

Supplementary material 1: Donkey owner questionnaire

Study: An evidence based approach for evaluating the socio-economic impact of working donkeys in developing countries

Questionnaire for Non-workshop Participant Donkey Owners

Identification of Location

Participant Number:

Name of Kebele:

Date:

Name of Interviewer:

Participant Details

1. Age (check inside the box)

18-25	26-30	31-40	41-50	51-60	61-70	71+
-------	-------	-------	-------	-------	-------	-----

2. Male or Female (circle)

3. Married (1), polygamous marriage (2), widowed (3), unmarried (4) (circle)

4. Who do you live with?(write)

5. How many dependents do you have? (check and write number inside the box)

Chronically ill	Infants	Disabled	Elderly	School children	None
-----------------	---------	----------	---------	-----------------	------

6. Who is the head of your household? (check in box)

You	Husband/Wife	Your parents	Someone else
-----	--------------	--------------	--------------

7. Do you own your own house? (circle) Yes/No

8. How many animals do you own of each category?

Species	Number owned
Cows	
Goats	
Dairy Cows	
Sheep	
Pigs	

Chickens	
Donkeys	
Mules	
Horses	
Other (please specify)	

Household Livelihood Activities

9. Between now and the last 12 months, what types of work or activities have you engaged in to earn an income? (answer yes or no in each column)

Activity/Income Source Engaged in Work Type Done with the Assistance of Donkey(s)

Agriculture	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
1.Crop production for sale			
2.Livestock Rearing and selling			

Wage Employment

Employment	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
3.Formal/salaried			
4.Local agricultural labour within the wereda			
5.Migration for agricultural labour outside the wereda			
6.Army service			
7.Domestic service			
8.Construction work			

Trade (buying and selling)	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
9.Grains			
10.Livestock			
11.Dung			
12.Donkey trader			
13. Mule/horse trader			
14. Other trade			

Entrepreneurial Activity

Sale of Natural Products	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
15.Honey sales			
16.Egg sales			
17.Wood for building			
18.Charcoal/Firewood			
19.Sand or stones			
20.Grass or fodder			
21. Assisting someone in the sale of any of the above products.			

Self-employed, entrepreneurial

Self-employed business	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
22.Food preparation and sales			
23.Coffee preparation and sales			
24.Tea preparation and sales			
25.Construction material transport			
26. Rubbish Collector			

Crafts/small industry	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
27.Basket-making			
28.Spining or weaving cloth (cotton or wool)			
29.Embroidery or making clothes			
30.Carpentry/house- building			
31.Pottery			
32.Blacksmithing or metal work			

Services	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
33.Water-carrying			

34.Hair-dressing			
35.Music/entertainment			
36.Traditional healer			
37.Traditional birth attendant			
38.Fruit and vegetable stand seller			

Rents	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
39.Renting out land			
40.Renting out pack animals (donkeys and mules)			
41.Renting out oxen			
42.Money-lending			
43. Renting house			
44. Renting shed			

Other (Write down name and description of activity)	Yes/No	Yes/No with Donkeys (Add description of use)	How much earned in Birr per week?
45.			

10. What non-income generating tasks do you do with your donkey(s)? Please list.

- 1.
- 2.
- 3.
- 4.

11. For all of the income generating tasks you do what is the task you spend the most time doing? (Write the task) _____

12. Does the income you earn with your donkeys help you save money? (circle)

Yes/No

13. Are you a member of Idir in your community? (circle)

Yes/No

14. Are you a member of Iquib in your community? (circle)

Yes/No

15. Are you a member of any other credit or savings program (for example any micro finance organization)? If yes, what is the name? (circle and write)

Yes: _____

No. If no, do you save/put away money personally (i.e. not within any organizational structures)? (circle) Yes/No

16. How many adults do you live with that are currently working? (write number) _____

17. Who usually decides how the money you earn will be used? (check inside box)

You	Your wife/husband	Parents	You and your partner jointly	Someone else
-----	-------------------	---------	------------------------------	--------------

18. Who usually makes decisions about major household purchases? (check inside box)

You	Your wife/husband	Parents	You and your partner jointly	Someone else
-----	-------------------	---------	------------------------------	--------------

Expenditure spent on donkeys and livestock

19. What season do you spend the most money on your livestock [except for donkeys]? [write in appropriate name for seasons after asking the participant for this question and the next one] (check answer inside the box next to the season the participant has indicated)

--	--	--	--

20. What season do you spend the most money on your donkey(s)? (check inside box)

--	--	--	--

21. Per year, what is the highest cost of owning donkey(s)? (check inside box)

Purchasing donkey(s)	Feed costs	Health care costs	Equipment costs	Donkey shelter costs	Other
----------------------	------------	-------------------	-----------------	----------------------	-------

Donkey Ownership

22. Who is the primary care taker of your donkey(s)? (check inside box)

You	Your wife/husband	Your children	Someone else
-----	-------------------	---------------	--------------

23. Who is the main user of your donkey? (check inside box)

You	Your wife/husband	Your children	Someone else
-----	-------------------	---------------	--------------

24. What season do you use your donkey the most? (write in and check inside box)

--	--	--	--

25. What is the current weight of your donkey(s)?(circle the accurate description for each donkey they own)

Donkey 1: Overweight (2); moderately over-weight (1.5); ideal weight (1); thin (0.5); severely thin (0)

Donkey 2: Overweight (2); moderately over-weight (1.5); ideal weight (1); thin (0.5); severely thin (0)

Donkey 3: Overweight (2); moderately over-weight (1.5); ideal weight (1); thin (0.5); severely thin (0)

26. What is the overall health status of your donkey(s)? (circle)

Donkey 1: Very healthy (2), moderately healthy (1.5), unhealthy (1), severely unhealthy (0.5)

Donkey 2: Very healthy (2), moderately healthy (1.5), unhealthy (1), severely unhealthy (0.5)

Donkey 3: Very healthy (2), moderately healthy (1.5), unhealthy (1), severely unhealthy (0.5)

27. In your community, what animal gives the most social value to the owner? (check inside box)

Cow	Sheep	Goat	Chicken	Horse	Mule	Donkey
-----	-------	------	---------	-------	------	--------

b. What animal brings the least social value? (check inside box)

Cow	Sheep	Goat	Chicken	Horse	Mule	Donkey
-----	-------	------	---------	-------	------	--------

28. In your community, do men or women use donkeys the most? (check inside box)

Men	Women	Equal Split
-----	-------	-------------

29. In your community, do people prefer to own male or female donkeys? (check inside box)

Male	Female	No preference
------	--------	---------------

30. In your opinion, is a donkey owner justified in hitting a donkey in the following situations:

- If the donkey will not stand for loading? (circle) Yes/No
- If the donkey kicks out? (circle) Yes/No
- If the donkey refuses to move fast? (circle) Yes/No
- If the donkey runs away from being caught for work? (circle) Yes/No
- If the donkey will not get up from resting? (circle) Yes/No

Questionnaire Administrator's Observations

Comments about respondent:

Comments on specific questions:

Any other comments:

Administrator's general observations:

Supplementary material 2: Donkey welfare assessment recording sheet

Donkey Welfare Assessment Recording Sheet

	Indicators	Donkey Number 1	Donkey Number 2	Donkey Number 3	Donkey Number 4	Donkey Number 5
1	Date					
2	Time					
3	Observer					
4	Region identification					
5	Environmental temperature (0-hot/1-mild/2-wet/3-cold)					
6	Observe before approaching donkey Donkey role (0-resting/1-tethered/2-cart/3-pack/4-pack saddle/5-riding)					
7	Observe before approaching donkey Sex (0-stallion/1-gelding/2-mare)					
8	Observe before approaching donkey Demeanour (0-alert/1- apathetic/2-severly depressed)					
9	Observe before approaching donkey Owner interaction when holding the donkey (0-stroking/1-light touch/2-resting against/3-slapping/4-hitting)					
10	Response to observer approach(0-Moves away/1-Turns head away/2-Does not move/3-Turns head towards observer/4-Aggressive)					
11	Walk down side (no interest/1-follows with one					

	ear/2-turns head or body to look at observer/3-attempts to move away from observer)					
12	Tail tuck (0-tuck/1-no tuck)					
13	Signs of faecal soiling on hind legs (0-present/1-absent)					
14	Chin Contact (0-accepts/1-avoids)					
15	Lesions at corners of lips (0-no lesion/1-any hair loss, skin thickening, or healed scars/2-small lesion, any break in skin smaller than a cotton bud/3-large lesion, larger than cotton bud)					
16	Age (0-<5 years/1-5-15/2-16+)					
17	Mucous membranes (0-normal/1-slight abnormality/2-moderate abnormality/3-severe abnormality)					
16	Eyes (0-normal/1-small amounts of discharge/2-mild to moderate abnormality/3-severe abnormality)					
17	Body Condition Score (1/2/3/4/5 and half scores)					
18	Signs of heat stress (0-no signs/1-mild to moderate/2-severe, extreme head nodding and nostril flaring)					
19	Signs of limb tethering/hobbling (0-no lesion/1-superficial or healed/2-skin and immediate subcutaneous					

	layers broken/3-deep lesion)					
20	Signs of firing (0-no lesion/1-superficial or healed/2-skin and immediate subcutaneous layers broken/3-deep lesion) Check for nostril slitting.					
21	Lesions of skin and/or deeper tissues (0-no lesion/1-superficial or healed/2-skin and immediate subcutaneous layers broken/3-deep lesion)					
22 a	Head					
22 b	Ears					
22 c	Neck					
22 d	Breast and shoulders (both sides)					
22 e	Withers and spine					
22 f	Girth and belly (look at both sides)					
22 g	Ribs and flank (look at both sides)					
22 h	Hindquarters (look at both sides)					
22 i	Tail and tail base					
22 j	Fore legs (other than front of knee)					
22 k	Hind legs (other than point of hock)					
23	Ectoparasites (0-none/1-mild/2-moderate/3-severe)					

24	Knee lesions (no lesion/1-superficial/2-skin and immediate subcutaneous layers broken/3-deep lesion)					
25	Point of hock lesions (no lesion/1-superficial/2-skin and immediate subcutaneous layers broken/3-deep lesion)					
26	Hoof Shape (0-normal hoof shape/1- mild deviation /2-moderate deviation /3-severe deviation) Pick up the right foot.					
27	Hoof horn quality (0-normal/1-mild/2-moderate/3-severe)					
28	Sole shape and Structure of foot (0-normal/1-mild/2-moderate/3-severe/4-closed shoe). Check if there is thrush.					
29	Gait [watch 6 paces] (0-normal paces/1-mild /2-moderate /3-severe)					
30	Other observations or limitations					

Table 3 The presence and severity of lesions observed on different anatomical locations of the assessed donkeys in rural and urban locations

	Rural (%)	Urban (%)	Significance*
Head			F=14.45, P=0.001
No lesion	88.2	64.7	
Superficial or healed	10.8	23.5	
Skin and immediate subcutaneous layers broken	1.1	10.3	
Deep lesion	0.0	1.5	
Corners of lips			NS
No lesion	93.5	100.0	
Hair loss, skin thickening or healed scars	6.5	0.0	
Small lesion (< a cotton bud)	0.0	0.0	
Large lesion (> a cotton bud)	0.0	0.0	
Ears			F=11.54, P=0.003
No lesion	60.2	41.2	
Superficial or healed	39.8	50.0	
Skin and immediate subcutaneous layers broken	0.0	7.4	
Deep lesion	0.0	1.5	
Neck			F=21.14, P≤0.001
No lesion	88.2	57.4	
Superficial or healed	11.8	35.3	
Skin and immediate subcutaneous layers broken	0.0	5.9	
Deep lesion	0.0	1.5	
Breast and shoulders			NS
No lesion	69.9	77.9	
Superficial or healed	30.1	20.6	
Skin and immediate subcutaneous layers broken	0.0	1.5	
Deep lesion	0.0	0.0	
Withers and spine			NS
No lesion	61.3	57.4	
Superficial or healed	31.2	32.4	
Skin and immediate subcutaneous layers broken	6.5	8.8	
Deep lesion	1.1	1.5	
Girth and belly			F=9.52, P=0.004
No lesion	48.4	67.6	
Superficial or healed	51.6	29.4	

Skin and immediate subcutaneous layers broken	0.0	2.9	
Deep lesion	0.0	0.0	
Ribs and flank			F=9.79, P=0.005
No lesion	84.9	64.7	
Superficial or healed	14.0	27.9	
Skin and immediate subcutaneous layers broken	1.1	7.4	
Deep lesion	0.0	0.0	
Hindquarters			F=15.07, P=0.001
No lesion	59.1	29.4	
Superficial or healed	32.3	54.4	
Skin and immediate subcutaneous layers broken	6.5	14.7	
Deep lesion	2.2	1.5	
Tail and tail base			F=61.21, P≤0.001
No lesion	32.3	83.8	
Superficial or healed	62.4	5.9	
Skin and immediate subcutaneous layers broken	5.4	7.4	
Deep lesion	0.0	2.9	
Forelegs (other than front of knee)			NS
No lesion	97.8	95.6	
Superficial or healed	2.2	4.4	
Skin and immediate subcutaneous layers broken	0.0	0.0	
Deep lesion	0.0	0.0	
Knee lesions			NS
No lesion	97.8	100.0	
Superficial	2.2	0.0	
Skin and immediate subcutaneous layers broken	0.0	0.0	
Deep lesion	0.0	0.0	
Hindlegs (other than point of hock)			F=15.88, P≤0.001
No lesion	89.2	64.7	
Superficial or healed	10.8	27.9	
Skin and immediate subcutaneous layers broken	0.0	7.4	
Deep lesion	0.0	0.0	
Point of hock lesions			NS
No lesion	89.2	92.6	
Superficial or healed	9.7	7.4	

Skin and immediate subcutaneous layers broken	1.1	0.0	
Deep lesion	0.0	0.0	
Mean total lesion score	16.6	18.0	NS

*NS = not significant