

## Questionnaire for survey

1. **Village:**

Date:

2. **Name of farmer:**

Woman	Man
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3. **Age:**

4. Educational background:

primary	secondary	tertiary	
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5. Have you been trained by SCC-Vi Agroforestry staff on agroforestry practices?

Yes	no	Once
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6. Farm size:

none			acres	lease
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7. Farm location in the landscape:

On a hill	On a slope	In valley/flat land	
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8. No of people depending on production from your farm:

Above 18:	17 and below:
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9. Main part of income from:

On farm	Equal	Off farm
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10. Off-farm income personal:

Off-farm income hh:

11. Member in a group?

Type:

Yes-1	Yes-	No
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12. Name the animals, crops and trees you have on the farm and what is for consumption and for selling:

Kind of animals	Consume	Sell	Kind of crops	Consume	Sell	Kind of trees	Consume	Sell
Cow/calf			Maize, millet, sorghum, rice			For firewood		
Goat			Beans/Peas			For timber		
Sheep			Vegetables			For fodder		
Donkey			Sw.pot./cassava, yams			For fruits		
Chicken, ducks, turkey			Pineapple, pumpkin, watermelon, butternut			For fertility		
Bee			Sugarcane, tea, coffee			Tree seedlings		
Fish			Banana					
Pig								

13. Which rain-related challenges have you experienced in your production during the last 3 years?

Too little rain/drought	Too much rain/flood	Unreliable rain	Hailstones	Too windy	Other
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14. Which combination of seasonal, annual or perennial crops makes you less vulnerable to rainfall challenges?

Seasonal (maize, sorghum, millet)	Annual (sw.pot., cassava, yams)	Perennial (coffee, banana, tea, sugarcane)	Mix of 2 or 3	Doesn't matter
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15. Which combination (of crops, trees and animals) makes you less vulnerable to rainfall challenges?

Crops	Trees	Animals	Mix of two:	Mix of three	Doesn't matter
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16. How do trees affect you in relation to rainfall challenges?

Neutral	Little positive	Much positive	Little negative	Much negative
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17. How do animals affect you in relation to rainfall challenges?

Neutral	Little positive	Much positive	Little negative	Much negative
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18. Does it matter which crop varieties/tree species/animal breeds you have to be less vulnerable to rainfall challenges?

Yes a little	Yes a lot	No, not much	Not at all	Don't know
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19. Prioritise which on-farm resources are most important in order to make you less vulnerable to rainfall challenges? (choose from: tools, knowledge, water, soil, seeds, farm plan, labour)

1:	2:	3:	4:	5:	6:	7:
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20. How does group membership affect you concerning vulnerability to rainfall challenges?

Neutral	Little positive	Much positive	Little negative	Much negative
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21. Have you in your household used any of the following strategies <b>during the last 3 years?</b>				
Strategy	Aware?	Use?	Score	Comment
Early ploughing				
Early planting				
Plough / plant along contours				
Plant without ploughing				
Dry planting (plant before rain)				
Plant higher/sloping/swampy area				
Raised beds / double digging				
Dig terraces / ditches				
Dig cut-off drain/drain ditches				
Soil ridges (heap soil on flat land)				
Soil in sacks (ridges)				
Grass strips / stone lines				
Mulching				
Manure application				
Compost application				
Tree nursery instead of direct sowing				
Trees for erosion control				
Trees to improve soil fertility/AF				
Trees as windbreak				
Trees for rain/micro-climate				
Trees to absorb water				
Build raised animal sheds				
Fence the farm				
Plant fodder / zerograzing				
Dry/store fodder				
Focus on animals				
Take animals to greener pasture				
Rotational grazing				
Fishpond				
Beekeeping				
Reduce no of animals and upgrade				
Water-tolerant crops (rice, banana, yams, veg., sw. pot., cassava)				
Drought resistant crops (cassava, sw. pot., sorghum, millet, cow/pigeon pea)				
Plant under-ground crops (cassava, yams, sw. pot., gr.nuts)				
Plant traditional crops (watermelon, butternut, pumpkin, millet, cow pea)				
Plant perennial crops (sugarcane, banana, coffee, tea, macadamia)				
New/short term crop varieties				
Crops in nursery				
Bananas inside ditches				

Strategy	Aware?	Use?	Score	Comment
Plant cover crops (sw. pot., desmod.)				
Relay cropping (“overlapping”)				
Mushroom production				
Greenhouse				
Reuse of water (from hh to farm)				
Kitchen garden				
Sacks with vegetables				
Off-season tomato production				
Irrigation (pump, gravity, drip, hand)				
Roof catchment				
Water pan				
Dig a well				
Water harvesting/micro-catchments				
Timely watering (morning & evening)				
Energy-saving stove (raised)				
Preserve/store food				
Group assistance ( <i>save/loan, market, knowledge, expose, labour, encourage</i> )				
Sell tree products (seedlings, timber, firewood, charcoal, fruit, fodder, med.)				Planned or forced?
Off-farm income (basket, rope, pots, brick making)				
Off-farm income (shop, fundi, salon, bodaboda, shoeshining)				
Fishing in lake/river				
Lease better land				
Construct dikes				
Sand harvest and sell				
Sell fish from flooded area				
Sell water				
Visit Agroforestry Training Centre				
<b>22. Have you in your household been forced to use any of the following strategies during the last 3 years?</b>				
Strategy	Aware?	Use?	Score	Comment
Early harvesting				
Sell animal				Planned or forced?
Sell labour/househelp				
Sell land				
Sell harvest at throw away price				
Stone mining				
Chemical on leaves to reduce moist				
Trading (buying and selling goods)				
Less meals/day, changed eating habits				
Relief food				
Migration				
Help from relatives				

23. Are there any other adaptation or coping strategies that you are aware of and are using or not using?							
1:		2:			3:		
24. What limits you (a need) in order to be able to use these strategies?							
labour	money	knowledge	land	tools/material	seeds	water	farm plan
25. How have you come to learn the different adaptation/coping strategies that we have talked about?							
Neighbour	Trained by govnt	NGO:	Saw parents do	Common sense	Other:		
26. Name the three most important characteristics that make you and your farm more or less vulnerable to rainfall challenges compared to your neighbours?							
More	Less	Equal	1:	2:	3:		
27. If you knew that there would be a more severe rainfall challenge during the next planting season, which of the above mentioned adaptation strategies would you try to use?							
1:		2:			3:		

0=this strategy has **no positive effect** to adapt to/cope with the rainfall challenge;

1=this strategy has a **small positive effect** but is **never enough** to cope with the rainfall challenge alone;

2=this strategy has a **visible positive effect** but is **rarely enough** to cope with the rainfall challenge alone;

3=this strategy has a **visible positive effect** that **sometimes is enough** to cope with the rainfall challenge alone;

4=this strategy has a **strong positive effect** and can **often be enough** to cope with the rainfall challenge alone;

5=this strategy is **enough** to adapt to/cope with the rainfall challenge alone.