

**Care Taker questionnaire: Snowmelt dependent systems in The United States and Kenya**

This survey is being conducted by Indiana University, Princeton University, and the University of Nairobi, under the direction of Dr. Tom Evans in the Department of Geography at Indiana University (Email address: cipec@indiana.edu). The focus of this project is on the ability of farmers to adapt to changes in the availability of water in this area. Every precaution will be taken to maintain the complete confidentiality of your responses and personal information. If you choose to participate, you may refuse to answer certain questions, or you may stop participating at any time. Your decision whether or not to participate will not affect your current or future relations with the researchers, Indiana University, or local water associations. Your responses will be summed together with those of roughly 500 other households in Kenya and only general averages from the analysis will be reported. You will not be identified in any published results from this project. This survey should take approximately one hour to complete. Respondents will not receive payment for participating. You indicate your voluntary consent by participating in this interview. If you have questions about your rights as a research participant or have concerns about the study, you may contact the Indiana University Human Subjects Office at irb@iu.edu.

1. Province: . . . . . **PROV** . . . . .2. District: . . . . . **DIST** . . . . .3. Location: . . . . . **LOC** . . . . .4. Sub-location: . . . . . **SLOC** . . . . .5. Ranch: . . . **RNCH** . . .6. Group ranch: . . . **GRNCH** . . . . .7. Village/Locality: . . . . . **VILL** . . . . .8. WRUA . . . . . **WRUA** . . . . .9. Scheme name . . . . . **CSNM** . . . . .10. Manager number . . . . . **MANNUM** . . . . .11. What is your role with this water scheme? . . . **ROLE**12. Name of enumerator: . . . . . **ENUM** . . . . .13. Date of interview . . . . . **DATE** . . . . .Day  Month  Year 14. Start and end time: . . . . . **STIME / ETIME** . . . . .Start time  End time 15. Name of supervisor: . . . . . **SUPER** . . . . .16. Date supervisor checked . . . . . **SUPCH** . . . . .Day  Month  Year 17. Name of data entry staff . . . . . **DENTRY** . . . . .

19. How many caretakers work for this water project? **CARTAKN**

20. Who is responsible for fixing leaks between homestead and line? **RESPFIX**

21. How many times/week do you or other caretakers clear debris from the intake or main tank? **CLEARTA**

22. In the last year have you disconnected any homesteads from the network? **DISCONNH**  YES  NO

23. When new users want to connect to the network, do you measure what the impact will be on other users?  
**MESIMP**  YES  NO

24. How do you decide the order of repairs to fix? **ORDREP**  
 First come, first serve?  If lots of problems on one line, fix all of those at one time?  From committee

25. Do households contact you directly or do you get jobs from committee? **CONTCT**  YES  NO

26. Please rank which activities consume your time in a the last year from most time consuming to least time consuming **TIMECONS**

Clearing debris from intake or tank	
Connecting new households to system	
Fixing leaks in main lines	
Adding new branches	
Responding to complaints from households that their flow is too low	
Other	

27. Have new lines been added to the network since the origin of the system? **NWLINES**  YES  NO

28. Please explain a few cases **NWLINSEXP**

29. Please sketch the lines and branches of your water project pipe network **SKETCHPIP:**

30. Here let's assume there are three main lines - A, B, C with multiple branches A1, A2, A3, B1, B2, C1, C2 what are the **LINESINF:**

Number of users										
What year was the line created										
Size of the pipe										
N of times p/m you have to fix leaks in the line										

**Section 3: Agricultural activities**

31. In a normal year, how many days per months do the members of your water user association normally irrigate?

**NORMIRR**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Days irrigate from project												
Months depend on Rainfall												

32. During the following months of the past year, for how many days were your users without irrigation water when they needed it?
- WOUT**

	2012							2013					
	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Days with insufficient water													

33. Does your association have access to a project tank/reservoir?
- RESER**
- 
- Yes
- 
- No
- 
- No response

34. If yes, what is this water mostly used for?
- RESUS**
- 
- Domestic
- 
- Irrigation
- 
- Livestock
- 
- Other:

35. Is there a gauge at the main headgate of your system that measures how much water enters the main canal?
- GAUGEMES**
- 
- Yes
- 
- No
- 
- No response

36. What is the size of your water project members' pipe?
- PIPSIZ**
- 

37. What is the size of the intake pipe from the river to your water project?

 **INTAKSIZEA**  **INTAKSIZEB**

**Section 4: Rules**

38. In many water projects there are cases of prohibited activities with the network. For the following:

**A. tampering with the network TAMPNET**

how often it happened in the last 2 years?  none  1-2 times  3-5 times  more than 6

who usually reports it?  Care taker  Committe members  project members  Other \_\_\_\_\_

**B. Irrigating when prohibited IRRPROB**

how often it happened in the last 2 years?  none  1-2 times  3-5 times  more than 6

who usually reports it?  Care taker  Committe members  project members  Other \_\_\_\_\_

39. How many people in this area are pumping water directly from the river? **DIRPUM**

None  1 to 5  6-10  11 or more

40. Can you please describe the last couple cases of illegal tampering with the water network?? **ILLTAMP**


41. What happens when people tamper with the water pipes/scheme pipes? **TAMPIP**

Nothing happens  Monetary sanctions  Pipe is cut off  Definitive expulsion from scheme  
 Other sanctions  Other
