nature climate change



Supplementary information

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Perceived climate change impacts and adaptation responses in ten African mountain regions

In the format provided by the authors and unedited

Supplementary material A. Semi-structured questionnaires.

Note that focus-group discussions were used to create the list of wealth items (question 8, see supplementary material B) and amend questions 10-13 to those relevant to each study area.

- 1. Village name
- 2. Household number
- 3. Household composition (adults M and F)
- 4. Owner of house (Y/N)
- 5. Owner of farm (Y/N)
- 6. Farm size (ha)
- 7. List all the livestock your household has
- 8. Does your household have any of these items?
- 9. Did you complete primary school? (Y/N)
- 10. Compared to when you were a teenager and started farming, which of the following climatic changes have you noticed in your village? Increased temperatures (dry season)/ Reduced rainfall (long rains)/Late start long rains/ More dry spells (long rains)/ More showers (dry season)/ More extreme floods/ More extreme droughts/ Fewer foggy days (rainy season)/ Less frost/ Increased wind strength (rainy season)/ Fewer hailstorms
- 11. Compared to when you were a teenager and started farming, which of the following impacts changes have you noticed in your village? Reduced stream flow (rainy season)/ More landslides (rainy season)/ More soil erosion (rainy season)/ Lower yields (main staple)/ Lower yields (coffee)/ Increased pests/diseases (main staple) / Increased pests/diseases (coffee) / Cows produce less milk / Livestock have more diseases / People are less healthy
- 12. Which of the following on-farm adaptation strategies have you used? Change to improved variety (main crop)/ Changed planting date / Sow seeds twice (if they die) / Increased use soil conservation (ditch, terrace, mulching)/ Increased use fertiliser / Increased use pesticide / Changed farm location (near stream) / Increased irrigation / Increased farm size / Change to improved variety (coffee) / Increase shade (coffee) / Increase inputs (coffee)/ Change to new crop
- 13. Which of the following other adaptation strategies have you used? Increased use veterinary care / Increased use feed (cows) / Diversify: labour / Diversify: started rearing animals / Diversify: vegetable/fruit production / Diversify: sell firewood / Diversify: business / Diversify: timber / Diversify: mining.
- 14. How you determine when to sow your seeds? You might gather information from... Tv or radio / extension services / elders or traditional authorities / your own personal experience / other (explain)
- 15. Have you heard the concept 'Climate Change'? If yes, can you explain what it means and who explained it to you?

Supplementary material B. Wealth items

Note that focus-group discussions were used to create a list of 10 wealth items relevant to each study area. BAM: Bamboutos Mountains (Cameroon), ITO: Itombwe Mountains (DRC), KIG: Kigezi Highlands (Uganda), NYU: Nyungwe (Rwanda), KIB: Kibira (Burundi), BAL: Bale Mountains (Ethiopia), KEN: Mount Kenya (Kenya), ABE: Aberdare Range (Kenya), KIL: Mount Kilimanjaro (Tanzania), UDZ: Udzungwa Mountains (Tanzania).

	KIB	NYU	BAL	BAM	KIG	KEN	ABE	ITO	KIL	UDZ
motorbike	x	x	х	x	х	Х	х		х	x
high-quality house	х	x	х	x	х	x		х	х	x
land (given number hectares)	x	x	х	x	х	x	х		x	
TV		x	х	x	х	x	х		х	x
cows (given number)	х	x	х			x	х	х	х	
radio	х	x	х		х			х	х	x
car		x		x	х	x	х		х	x
shop	x	x			х					x
solar panel	x				х	x		х		
pigs (given number)	x			x	х			х		
android phone		x		x		х	х		x	
homeowner	x			x						x
mobile phone			Х					х		
Eucalyptus plantation	x				х					
children (given number)			х						х	
grinder				x						x
bank account				x				х		
pesticide spraying pump						x	Х			
plastic chairs						x	Х			
tractor									x	x
irrigation			Х							x
extra house to rent		х								
donkey (given number)			Х							
fridge							Х			
gas cooker							Х			
children going to school								х		
torch								х		
goat (given number)								Х		