Very likely <i>Aad bay suurto gal u tahay</i> <input type="checkbox"/> Somewhat likely <i>Woxogaa waa suurto gal</i> <input type="checkbox"/> Not likely <i>Suurto gal maaha</i>

<input type="checkbox"/> Do not know/Will not say <i>Garanmaayo/sheegi maayo</i>	<input type="checkbox"/> Do not know/Will not say <i>Garanmaayo/sheegi maayo</i>
<b>Cues for Action</b>	
<p>Doer</p> <p><b>In your opinion, how easy is it to remember to fill water in a ceramic filter?</b></p> <p><i>Fikirkaaga adoo cabirayaa siday kuugu fududahay inaad xasuusato inaad buuxiso biyaha miiraha?</i></p> <p><input type="checkbox"/> <input type="checkbox"/> Very likely</p> <p><i>Aad bay suurto gal u tahay</i></p> <p><input type="checkbox"/> Somewhat likely</p> <p><i>Woxogaa waa suurto gal</i></p> <p><input type="checkbox"/> Not likely</p> <p><i>Suurto gal maaha</i></p> <p><input type="checkbox"/> Do not know/Will not say</p> <p><i>Garanmaayo/sheegi maayo</i></p>	<p>Non-Doer</p> <p><b>In your opinion, how easy would it be to remember filling water in a ceramic filter?</b></p> <p><i>Fikirkaaga adoo cabirayaa siday kuugu fududaan lahayd inaad xasuusato inaad biyamiiraha biyo ka buuxiso?</i></p> <p><input type="checkbox"/> Very likely</p> <p><i>Aad bay suurto gal u tahay</i></p> <p><input type="checkbox"/> Somewhat likely</p> <p><i>Woxogaa waa suurto gal</i></p> <p><input type="checkbox"/> Not likely</p> <p><i>Suurto gal maaha</i></p> <p><input type="checkbox"/> Do not know/Will not say</p> <p><i>Garanmaayo/sheegi maayo</i></p>
<b>Perceived Severity</b>	
<p>Doer</p> <p><b>In your opinion, how bad of a problem would it be if you or a member of your household had diarrhoea?</b></p> <p><i>Fikirkaaga adoo cabirayaa siday u culustahay dhibaataada hadii qof qoyskaaga kamida uu shuban ku yimaado?</i></p> <p><input type="checkbox"/> Very bad</p> <p><i>Mid aad u xun</i></p> <p><input type="checkbox"/> Somewhat bad</p>	<p>Non-Doer</p> <p><b>In your opinion, how bad of a problem would it be if you or a member of your household had diarrhoea?</b></p> <p><i>Fikirkaaga adoo cabirayaa siday u culustahay dhibaataada hadii qof qoyskaaga kamida uu shuban ku yimaado?</i></p> <p><input type="checkbox"/> Very bad</p> <p><i>Mid aad u xun</i></p> <p><input type="checkbox"/> Somewhat bad</p>



<p><i>Woxogaa way xuntahay</i></p> <p><input type="checkbox"/> Not bad</p> <p><i>Maba darna</i></p> <p><input type="checkbox"/> Do not know/Will not say</p> <p><i>Garanmaayo/sheegi maayo</i></p>	<p><i>Woxogaa way xuntahay</i></p> <p><input type="checkbox"/> Not bad</p> <p><i>Maba darna</i></p> <p><input type="checkbox"/> Do not know/Will not say</p> <p><i>Garanmaayo/sheegi maayo</i></p>
<b>Culture</b>	
<p>Doer</p> <p><b>Are you aware of any cultural rules or taboos that are for or against the use of Ceramic filters?</b></p> <p><i>Miyaad ogtahay xeer dhaqameedyo kuwaas oo taageeraya ama kasoo horjeeda in qoysku suuli dhisto?</i></p> <p><input type="checkbox"/> Yes <i>Haa</i></p> <p><input type="checkbox"/> No <i>Maya</i></p> <p><input type="checkbox"/> Do not know/Will not say</p> <p><i>Garanmayo/ sheegi maayo</i></p>	<p>Non-Doer</p> <p><b>Are you aware of any cultural rules or taboos that are for or against the use of ceramic filters?</b></p> <p><i>Miyaad ogtahay xeer dhaqameedyo kuwaas oo taageeraya ama kasoo horjeeda in qoysku suuli dhisto?</i></p> <p><input type="checkbox"/> Yes <i>Haa</i></p> <p><input type="checkbox"/> No <i>Maya</i></p> <p><input type="checkbox"/> Do not know/Will not say</p> <p><i>Garanmayo/ sheegi maayo</i></p>

**End of survey**

*Note to interviewer: Thank interviewee, and tell them that you appreciate them giving their time to respond to the questions. Tell them again that the information will be used to guide Concern's programme activities.*

**Dhamaadkii Xogwaraysiga**

*U mahadnaq xogbiyaha sida uu waqtigiisii qaaliga ahaa inoo siisay . Una sheeg in xogtani ay hagi doonto hawlaha mashaariicda Concern*