

Supplementary Materials- Semi-structured questionnaire

Note that the questionnaire was modified in each country according to responses in the focus group discussions.

Part 1. General information

Village name

Household composition (adults M and F)

Farm size (ha)

Farming as main livelihood (Yes/No)

List animals your household has

Does your household have any of these items?

In Burundi: motorbike, >3 ha of land, high-quality house (concrete floor), shop, >1ha Eucalyptus plantation, solar panel, at least 1 cow, at least 1 pig, radio and homeowner. In Rwanda: android phone, car, motorbike, shop, extra house to rent, > 1ha land, >5 cows, Tv, radio, 'nice floor' (cement, tiles, or local plaster) and homeowner.

Did you complete primary school?

Part 2. Climate changes

Which of the following climatic changes have you observed?

Increased temperatures (dry season)

Increased temperatures (rainy season)

Reduced rainfall (long rains)

Late onset long rains

More dry spells (long rains)

More showers (dry season)

More extreme floods

More extreme droughts

Fewer foggy days

Less frost

Increased wind (rainy season)

Fewer hailstorms

Part 3. Impacts of climate changes

Which of the following impacts have you observed?

Reduced stream flow (rainy season)

More landslides (rainy season)

Increased erosion (rainy season)

Lower yields (maize)

Lower yields (beans)

Lower yields (tea)

Lower yields (Irish potatoes)

Increased pests/diseases (maize)

Increased pests/diseases (beans)

Increased pests/diseases (tea)

Increased pests/diseases (Irish potatoes)

Cows produce less milk

Cows have more diseases

Goats/sheep have more diseases

People are less healthy

Part 4. Adaptation

Which of the following adaptation strategies have you used?

Change to new crop*

Change to improved variety (maize)

Change to improved variety (beans)

Change to improved variety (Irish potatoes)

Increased irrigation
Changed farm location (near stream)
Sow seeds earlier
Sow seeds twice (if they die)
Increased use fertiliser
Increased use pesticide
Increased use soil conservation (ditch)
Increased use soil conservation (terrace)
Increased use soil conservation (perennial grass)
Increased use soil conservation (soil cover crop)
Increased use soil conservation (mulching)
Increased use veterinary care (cows)
Increased use feed (cows)
Increased use veterinary care (goat/sheep)
Diversify: sell firewood
Diversify: labour
Diversify: started rearing animals
Diversify: vegetable production
Diversify: fruit production

Part 5

How would you describe your household food security during the previous year? Good/Bad
How would you describe your household food quality (access to your preferred foods) during the previous year? Good/Bad
How would you describe your household access to clean water during the previous year? Good/Bad