

Appendix 1. Questionnaire.

Only households that formed at 2005 (or earlier) are eligible for this interview, determined in the wealth-ranking exercise. Forty households in each village will be interviewed. Households will be selected combining a stratified and random and purposive manner:

- Begin by selecting 3-5 households from the very poor and rich categories, respectively.
- Then select the VEO, VC chairperson, up to 4 sub-village chairs, up to 7 VNRC/ environmental committee leaders, and top off the balance to 15 people from VC representatives.
- 12-15 poor and normal households

The 'household head' should generally be interviewed in private. Every other household should interview the wife of the household head, assuming that the head is male (if a polygamist household, try to interview the first wife. If she is not available, try the second, etc. HOWEVER, recall that the household head must have formed at 2005 or earlier to qualify for an interview).

General guidelines

- Begin each interview by introducing yourself followed by a description of the project and research objectives
 - The interview will specifically involve a series of questions about the respondent's household and how (if) it has changed since 2005 to present day (2015)
- Indicate that any information given is kept anonymous and may not be traced back to the individual. Make clear that they have every right to decline to be interviewed or to decline to answer any particular question and/or withdraw and cease the interview at any point in the process.
- At the end of the study towards the end of 2016, results will be disseminated to the village
- Request their consent to be interviewed
- Should take between 1-3 hours of their time for which we will compensate them

Does the respondent consent to participate in the interview? (Tick appropriate box)

Yes	No
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If no, cease the interview.

Because some of the questions will require the respondent to reflect back to 2005, it is worthwhile spending a few minutes asking them to reflect back to this time to see if there are any distinct events - personal or at a larger scale, that help them refer back to this time, e.g. birth of a child, natural event such as flooding. A significant national event in 2005 that may help stimulate this was the presidential election.

Is the respondent able to recall events and the circumstances of his/ her livelihood around 2005? (Tick appropriate box)

Yes	No
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1. General

1.1 Date (DD/MM/YYYY)	
1.2 Time at beginning of interview (24 hour)	
1.3 Household ID (linked to wealth ranking)	
1.4 Village	
1.5 CBNRM Present (yes = 1, no = 0)	
1.6 Interviewer (initials)	
1.7 GPS Coordinates (Lat/Long)	

2. Household demographics

2.1 Who is being interviewed? (HH head = 1, wife of HH head = 2)	
2.2a If from a polygamist HH, which number wife are you?	
2.2b How many wives do you have? [If one of the wives] How many wives does your husband have?	
2.3 Gender of HH head (Circle one)	Male / Female
2.4 Age of HH head (less than 20 years = 1, 20-29 years = 2, 30-39 years = 3, 40-49 years = 4, 50-59 years = 5, 60-69 years = 6, 70-79 years = 7, 80-89 years = 8, more than 89 years = 9)	
2.5 Marital status (married = 1, divorced/ separated = 2, widow = 3, single = 4)	
2.6 Highest level of education in household (number of years of schooling completed) (less than 5 years = 0, more than 5 years = 1)	
2.7 Has anyone in your household completed secondary school? (yes = 1, no = 0)	
2.8 Has anyone in your household completed a bachelor's degree? (yes = 1, no = 0)	
2.9 Does anyone in your household have vocational training? (yes = 1, no = 0)	
2.10 If yes, is this training from a recognized institution? (yes = 1, no = 0)	
2.11 Number of years the household has been present in the village	
2.12 Ethnicity (Tribe) of interviewee	

2.13 Religion of interviewee (Muslim = 1, Christian/ Catholic/ Pentecost = 2, Customary religion = 3)	
2.14 Political affiliation of interviewee (CCM = 1, CUF = 2, Chadema = 3, Other = 4)	
2.15 Now, how old are your children? [Record the number of children between the ages of 7-14 years]	
2.16 Now, how many of your children are in primary school?	
2.17 In 2005, how old were your children? [Record the number of children between the ages of 7-14 years]	
2.18 In 2005, how many of your children were in primary school?	
2.19 How many people do you provide for? (This would include anyone that lives in the household the majority of the year such as servants, labourers, etc.)	NOW (a)
	In 2005 (b)

3. House/ Residence

	Now (a)	In 2005 (b)
3.1 Do you have a house? Code 1		
3.2 Have you managed to make improvements to your house? Code 1		
3.3 What is the floor of your house made of? (dirt, sand, dung = 0, tile or cement = 1)		
3.4 Do you have (mains) electricity? Code 1		
3.5 Do you have solar electricity? Code 1		
3.6 What kind of toilet do you have? (0 = any toilet that is shared by more than one household and/ or with a shallow pit, 1 = an unshared, deep pit latrine, 2 = an unshared, porcelain 'water' toilet)		
3.7 Where do you collect you drinking water? How far is the source from your house (minutes roundtrip)? (more than or equal to 30 minutes = 0, less than 30 minutes AND from a piped, public tap, borehole, pump, protected well, spring or rainwater (ie NOT from a river) = 1)		
3.8 What do you primarily use for cooking fuel? (dung, wood or charcoal = 0, cooking gas = 1)		

Code 1: yes = 1, no = 0, 777 = refuses to answer, 888 = does not apply, 999 = does not know

4. Ardhi (Land)

4.1 Does your household (customarily) **own** any land? ['Customarily' would include any land that a household has cleared themselves, has been passed down to them by their parents, or otherwise purchased. The land is still, however, properly owned by the government of TZ]

(a) Now	(b) In 2005
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Code: yes = 1, no = 0, 777 = refuses to answer, 888 = does not apply, 999 = does not know

4.2 How much land does your household (customarily) **own** now?

ha, acres, m2, ft2 (Circle appropriate)

4.3 Does your household **rent** any land now or any time since 2005?

Yes	No
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4.4 How much land does your household **rent**?

ha, acres, m2, ft2 (Circle appropriate)

4.5 Has the amount of land that you own and/ or rent changed since 2005, if yes please explain why, e.g. inheritance of land from deceased family member, increase of income enabled the purchase of more land, poor income required sale of some land, difficulty in expanding due to (forest) land management, etc.

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4.6a Does the harvest from the land that you own and/ or rent provide enough income to enable you to feed your household on a yearly basis?

(yes = 1, no = 0)

(a) Now	(b) In 2005

4.6b If the harvest from the land that you own and/ or rent is not sufficient to feed your family on a yearly basis, explain why?

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4.7 If 'no', how many months of the year can your harvest feed your household? (0-12 months/ If two values are provided by the respondent record the lower of the two.)

(a) Now	(b) In 2005

4.8 Is the land that you own and rent sufficient to feed your household **and** earn some extra income on a yearly basis? (yes = 1, no = 0)

(a) Now	(b) In 2005
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I am going to read out a list of items. For each once, tell me if you use this item or anyone in your household does now or in 2005.

Use the following in your fields:	Now (a)	2005 (b)
4.9 animal manure		
4.10 Chemical fertilizers		
4.11 Pesticides (purchased)		
4.12 Improved seeds		
4.13 Kibarua Labourers/ Hired help		
4.14 Irrigation		

Code: yes = 1, no = 0, 777 = refuses to answer, 888 = does not apply, 999 = does not know

4.15 How do you see your ability to provide food for yourself and your household NOW as compared to 2005?

Code: much worse now = 1, worse now = 2, no change = 3, better now = 4, much better now = 5	
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4.16 If there has been a change in your ability to provide food for yourself and your household, please describe WHY? What has made it more or less difficult, eg new constraints on land, the size of my family has grown, more people have moved here, etc. Can you define what has been the MAIN cause of this change?

4.17 Do you experience crop raiding?

Now (a)	In 2005 (b)
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Code: yes = 1, no = 0, 777 = refuses to answer, 888 = does not apply, 999 = does not know

4.18 How do you see the level of crop raiding you experience NOW as compared to 2005?

Code: much worse now = 1, worse now = 2, no change = 3, better now = 4, much better now = 5	
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4.19 What is the main cause of this change in crop raiding?

5. Livestock

5.1 Do you keep any livestock NOW? (yes = 1, no = 0)

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How has the number of animals you own changed from 2005 to now?
(many less = 1, less = 2, no change = 3, more = 4, or many more = 5)

5.2 Cows (includes males and females)	
5.3 Oxen (working animals)	
5.4 Chickens/ Other birds	
5.5 Goats/ Sheep	
5.6 Pigs	
5.7 Donkeys	

5.8 If the number of your animals has changed, what is the main cause of this?

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6. Income/ Livelihoods/ Assets

Where does most of your household's income come from? Or, worded differently, what does your family do to sustain itself? [Rank in order of importance with '1' being the most important] Describe the proportion of income coming from the top 5 sources - ***NOTE: I would expect most people to describe agricultural production as their main source of income***

Code: agriculture = 1, livestock = 2, small business = 3, remittance from family or other person = 4, sale of items collected from the forest = 5, household consumption of items collected from the forest = 6, casual labourer = 7, or regular waged job = 8 (ie in a shop or office).

6.1a in 2015 Rank 1 _____

6.2a in 2015 Rank 2 _____

6.3a in 2015 Rank 3 _____

6.4a in 2015 Rank 4 _____

6.5a in 2015 Rank 5 _____

6.1b in 2005 Rank 1 _____

6.2b in 2005 Rank 2 _____

6.3b in 2005 Rank 3 _____

6.4b in 2005 Rank 4 _____

6.5b in 2005 Rank 5 _____

I am going to read a list of items. Please tell me if you or anyone in your household has the following:

	Now (a)	In 2005 (b)
6.6 Mobile phone		
6.7 Radio		
6.8 Television		
6.9 Motorbike		
6.10 Tractor or powertiller		
6.11 Metal roof		
6.12 Bicycle		
6.31 Solar light		

Code: yes = 1, no = 0, 777 = refuses to answer, 888 = does not apply, 999 = does not know

7. Forest

I am going to read a list of products from the forest. For each one, tell me if you or any one in your household collects this product now or in 2005.

	Now (a)	In 2005 (b)
7.1 Medicinal plants		
7.2 Wild honey		
7.3 Firewood		
7.4 Charcoal production		
7.5 Wood for construction – eg poles		
7.6 Thatch – grass for roofing, etc.		
7.7 Forest fruit or other edible plant foods including mushrooms		
7.8 Fish		
7.9 Wild meat		

Code: yes = 1, no = 0, 777 = refuses to answer, 888 = does not apply, 999 = does not know

7.10 If there have been any changes in your household's collection of the forest products above since 2005, please describe the MAIN reason WHY you think there is this change?

How do you see your **access** (not availability) to the following resources for you and your household NOW as compared to 2005?

[NOTE: I am interested in '**access**' here, being able to go to a location and collect it, but NOT interested in whether the resource is more or less available.]

	Access NOW compared to 2005
7.11 Land for settlement	
7.12 Land for cultivation	
7.13 Land for grazing livestock	
7.14 Firewood	
7.15 Construction materials	
7.16 Water	

Code: much worse now = 1, worse now = 2, no change =3, better now, 4 = much better now =5

7.17 If there has been a change in access since 2005, please describe the MAIN reason WHY you think this change has occurred? [Be sure to indicate in your recorded response what the respondent is referring to, eg land for settlement has gotten worse due to . . .]

It is important to conserve the forest because. . .

	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.18 it is a source of things that are important and useful to our daily lives like water, food and medicinal plants	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.19 it is a place where we conduct certain rituals that are important for our culture/ people	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.20 it is a legacy for our children/ grandchildren	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.21 the government tells us to serikali imetuambia	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.22 it is God's will ni mambo ya Mungu	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.23 the forest is our mother msitu ni mama yetu	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
	Strongly agree	Agree	In the middle	Disagree	Strongly disagree

Do you agree with the following?

7.24 It is good to use natural resources from the forest to try to become richer. Ni vizuri kutumia mali asili kujipatia utajiri (oa faidha ?)	Strongly agree	Agree	In the middle	Disagree	Strongly disagree
7.25 The needs of the community should come before the needs of individuals Maslahi ya jamii kwanza alafu ndio maslahi binafsi	Strongly agree	Agree	In the middle	Disagree	Strongly disagree

7.26 Is anyone in your household currently (in 2015) on the Village Council, VNRC or some other committee that is part of the VC?

(yes = 1, no = 0)

7.27 If yes, how many years has s/he been on the Village Council? (If less than a year, write '0')

7.28 Do you attend Village Assembly meetings regularly?

(a) Now	(b) In 2005
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(yes = 1, no = 0)

7.29 Why do you attend these meetings

CBFM Villages only

7.30 Do you know anything about the VLFR? (NOTE: I want to ensure that the person is aware that there is an established VLFR and that any income generated from the VLFR should, technically, be put towards community development activities)

Yes = 1, No = 0

7.31 Do you know what part of the forest is included in the CBFM? (NOTE: In areas with CBFM and JFM be sure the respondent is able to distinguish. If not, put does not know, '999').

Yes = 1, No = 0

7.32 Do you feel sufficiently informed about the management of the CBFM?

Yes = 1, No = 0

7.33 Did you agree to the formation of the CBFM?

Yes = 1, No = 0

7.34 Are you in favour of the presence of a CBFM in your village today?

Yes = 1, No = 0

7.35 If your support of the CBFM has changed since its formation to today, please describe why.

7.36 Do you or anyone in your household receive employment or other financial benefit from the CBFM?

Yes = 1, No = 0

7.37 Do you know who the CBFM village representatives are?

Yes = 1, No = 0

7.38 Do you feel you are able to exert influence on the CBFM management through your village representatives?

Yes = 1, No = 0

8. Health

[NOTE: This section should be prefaced with an acknowledgement that the questions are sensitive but important and helpful in bringing awareness to the authorities of the level of health care in the community. Also reiterate that it is the respondent's choice whether or not to answer the questions.]

8.1 Do you have health insurance? (yes =1, no = 0)

Now

8.2 Is there an operational dispensary in your village? (I define a 'dispensary' where there is a nurse or doctor on a regular basis, eg weekly, monthly, etc.)

(a) Now	(b) In 2005
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(yes = 1, no = 0)

8.3 How accessible is the nearest hospital NOW as compared to 2005? How easy is it to get to?

Code: much more accessible =1, more accessible =2, no change = 3, more difficult to reach =4, much more difficult to reach =5	
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8.4 Has anyone in your household ever lost a child (death)? [A child refers to someone up to the age of 18]

(yes =1, no = 0)

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8.5 Would you like to tell us what happened?

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9. Self-esteem/ Hope/ Agency

Snyder Hope Scale

Score each statement as follows:

1 = Definitely false, 2 = mostly false, 3 = mostly true, or 4 = definitely true

9.1 Are you someone that thinks there are many ways to get out of a jam? Mimi ninaweza kufikiria juu ya njia mbalimbali za kujikwamua kutoka katika hali ngumu iwapo maisha yatabadilika bila kutegemea.	
9.2 Do you energetically pursue your goals? Ninafuatilia malengo yangu kwa bidii.	
9.3 Do you feel tired most of the time? Muda mwingi ninajisikia mchovu.	
9.4 Do you think that there are lots of ways around any problem? Kuna njia nyingi sana za kutatua tatizo lolote.	
9.5 Are you easily downed in an argument? Mimi huwa ninashindwa kirahisi katika kutoa hoja.	
9.6 Do you think there many ways to get things in life that are important to you? Mimi ninaweza kufikiria njia nyingi sana za kuweza kupata vitu ninavyovihitaji katika maisha ambavyo ni vya muhimu kwangu.	
9.7 Do you worry about your health? Mimi huwa ninakuwa na wasiwasi juu ya afya yangu.	
9.8 Even when others get discouraged, do you know you can find a way to solve the problem? Hata pale wengine wanapokata tamaa, mimi ninajua ninaweza kupata njia ya kutatua tatizo.	
9.9 Have your past experiences prepared you well for your future? Maisha niliyoishi zamani yameniandaa mimi vizuri kwa ajili ya maisha ya baadaye.	
9.10 Have you been pretty successful in life? Mimi nimekuwa mtu mwenye mafanikio sana katika maisha.	
9.11 Do you usually find yourself worrying about something? Mara kwa mara mimihuwa ninajikuta ninahofia kitu Fulani.	
9.12 Do you meet goals that you set for yourself? Mimi huwa ninafikia malengi niliyojiwekea mimi mwenyewe.	

(Snyder et al., 1991, p. 585 – see also Barnett et al 2015 Global Public Health paper)

Swahili translation provided by colleague of Janet Seeley's, Shelley Lees and Kija Nyatali (March 2014)

Do you feel that your voice is heard/respected in decisions made in your **household** about
(Circle one for each statement)

9.13 Education for my children	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
9.14 Livestock	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
9.15 Money	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply

Do you feel that your voice is heard/respected in decisions made in your **village** about
(Circle one for each category)

9.16 Land	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
9.17 Village funds	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply

Circle one for each statement.

9.18 I have authority to make decisions which impact on my life.	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
9.19 I feel safe and secure In my home.	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
9.20 I feel safe and secure in my village.	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
9.21 I feel safe and secure in the forest in and around my village.	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply

9.22 My voice is equal to that of my spouse	Strongly agree	Agree	In the middle	Disagree	Strongly disagree	Does not apply
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9.23 If you disagree with 9.22 (only), please explain WHY?

9.24 Did you know about this research project before this interview?	
9.25 If yes, how did you hear about it? [Code 2]	
9.26 [PV villages only – Mchakama, Kilambo, Kinyawnganga] Were you aware of the participatory video?	
9.27 If yes, have you watched the participatory video?	

Code 1: yes = 1, no = 0

Code 2: Village assembly meeting = 1, word-of-mouth = 2, participatory video = 3, interviewed earlier = 4, Other = 5

10. Enumerator assessment of the interviewee

How reliable is the information **generally** provided by the interviewee?

Code: poor = 1, reasonably reliable =2, very reliable =3	
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List the numbers of any sections and/ or questions where you think the respondent's answers are less reliable.

Section	Question number(s)
2	
3	
4	
5	
6	
7	
8	
9	

Enumerator comments (eg problems with specific questions or sections, other notable issues that arose during the interview that may be relevant to data quality)

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Time at end of interview	
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