

Supplement 1a – Data collection sheets for the survey of animal welfare and work equipment indicators

Animal-cart ID

Animal-Cart Unit Record

Town: Bishoftu Shashamene Location: _____ Date: ___/___/___
 Selale

Animal Signalment

Species: Donkey Horse Mule Gender: Female Male Entire Male Castrated

Age: _____ years Height: _____ cm Breed: _____

Work

Work Type: _____% Taxi (people)	Work per week: _____ days	Average planned breaks during work: _____ breaks
_____ % Transport goods		
_____ % Transport water	Work per day: _____ hours	Average duration of each planned break: _____ minutes
_____ % Other: _____		

Welfare Parameter Scores

General Attitude: <input type="checkbox"/> Positive <input type="checkbox"/> Non-reactive <input type="checkbox"/> Negative	BCS: <input type="checkbox"/> 1 - Very thin <input type="checkbox"/> 2 - Thin <input type="checkbox"/> 3 - Ideal <input type="checkbox"/> 4 - Fat <input type="checkbox"/> 5 - Very fat	Gait: <input type="checkbox"/> Not lame <input type="checkbox"/> Moderately lame <input type="checkbox"/> Severely lame <input type="checkbox"/> Not weight-bearing <input type="checkbox"/> Not assessed																
Response to Spinal Contact: <input type="checkbox"/> No reaction <input type="checkbox"/> Weak reaction <input type="checkbox"/> Strong reaction	Limb Score: <table border="0" style="display: inline-table; margin-right: 20px;"> <tr><td>Front</td><td>Hind</td></tr> <tr><td><input type="checkbox"/> 0</td><td><input type="checkbox"/> 0 (normal)</td></tr> <tr><td><input type="checkbox"/> 1</td><td><input type="checkbox"/> 1 (1 abnormal)</td></tr> <tr><td><input type="checkbox"/> 2</td><td><input type="checkbox"/> 2 (both abnormal)</td></tr> </table>	Front	Hind	<input type="checkbox"/> 0	<input type="checkbox"/> 0 (normal)	<input type="checkbox"/> 1	<input type="checkbox"/> 1 (1 abnormal)	<input type="checkbox"/> 2	<input type="checkbox"/> 2 (both abnormal)	Hoof Score: <table border="0" style="display: inline-table;"> <tr><td>Front</td><td>Hind</td></tr> <tr><td><input type="checkbox"/> 0</td><td><input type="checkbox"/> 0 (normal)</td></tr> <tr><td><input type="checkbox"/> 1</td><td><input type="checkbox"/> 1 (1 abnormal)</td></tr> <tr><td><input type="checkbox"/> 2</td><td><input type="checkbox"/> 2 (both abnormal)</td></tr> </table>	Front	Hind	<input type="checkbox"/> 0	<input type="checkbox"/> 0 (normal)	<input type="checkbox"/> 1	<input type="checkbox"/> 1 (1 abnormal)	<input type="checkbox"/> 2	<input type="checkbox"/> 2 (both abnormal)
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<input type="checkbox"/> 1	<input type="checkbox"/> 1 (1 abnormal)																	
<input type="checkbox"/> 2	<input type="checkbox"/> 2 (both abnormal)																	
Shoes: <input type="checkbox"/> x 1 <input type="checkbox"/> No Shoes <input type="checkbox"/> x 2 <input type="checkbox"/> x 3 <input type="checkbox"/> x 4	Shoe Type: <input type="checkbox"/> Metal <input type="checkbox"/> Rubber <input type="checkbox"/> Other: _____	Harness Assessment: <input type="checkbox"/> BCS <input type="checkbox"/> Gait <input type="checkbox"/> Spinal Contact <input type="checkbox"/> Wounds																

Wounds Photos

Size: 1 = small; 2 = medium; 3 = large / Severity: 1 = superficial/healed; 2 = skin and subcutaneous; 3 = deeper structures

Harness-Related Wounds				Other Wounds			
	Number	Size (1-3)	Severity (1-3)		Number	Size (1-3)	Severity (1-3)
Bit				Encouragement			
Blinker				Hobble			
Chest-band				Traditional Practices			
Girth				Limbs			
Saddle				Other			
Tail							
Shafts							

Harness

Transmission

Breast collar <input type="checkbox"/> Photo	<input type="checkbox"/> Present	<input type="checkbox"/> Material	<input type="checkbox"/> Position	<input type="checkbox"/> Padding	<input type="checkbox"/> Material
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____	<input type="checkbox"/> Pectoral <input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Adjustable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Thickness <input type="checkbox"/> Adequate <input type="checkbox"/> Inadequate	<input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____
Width: _____ cm					

Breeching Photo

<input type="checkbox"/> Present	<input type="checkbox"/> Material
<input type="checkbox"/> No <input type="checkbox"/> Yes - True <input type="checkbox"/> Yes - False	<input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____
Assembly	
<input type="checkbox"/> Adequate <input type="checkbox"/> Inadequate	

Neck Strap <input type="checkbox"/> Photo	<input type="checkbox"/> Present	<input type="checkbox"/> Material	Traces <input type="checkbox"/> Photo	<input type="checkbox"/> Present	<input type="checkbox"/> Material
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____
Adjustable		Movement			
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Free <input type="checkbox"/> Not Free			

Steering

Bit Photo

<input type="checkbox"/> Bit	<input type="checkbox"/> Condition	<input type="checkbox"/> Size
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Good <input type="checkbox"/> Poor	<input type="checkbox"/> Fit <input type="checkbox"/> Not fit

Blinkers Photo

<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Dished <input type="checkbox"/> Flat	<input type="checkbox"/> Touching <input type="checkbox"/> Not Touching
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Swingle <input type="checkbox"/> Photo	<input type="checkbox"/> Present	<input type="checkbox"/> Traces attach	<input type="checkbox"/> Moves	Is the breast collar positioned through the point of draught?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Reins Photo

<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Move Freely <input type="checkbox"/> Don't move freely
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Weight Distribution

Saddle

<input type="checkbox"/> Present	<input type="checkbox"/> Material	<input type="checkbox"/> Shape	<input type="checkbox"/> Position	<input type="checkbox"/> Fit	<input type="checkbox"/> Pressure Points
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Wood <input type="checkbox"/> Metal <input type="checkbox"/> Other: _____	<input type="checkbox"/> Gullet <input type="checkbox"/> No Gullet	<input type="checkbox"/> Adequate <input type="checkbox"/> Withers <input type="checkbox"/> Back	<input type="checkbox"/> Tight <input type="checkbox"/> Loose	<input type="checkbox"/> Narrow <input type="checkbox"/> Wide

Saddle Padding

<input type="checkbox"/> Padding	<input type="checkbox"/> Thickness	<input type="checkbox"/> Description
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Adequate <input type="checkbox"/> Insufficient <input type="checkbox"/> Excessive	_____

<input type="checkbox"/> Back Band	<input type="checkbox"/> Girth	<input type="checkbox"/> Belly Band	<input type="checkbox"/> Crupper	<input type="checkbox"/> Tugs
<input type="checkbox"/> None <input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____	<input type="checkbox"/> None <input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____	<input type="checkbox"/> None <input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____	<input type="checkbox"/> None <input type="checkbox"/> Fabric <input type="checkbox"/> Nylon <input type="checkbox"/> Leather <input type="checkbox"/> Rubber <input type="checkbox"/> Rope <input type="checkbox"/> Other: _____	<input type="checkbox"/> None <input type="checkbox"/> Yes - loose <input type="checkbox"/> Yes - tight <input type="checkbox"/> Saddle <input type="checkbox"/> Girth <input type="checkbox"/> Backband <input type="checkbox"/> Crupper <input type="checkbox"/> Belly Band <input type="checkbox"/> Tugs

Do shafts pass through center of gravity?

No
 Yes - Horizontally
 Yes - Not Horizontal

Appropriate shaft width?

Yes
 No - Too wide
 No - Too narrow

Cart

<input type="checkbox"/> Number of animals: _____	<input type="checkbox"/> Number of wheels: _____	<input type="checkbox"/> Wheel type:	<input type="checkbox"/> Wood <input type="checkbox"/> Pneumatic - good inflation <input type="checkbox"/> Pneumatic - poor inflation	<input type="checkbox"/> Axle balance:	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Is the girth adjustable? Yes No

Is the harness clean? Yes No

Comments

Supplement 1b – Data collection sheets for the questionnaires to working equid cart-drivers

Animal-cart ID

Animal-Cart Unit Record

Town: Bishoftu Location: Date: __/__/__
 Shashamene
 Selale

Demographics

Gender: Male Age: Level of Education: No formal education
 Female Rather not say Primary education
 Other Rather not say Early secondary
 Rather not say Number of dependents: Late secondary
 Rather not say Tertiary education
 Rather not say

Occupation Relating to Working Equids

Ownership of animal: Owner and driver Number of equids owned: Experience as driver: years Is driving the main occupation: Yes No
 Driver only Rather not say Experience with equids: years

Given your current needs and financial responsibilities, would you say that you and your household are: Finding it difficult Just managing Comfortable Very comfortable Prospering Rather not say

Approximate percentage of income derived from cart-driving?%

Enjoyment of driving occupation: 1 2 3 4 5
1=strongly dislike 5=strongly enjoy

Source of Training as a Driver:
 1 2 3 4 5

Choice of Equipment

Are you responsible for the choice of cart and harness for your animal? Yes No If "No", who is?

Where have you obtained your harness equipment? Purchased Inherited Donated Home-made Partly purchased and home-made Other:

If "Home-made" or "Partly purchased and home-made", please explain why: Cost Availability Tradition Design Responsibility Other:

If "Purchased" or "Partly purchased", where was it purchased from?

What is the near cost of your harness?

What is the near cost of your cart?

Which factors influence your decision when choosing this equipment? (select as many as apply)

<input type="checkbox"/> Cost	<input type="checkbox"/> Ease of use	<input type="checkbox"/> Location
<input type="checkbox"/> Design	<input type="checkbox"/> Popularity	<input type="checkbox"/> Recommendation
<input type="checkbox"/> Materials	<input type="checkbox"/> Maker	<input type="checkbox"/> Availability
<input type="checkbox"/> Tradition	<input type="checkbox"/> Culture	<input type="checkbox"/> Other:

Which of these factors has the highest importance to you? (select only one)

<input type="checkbox"/> Cost	<input type="checkbox"/> Ease of use	<input type="checkbox"/> Location
<input type="checkbox"/> Design	<input type="checkbox"/> Popularity	<input type="checkbox"/> Recommendation
<input type="checkbox"/> Materials	<input type="checkbox"/> Maker	<input type="checkbox"/> Availability
<input type="checkbox"/> Tradition	<input type="checkbox"/> Culture	<input type="checkbox"/> Other:

Equipment Maintenance					
Does the work equipment you use receive any routine maintenance?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
Are you responsible for the routine maintenance of the equipment?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If "No", who is?		
With what frequency does the work equipment you use receive maintenance and how is the maintenance best described?	Harness	Cart		Harness	Cart
	<input type="checkbox"/>	<input type="checkbox"/>	Daily	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Weekly	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Monthly	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Yearly	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Other:	<input type="checkbox"/>	<input type="checkbox"/>
			Inspecting	<input type="checkbox"/>	
			Cleaning	<input type="checkbox"/>	
			Brushing	<input type="checkbox"/>	
			Oiling	<input type="checkbox"/>	
			Other:	<input type="checkbox"/>	

Assembly and Hitching					
Are you responsible for assembling the harness and hitching your animal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If "No", who is?		
How have you learnt about harness assembly and hitching?	<input type="checkbox"/> Intuition	<input type="checkbox"/> Observation	<input type="checkbox"/> Other drivers	<input type="checkbox"/> Harness maker	<input type="checkbox"/> Research
Where do you go to for additional information about work equipment?	<input type="checkbox"/> Other drivers	<input type="checkbox"/> Harness maker	<input type="checkbox"/> Research	<input type="checkbox"/> Community	<input type="checkbox"/> Veterinary professionals
	<input type="checkbox"/> Research	<input type="checkbox"/> Other:	<input type="checkbox"/> NGOs	<input type="checkbox"/> Other:	
If possible, would you change anything about your current harness or cart?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	If "Yes", what?	
Do you believe your harness is currently assembled correctly?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
Do you feel your current equipment is efficient?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
Do you think about load distribution when loading the cart?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
If "Yes", how do you aim to distribute the load?				

Animal Equipment Interaction					
Do you remove the harness from the animal during rest periods at work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Sometimes		
Do you think the harness can influence the animal's ability to work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
Do you think the cart can influence the animal's ability to work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
Do you feel your current equipment is comfortable for the animal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure		
In the past year, how many times has your animal been lame? times			<input type="checkbox"/> Not sure	
In the past year, has your animal developed harness related wounds?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure	If "Yes", how often?	
	<input type="checkbox"/> Rarely	<input type="checkbox"/> Often			
	<input type="checkbox"/> Occasionally	<input type="checkbox"/> Very often			
Do you take any measures to prevent the development of wounds?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If "Yes", which measures?		

Comments