Appendix 1a: Participant Information Sheet – for households who do not own cattle, participating in household survey, water quality assessment and microbial hazard identification

Study Title: OneHealthWater: Drinking-water under a "One Health" lens - quantifying microbial contamination pathways between livestock and drinking-water

Researchers: Dr. Jim Wright, University of Southampton (PI); Dr. Thumbi Mwangi, Kenya Medical Research Institute; Mr. Joseph Okotto-Okotto, Victoria Institute for Research on Environment and Development International; Prof. Huw Taylor, University of Brighton **Ethics reference (KEMRI): to be confirmed**

Ethics number (University of Southampton, UK): 25247

Please read / listen to this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

The OneHealthWater project is investigating the health risks of water contamination from livestock. We wish to understand how far livestock and their faeces are responsible for contamination of water and causing disease, particularly diarrhoea, in people. In studying this issue, we wish to develop tools for making water safer to drink, particularly simple checklists that can be used to identify and then prevent water contamination from livestock, both in the home and around water sources. The study team is made up of the Kenya Medical Research Institute, VIRED International, a Kenyan non-profit organisation, and two UK universities (University of Southampton – the research sponsor, and University of Brighton) and all institutions will be involved in the data analysis. If you are happy for us to do so, we will also make an anonymous version of the data collected available to other researchers and for educational purposes here in Kenya.

The study is funded by the UK Department for International Development, and by the UK Medical Research Council, a government body that funds research collaborations between the UK and other countries. The study has been approved by the Scientific and Ethical Review Unit Committee of the Kenya Medical Research Institute and by a University of Southampton ethics committee in the UK.

Am I required to participate in this study?

You can choose whether or not you wish to take part in the study: this is your choice.

Why have I been chosen?

You have been chosen because you are already participating in the syndromic surveillance survey study, run by the Kenya Medical Research Institute. We have picked just some people participating in that study at random to take part in this study.

What will happen to me if I take part?

If you take part, we will visit you three – now and two more times in three months' time. Right now, we will ask you some questions about the water that you use, record the position of your water source, and take a water quality sample from your water source. In doing so, we will look for possible contamination pathways at or near the water source, including from animals. We will also look at where you store your water at home, look for any possible hazards that could contaminate your water, and take a sample of your stored drinking-water for testing. This should take around 40 minutes of your time. In three months' time, we will return once more, look again for any contamination hazards around your water source and around the water you store at home, and take another water sample for testing from both your water source and stored water. Again, this should take around 40 minutes. A second person from our team will then visit you again the same day or day after and do the same checks for contamination hazards. This should take 15 or 20 minutes.

Are there any benefits in my taking part?

If we identify any potential contamination pathways around your well that can easily be fixed when we inspect your water source and stored water, we will let you know and provide suggestions for stopping contamination via that route. We will also provide a general overview of water quality in our study sites, which we intend to feed back via community meetings. By creating a checklist of hazards that people can look for around water sources, we hope to provide a simple tool that people can use to make water sources safer from contamination by livestock in the future.

Are there any risks involved?

There is a very small chance of us inadvertently contaminating your water source during sampling. However, we will make this risk as small as possible by using different clean sample bottles for each sample and sterilising our hands and equipment before taking each sample. If you do become concerned that your water storage vessel has become contaminated during sampling, please contact us, so that we can provide advice on treating stored water using chlorine to remove contamination.

Will my participation be confidential?

Yes, your participation in the study will be kept confidential. The study will comply with both the privacy requirements of Article 31 of the Kenya Constitution and the 1998 UK Data Protection Act. Some staff at the Kenya Medical Research Institute may sometimes look at your research records whilst the study is taking place. Your data will be coded so that your identity cannot be determined by the project researchers and we will remove any names at the earliest opportunity. You will not be named in any reports. If you wish to view or correct any personal information following the project team's visit, you can do so via the contact details provided below.

What happens if I change my mind?

You can withdraw from the study at any time, without your legal rights being affected.

Is there any reason why you might ask me to leave the study?

If you move home and away from the villages chosen for this study here in Siaya, then you will no longer be able to participate in the study.

What happens if something goes wrong?

If you have any concerns or complaints about how this research is conducted, in the first instance, you may contact either Dr. Mwangi in Kenya or Dr. Wright in the UK (see 'Where can I get more information?' below). If your concern or complaint is not resolved by contacting Drs Mwangi or Wright, please contact:

Head of Research Governance, University of Southampton, rgoinfo@soton.ac.uk +44 (0) 2380 595058

If you would prefer to speak with someone directly in Kenya in order to raise your concerns you can contact:

The Secretary, KEMRI Scientific and Ethical Review Unit (tel. 0202722541 or 0722205901 or 0733400003); P.O Box 54840-00200, Nairobi-Kenya, E-mail: ERCAdmin@kemri.org

Where can I get more information?

You can contact the study team via the following routes:

Kenyan study co-ordinator: Dr. Thumbi Mwangi, Center for Global Health Research, Kenya Medical Research Institute, smthumbi@kemricdc.org, +254721250832

UK co-ordinator and team leader: Dr. Jim Wright, Associate Professor, University of Southampton. Tel: +44-2380-594619. Email: <u>j.a.wright@soton.ac.uk</u>. Address: Geography and Environment, University of Southampton, Building 44, Highfield, Southampton SO17 1BJ, UK.

Appendix 1b: CONSENT FORM – for households who do not own cattle, participating in household survey, water quality assessment and microbial hazard identification

Study title: OneHealthWater: Drinking-water under a "One Health" lens - quantifying microbial contamination pathways between livestock and drinking-water

Researcher name: Dr. Jim Wright and Dr. Thumbi Mwangi on behalf of the OneHealthWater consortium

Ethics reference (KEMRI): to be confirmed Ethics reference (University of Southampton): 25247

Please initial the box(es) if you agree with the statement(s):	
I have read and understood the information sheet (22 Sep 2017, v 1.4) and have had the opportunity to ask questions about the study.	
I agree to take part in this research project and agree for my data to be recorded and used for the purpose of this study	
I agree to anonymous data about me being used for other not-for-profit research and education studies	
I understand that my responses will be anonymised in reports of the research	
I understand my participation is voluntary and I may withdraw at any time without my legal rights being affected	
Data Protection I understand that information collected about me during my participation in this stude stored on a password protected computer and that this information will only be used purpose of this study, in compliance with the Article 31 of the Kenya Constitution and Data Protection Act.	for the
Name of participant (print name)	
Signature of participant	
Name of witness (print name)	
Signature of witness	
Date	
Name of OneHealthWater team member (print name)	
Signature of OneHealthWater team member	

Appendix 1c: CONSENT FORM – for households who do not own cattle, participating in household survey, water quality assessment and microbial hazard identification (Dholuo version)

Study title: OneHealthWater: Drinking-water under a "One Health" lens - quantifying microbial contamination pathways between livestock and drinking-water Researcher name: Dr. Jim Wright and Dr. Thumbi Mwangi on behalf of the OneHealthWater consortium **Ethics reference (KEMRI): to be confirmed** Ethics reference (University of Southampton): 25247 *Please initial the box (es) if you agree with the statement(s):* Kuom nguono mari, yie iKet rang'isi moro amora e boks kaponi iyie gi weche mondikigi. I have read and understood the information sheet (22 Sep 2017, v 1.4) and have had the opportunity to ask questions about the study. Ase somo kendo awinjo weche manie oboke mamiya ng'eyo kuom nonroni (Tarik Piero Ariyo gi Ariyo (22), Dwe Mar Ochiko (Sept.), Higa Gana Ariyo gi Apar gi Abiriyo (2017), v 1.4) kendo ne ayudo thuolo mar penjo penjo koluore gi nonroni I agree to take part in this research project and agree for my data to be recorded and used for the purpose of this study. Ayie ni mondo abed achiel kuom joma itimonegi nonroni kendo ayie ni wechega mondo oket e gir mako wach kendo oket e andiko kendo ni mondo otigo mana e yor nonroni. I agree to anonymous data about me being used for other not-for-profit research and education Ayie ni mondo wechena ma oket e yo maok nyal miyo ng'ato ong'e ni an ema awachogi, mondo otigo e yore mag nonro ma ok mag ohala kod tiegruok mag somo. I understand that my responses will be anonymised in reports of the research. An kod winjo ni weche ma awacho ibiro keti e yo maok nyal miyo ng'ato ong'e ni an ema awachogi ka iketogi ei dwoko kata lipot mar nonroni. I understand my participation is voluntary and I may withdraw at any time without my legal rights being affected. An Kod winjo ni bedona achiel kuom jogo mani e nonroni en chiwruokna kenda awuon ma oenge achuna moro kendo anyalo wuok saa asaya ma ratiro mara moro amora mar chike ok okethi.

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study, in compliance with the Article 31 of the Kenya Constitution and 1998 UK Data Protection Act.

An kod winjo ni weche duto ma ogol kuoma ndalo duto ma a biro bedo ka an achiel kuom joma itimonegi nonroni ibiro kan ei komputa kama ng'ato ok nyal chopoe ma ok oyudo thuolo ma ochiwne kod wach ma opondo marito Knayo, kendo ni wechegi duto ibiro tiyo godo mana ei nonroni, kaluwore gi chik mar Kenya maduong' namba piero adek kod achiel kod chik ma orito nyirinyiri mag weche e piny mar Kingi Ma Oriwore.(UK)

Name of participant (print name)
Nymg ng a ma rumone Nomo.
Signature of participant
Seyi mar ng'a ma Itimone Nonro:
Name of witness (print name)
Nying' janeno:
Signature of witness
Seyi mar janeno:
Date
Tarik
Name of OneHealthWater team member (print name)
Signature of OneHealthWater team member