

Figure T3 Venn diagram of animal-related service providers and resources in a village, Uttar Pradesh, India (2006)

The centre circle represents the village. Outer circles show the relative importance (according to size) of the services and resources used by animal owners. In this diagram, circles are placed at different distances from the centre according to their accessibility; for example the government veterinary hospital has been shown in a small circle and far away, because animal owners feel that the service is of low importance to them and often the vet is not available. Arrow-heads represent the frequency with which people use each service.

T4 Daily activity schedule



Including working animals

What it is

A Daily activity schedule is a chart showing how people and animals spend their time, including the time of day that each activity takes place and the time it takes to do. We have adapted this tool (Kumar, 2002) so that it includes aspects of the lives of working animals, as well as their owners.

Purpose

The Daily activity schedule identifies important times of the day, for example times when people are busy working, when they spend time with their animals, or when they are free to discuss their common problems. It can be used to initiate discussion about the best times to plan animal welfare activities, to hold a community meeting, or for you (the field facilitator) to visit the village.

Daily activity schedule of the animal-owning community

This chart (Figure T4a) explores and compares how animal owners, users, handlers and carers spend their work and leisure time. It helps people to understand the roles and responsibilities of different members of the family towards their animals. It can be used to analyse the factors that influence different people's roles and activities, and to understand the problems and obstacles faced when dealing with animals.

Daily activity schedule of the animal

This chart (Figure T4b) explores how working animals spend their day, during both work periods and rest periods. It can be used to look at a daily routine from the animals' point of view and find out where improvements to welfare could be made, such as increasing the time available to animals for rest or grazing.

How y	you do it
Step 1	Explain the exercise to the participants. Daily activity charts are best made by individuals and small groups, so divide up larger groups to make charts for different people, such as men, women and children.
Step 2	Start a discussion about the activities that a person, a group of people or their animals normally do, from when they get up in the morning until they go to sleep in the evening. Ask them to list all the activities in order.
Step 3	Agree whose daily activities to chart first. This can be the animal owner, members of the owner's family, a single animal or a group of animals. Agree whether to make a circular clock or a line chart to represent time. Decide whether to show time in hours or as parts of the day, such as morning, afternoon and evening.
	Show daily activities using symbols placed at the appropriate time of day.
Step 4	 Discuss the Daily activity schedule with participants. Key points can include: free time and working time periods of heavy workload or strain times when animals are fed or the animal shed is cleaned when are animals taken for grazing? when are animals offered feed and water? when do people groom animals or clean their hooves? how much the activity is liked or disliked? how participants feel about the way they use their time throughout the day? Also ask when people have free time to take part in other activities, either individually or as a group.



Facilitator's notes: Daily activity schedule

- Daily activity charts are a useful, non-threatening, rapport-building exercise to look at real life experiences.
- You might want to discuss how daily routines change depending on the time of the week or the season.





DAILY ROUTINE ACTIVITIES

Figure T4a Daily activity schedule of an animal-owning community in Ghaziabad, Uttar Pradesh, India (2008)

In this exercise (Figure T4a above), men, women and children listed all their activities between getting up at 5 am and going to bed at 9 pm. Women start cleaning the animal shed and watering their animals between 5 and 7am. Men feed the animal around 8am and then take it out to work. Women are involved in feeding, watering and cleaning for animals several times a day, while men are involved with their animal only between 8am and 2pm. Children take animals for grazing between 3 and 6pm. This initiated a discussion about the roles and responsibilities of family members in animal care.



Figure T4b Daily activity schedule of the working animal in Meerut, Uttar Pradesh, India (2008)

This Daily activity schedule (Figure T4b, above) for animals was facilitated with brick kiln workers, in order to initiate a discussion on animal welfare issues. The animals are used for transporting bricks by cart. The day starts with cleaning the feeding trough at 4 a.m., followed by feeding at 4.30 a.m. At 5 a.m. the animal is harnessed to the cart and work starts at the brick kiln at 5.30 a.m. Water is offered between 10 a.m. and midday and again at 3 p.m. when the animals return home. A second feed is offered after finishing work at 2 p.m. From 5 to 6 p.m. animals can graze and roll. They are groomed between 7 and 8 p.m. and the last feed is given between 8 and 9 p.m.

T5 Gender activity analysis



What it is

Gender activity analysis explores the division of animal-related labour and workload between men and women, boys and girls. It is adapted from the gender-disaggregated activity calendar (Thomas-Layter et al, 1995).

Purpose

While facilitating community groups who own working animals, often there is an unintentional focus on men and boys, because they frequently own the animals and work with them during the day. To improve all aspects of animal welfare, women and girls who care for animals at home must be included. This Gender activity analysis and the Gender access and control (T10) tools are both useful to gain a better understanding of the role of women and girls in looking after working animals.

This tool (Figure T5) explores differences in the animal-related work of male and female members in the same household. It can be used for the following purposes:

- as an entry point activity to involve women in animal welfare improvement;
- as the start of the participatory welfare needs assessment process; (see page 86)
- to ensure the most appropriate animal welfare extension messages are delivered to each member of the household.



How yo	ou do it
Step 1	Explain the exercise to the participants. Gender activity analysis is better when carried out in small groups. We find it works best in separate gender groups first, with each group analysing the work for both male and female members of the household. Then the two groups may be combined for further discussion.
Step 2	Start by asking about the activities that men and women normally do when looking after their working animals. Include activities carried out on a daily, weekly or monthly basis. Ask the group to list these on the ground or on a chart, using symbols or drawings of the activities.
Step 3	Ask the group to indicate how the workload for each activity is divided or shared between men and women, using up to ten seeds or stones to score their relative contributions (see Figure T5).
Step 4	 Discuss the gender activity analysis with the two groups separately. Then bring the two groups together to discuss any differences between the men's and women's chart. Key points for discussion can include: Who is responsible for which activity and why? Which activities are done when the animal is at home and which are done when the animal is at work? Which activities are typically done by men and women, and why? How much time does each activity require and is the workload (number of activities) equally distributed? Which animal-related activities are done by children and why? Is there a difference between boys' and girls' work? What are the implications on the welfare of the animal, if any, if a man, woman or child does the activity? Would participants like to change anything in the division of labour shown in their diagram? If so, what and why?



Facilitator's notes: Gender activity analysis

- Looking after the animals in the household is usually the responsibility of all family members, although different people are responsible for different tasks. Girls and boys can also do this analysis, by adding an additional two columns to the example •
- shown in Figure T5.



GENDER ACTIVITY ANALYSIS

		MALE	FEMALE
200	WORK	A	RA.
CLEANING OF STABLE			****
offering Fodder in Morning	A MA	***	1:
OFFERING WATER	一個		
	Son	*****	•
BRINGING HARNESS	0	:::::	
PLACING. CART		:::::	
PLACING HARNESS	こが	*****	
GOING FOR WORK		*****	
OPPERING FODDER DURING WORK		:::::	· · · · · · · ·
OPPERING OREEN FODDER	PARTA	•	*****
FREE FOR GRAZING	REWN	*****	
OFFERING GRAM	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	****	*****
GROOMING	= m2		
OFFERING FODDER IN EVENING		•	****

Figure T5 Gender activity analysis for work with animals, Ghaziabad, Uttar Pradesh, India (2008)

The chart (Figure T5) explains the animal-related work distribution of men and women in a village in Ghaziabad, Uttar Pradesh, India. The group used 10 pebbles to score the division of labour for each of fourteen daily activities. Women have more responsibility for cleaning the animal shelter, offering fodder and grain and watering animals. Men do all the activities related to working the animals, harnessing, taking animals to graze and tying them up. Participants discussed why some of the activities were only carried out by men or women and what effect this had on their animals.

T6 Seasonal analysis of the lives of working animals



Disease seasonality calendar

What it is

A Seasonal analysis (also called a Seasonal calendar, Seasonal diagram or Seasonal activity profile) is a diagram of changes over the annual cycle of months or seasons. We have adapted this tool from a similar tool (Kumar, 2002) so that it includes aspects of the lives of working animals as well as their owners.

Purpose

This tool enables people to analyse how their livelihoods and the welfare of their working animals change in different seasons, and how these changes influence each other. For example, it may highlight changes in animal welfare status according to seasonal changes in the workload or types of animal feed available. It helps the community to decide on actions to improve animal welfare and plan ahead to prevent welfare from getting worse in a difficult season.

Seasonal analysis of the lives of working animals and their owners

The analysis (see Figure T6a) can cover many aspects of life, using scoring to show the size of seasonal variations in:

- livelihood activities of animal owners, users and carers as different work is done at different times of year;
- availability of work or employment;
- migration patterns of animal-owning families;
- work load of animals, periods of heavy work and periods of relative ease;
- availability of animal feed and fodder, grazing or other resources;
- animal diseases;
- changing welfare status of animals.

How you do it

Step 1	The Seasonal calendar is best carried out in small or medium-sized groups, so divide larger groups to compare how seasonal changes affect different people. Discuss the local calendar and seasonal landmarks; for example months, dry or rainy seasons, festivals and religious ceremonies. Ask participants to identify unique characteristics of each month or season and depict these using a symbol or drawing.
Step 2	Start the discussion with the present season and the work that that participants do during this season. Agree on which activities, events or problems are going to be discussed and mark changes in these along the calendar line. Participants might find it easier to start by discussing general issues such as the types of work and income flow at different times of the year, before moving on to animal-related issues such as diseases or the availability of feed, water and grazing.
Step 3	Encourage participants to score seasonal changes using beans or seeds. For example, higher income levels can be shown by placing a lot of seeds on the month in which this occurs, while a decrease in income the next month is shown with just a few seeds.
Step 4	Discuss reasons for the seasonal changes shown. Explore the relationships between different seasonal events, activities and problems for working animals. Discuss and agree action points for improvement of animal welfare or preparation for difficult seasons.

Disease seasonality calendar

The seasonal calendar (Figure T6b) can be made specific to one area of concern, such as a specific pattern of animal disease.

MONTHS	APRIL	APRIL MAY	HAY MAY JUNE	SUNE JUNE JULY	सावन उपरम बद्धधार	भादो मण्दण्डा डहनः	आसिन् sept oct.	कार्तिक ०८२. Nov.	अगरन Nov. Dec.	DEC. JAN	FILE JAN FEB.	फागुन FEB MARCH
DISEASE	:::	::::	:::;	:::	::	::	:			:	:	:
INCOME	:::	::::	::::	:.	:-	:	::-	::*	::*	::*	::-	:::
INCOME FROM OTHER SOURCES	ŧ.		::/:	::/	12	:/	V	1	1.	7	И	٠/-
EXPENDITURE	::::	::::	::::	:	:	:	::*	::-	::*	::*	::*	:::
FODDER	88	8	۵	× ×	¥ ¥	¥	220	ŝ	۵	۵	۵	à
ANIMAL'S BODY CONDITION	**	::	:	:	:	:	:::	:::	:::	:::	***	:::

Figure T6a Seasonal analysis of the lives of working animals and their owners, India (2008)

Seasonal analysis (Figure T6a above) was one of the first exercises carried out with a community in Hardoi, Uttar Pradesh, India as part of rapport building, described in Chapter 4. Working with animals is the main source of village income (second row) and the group has two additional sources of income: wage labour and sale of agriculture produce. Overall income is lowest in the summer months. Green fodder is available during rainy months (grass symbol) and in other months the animals receive dry fodder (grain symbol). Relationships between the body condition of animals and seasonality of feed and disease were analysed by the group: animals are in good condition between September and November because there is more feed available and less risk of disease than in other months.



Facilitator's notes: Seasonal calendar

It is important to enable people to use their own way of measuring time if a twelve-month calendar is not used. Instead of scoring with beans or seeds, sticks of different length can be placed along the calendar to show increases and decreases over time, or both seeds and sticks can be used for different activities.



		WINTER	SUMMER	MONSOON
- 1	SEASON	সাহা	गर्मी	बरमात
DISEASE	मीसम बीमारी	G		
Respiratory Problem	च्यसका नजला		•	••
Surra	सुर्रा	••		
Colic	पेरदर्घ	:	••	••
Tetanus	दिरणब्याल			••••
Lameness	लँगड़ापन	:	••	••
Hoof Problem	खुराली		•	
Eye Problem	औंख में पानी आना	••	::***	•
Foot Cankar	चकरावल		••	••
Hoof Swellings	सुम में दाले	••	::	
Loose Motions	दस्त			••
Wounds	जरम	•		

Figure T6b Disease seasonality calendar, India (2008)

A community group in Ghaziabad, Uttar Pradesh, India carried out a seasonal analysis of diseases affecting their donkeys, as part of developing a shared vision and collective perspective (see Chapter 4). Eleven diseases were identified and scored against three different seasons: winter, summer and rainy season. Respiratory problems, colic, lameness and foot canker occurred most often in winter, while surra, eye problems and hoof swelling were more common in summer. In the rainy season, wounds and hoof problems are the biggest disease issues. Based on this analysis the group discussed why some diseases were seasonal and how they could be prevented.

T7 Historical timeline



What it is

A Historical timeline lists the past events in a community in chronological order. This tool works particularly well when carried out with the elderly people of the village. It is a good rapport building exercise with the community.

Purpose

A Historical timeline exercise (figure T7) will provide both you and the participants with an insight into how each person perceives past history and which events are seen as important. In the animal welfare context it is interesting to draw a timeline of the history of working animals in the village, including important events such as when the first animal was brought into the village, outbreaks of disease, and introduction of the first mechanized transport into the area.

How yo	ou do it
Step 1	Start the discussion on past events using questions such as: Was there ever a time when there were no working animals in the village? When was that? When did the first one arrive?
Step 2	As participants recall events, ask a group member to write them on cards or show them using symbols on the ground. Ask if people can remember these events in a specific year or related to any other important or well-known event in the country. This will enable you to work out the year. Discuss and ask questions about as many events as they can remember that relate to the history of working animals in their locality.
Step 3	Then ask the group to organize all the events in time order, starting with the earliest events at the top and gradually adding all later events below, until they reach the most recent event at the bottom. When they have finished the timeline, ask them to check if all the events are there and the timeline is correct.
Step 4	Discuss thoroughly the aspects and events that participants are interested in. Bring up events for discussion that you are particularly interested in and explore more of their history with the group.



Facilitator's notes: Historical timeline

• Initially participants may find it difficult to relate events to the time when they happened. We often find that people use a local time frame which is different from our calendar years. You will need to use your own judgement to enable people to articulate time in a way that both you and they can relate to.



• Recalling or remembering all the events in a timeline is not the main purpose of the exercise. The points discussed during the process of drawing the timeline are more important than the time line itself, which captures very little information. Important animal-related issues which arise while the group is making the timeline should be taken forward for further exploration by the group.

1938	斎	FIRST TEMPLE CONSTRUCTED
1939		LATE KAMLESH CHANDRA PASSED HIGH SCHOOL
1945	日田田	FIRST PRIMARY SCHOOL STARTED
1952	ġD.	DURGA PRASAD ELECTED AS VILLEGE HEAD
1960	EFD	FIRST LAND ALLOTMENT
1965		FIRST ROAD CONSTRUCTED
1981	Б	FIRST INDIA MARK HAND PUMP INSTALLED
1985		FIRST BRICK KLIN ESTABLISHED
1986	XX	ELECTRICITY IN VILLAGE
1988	à às	FIRST BICYCLE OF THE VILLAGE PURCHASED BY
1990	En	FIRST HORSE PURCHASED BY TEJ PAL
1991	1313	FIRST MOSQUE CONSTRUCTED
1992	F	FIRST TELEPHONE
1994	BEB	FIRST MOTOR DIKE PURCHASED BY KALLU
1996	Part and	METALLED ROAD CONSTRUCTED
1998		SAHEB LAL BOUGHT SECOND HORSE OF THE

HISTORICAL TIME LINE

Figure T7 A historical timeline from Sunni village, Hardoi district, Uttar Pradesh, India (2009) including key animal-related events

The Historical timeline in Figure T7 begins in 1938 when the first temple was built in Sunni village, Hardoi district, Uttar Pradesh. The first horse was purchased by Tejpal in the village in 1990 and the second horse by Sahib Lal in 1998. This exercise was done as part of the initial interaction with the community during Phase 1, Feeling the pulse (Chapter 4) and generated an interesting discussion on horse ownership and use in the village.

T8 Pair-wise ranking and scoring



What it is

This tool uses a matrix to make direct comparisons between items or issues, without referring to a scoring system or any other pre-determined criteria. Adapted from a similar method (Kumar 2002), it helps prioritise different issues for further analysis or action. It is often used before a more detailed ranking tool, such as Matrix ranking (T9).

Purpose

Pair-wise ranking helps people to compare and prioritise things, such as different service providers, animal diseases or varieties of animal feed, in order to arrive at a decision about which one the community prefers. It is also used to prioritise welfare issues for taking action, after a participatory welfare needs assessment has been carried out (see Chapter 4, Phase 3). Several examples of pair-wise ranking follow that we often use with animal owners.

Pair-wise ranking of animal diseases

The chart (Figure T8a) compares common diseases in working animals and identifies which of them are perceived to be a bigger problem. It helps people to understand the common diseases in their location and can be used as the basis for the Animal welfare cause and effect analysis tool (T26).

Pair-wise ranking of animal-related service providers

Pair-wise ranking (see Figure T8b) may be used to analyse several aspects of service providers, such as the importance of the service provider for the welfare of animals, ranking of the quality, cost or availability of different service providers (for example the animal health worker, farrier, saddler and feed seller) or ranking several providers of the same service, such as the farriers in one locality.

A second dimension of analysis may be added to the matrix as shown in Figure T8b below. As well as ranking the importance of various service providers to animal welfare, the group also used arrows on the same chart to indicate which service provider they preferred over the others in terms of service quality and friendliness.

Pair-wise ranking of animal welfare issues

This helps the community to prioritise the welfare issues identified during the Participatory welfare needs assessment.



How yo	ou do it
Step 1	Discuss the subject to be explored, for example which diseases of working animals are seen to be a severe problem for the village. Ask participants to discuss the most common diseases amongst themselves and come up with a detailed list, making sure that no diseases are missed out. Use symbols to depict the diseases, such as different tree leaves, coloured cards or other locally available materials. Make two sets of each symbol.
Step 2	Ask the group to draw a grid or matrix on the ground using coloured powder, chalk or a stick.
	Place one set of symbols in a column, from top to bottom. Then place the second set of symbols in a line from left to right (or right to left if the group prefers), in the same order. One by one, compare each symbol in the columns with each symbol in the rows. Encourage participants to discuss which one of the pair they perceive to be a bigger problem and why. Put the preferred symbol in the relevant box on the matrix. Cross out the boxes in which same symbols are compared. This will lead to the bottom half of the boxes being crossed out because they repeat what is on the top (see Figure T8a).
Step 3	Count the number of times each option appears in the matrix. Add them up and record totals at the bottom of the matrix using seeds or pebbles. Then make a list of the options with the most-preferred option (or the most severe disease problem) ranked first.
	Discuss the results of the activity. The next step could be to carry out a root cause analysis of the disease perceived as the biggest problem, or a decision to invite the most-preferred service providers to a group meeting in order to plan with them for action to improve animal welfare.



Facilitator's notes: Pair-wise ranking

- If the number of items to be compared is too large, this exercise can become boring for participants. In this case reduce the list by focusing on a smaller number of items.
 - The discussions that people have about why they choose one option over another are just as important as the result. These reasons for choosing one option over another should be recorded.



Figure T8a Pair-wise ranking of animal diseases, Meerut, Uttar Pradesh, India (2007)

A group of horse owners in Meerut, Uttar Pradesh, identified, compared and ranked six diseases, using tree leaves as symbols for respiratory problems, surra (*trypanosomiasis*), worm infestation, colic, wounds and tetanus. This showed that tetanus was seen by the group to be the biggest welfare problem, followed by colic. Though worm infestation was initially identified as one of the most important diseases, it was found to be less important than other diseases during pair-wise comparisons. This tool was used as part of the situational analysis described in Chapter 4, Phase 2. As a result, the group decided to take up community-led vaccination of their animals against tetanus (see Cost-benefit analysis, T15).



Figure T8b Pair-wise ranking of service providers, Abupur village, Saharanpur, Uttar Pradesh, India (2007)

A group of animal owners in Abupur village, Saharanpur, Uttar Pradesh ranked service providers in their locality according to who they found most important for the welfare of their animal. The farrier was seen as the most important. The group also included a second dimension in the matrix, using arrows to indicate which service providers they preferred in terms of quality and friendliness.

T9 Matrix ranking and scoring



What it is

This tool uses a matrix diagram to compare animal-related issues based on pre-determined criteria. It is adapted from another matrix ranking/scoring tool (Kumar, 2002).

Purpose

Matrix ranking differs from pair-wise ranking because it ranks or scores issues or items based on criteria agreed by the group in advance of the exercise. Both you and the participants will gain a better understanding of the reasons for the group's preferences or choice and how the decision-making process happens within the group:

In the context of animal welfare, matrix ranking or scoring can be used for the following:

Matrix ranking of animal diseases (or other animal welfare issues)

Diseases are ranked or scored against a set of criteria, which could include disease frequency, severity, treatment costs, recovery rates and recovery times.

Matrix scoring of animal-related service providers

Service providers available in the locality are scored or ranked (see Figure T9a) against criteria such as service quality, cost, friendliness, availability or importance for working animal welfare. Providers of different services may be compared (for example the hair clipper, farrier, agrovet store and community animal health worker) or several providers of the same service may be compared (such as all the feed sellers in the area).

Matrix scoring of sources of credit

Groups may wish to compares sources of credit or loans for improving the welfare of their working animals. Matrix ranking or scoring (Figure T9b) can look at criteria such as interest rates, availability of credit, easy repayment terms or risk of losing property or land if unable to repay on time. Sources of credit may also be identified through the Credit analysis tool (T13).



How yo	ou do it
Step 1	Identify the issues or items to be analysed for decision-making, based on previous discussions or exercises with the group on the agreed topic. Discuss the reasons or criteria that will be used for making decisions about which items will be preferred over others. If a lot of reasons or criteria are given, encourage the participants to sort out which are the most important ones. Make a list of these criteria. Criteria should be either all positive or all negative: mixing positive and negative criteria will create confusion later.
Step 2	Draw a matrix on the ground with the criteria listed from top to bottom and the items for ranking listed from left to right. Ask the group to rank all the items based on the first criterion they have chosen. Then rank them all based on the second criterion and so on, until the full list of items has been compared against all of the agreed criteria.
Step 3	When the ranking is complete, facilitate the group to draw conclusions from the exercise by asking questions. For example, ask about the items which ranked first and last, encouraging a more in-depth discussion of the reasons for these decisions.
	Matrix scoring is done in the same way but using up to ten seeds or stones to score each criterion instead of ranking them. Allow enough time for in-depth discussion and analysis of the reasons for ranking or scoring and enough time to come to consensus. The entire matrix should be documented for further decision-making and action planning.

Facilitator's notes: Matrix ranking and matrix scoring

- Consciously or unconsciously, there is often a tendency amongst facilitators to include their own criteria for ranking or scoring, rather than those of the community. It is important that you enable and allow the community to come up with their own criteria. Some of the criteria selected by the community may look strange, but if participants consider them to be important, this needs to be respected and their rationale understood.
- We have used these tools effectively for monitoring and evaluating changes in items or issues over time, as our welfare improvement programme progresses.
- This is a versatile exercise and is open to improvisation and innovation.

QUALITY OF WORK NAME OF FARRIER	SHOE QUALITY	AVAILABLE ON TIME	DISTANKE FROM HOME	LICO CLEANS HOOF	DOES IT PATIENTLY	P P P P P P P P P P P P P P P P P P P	HANDLING OF ANIMAL
AFTAB	****	:::::	*****	***	***		*****
UMAR	•		• •				
ABDUL ALI	**			•••			••
HAKIM	****		20000 9000	••••	0000	****	
MOHAMMED					••	4400	

MATRIX SCORING

The services of five local farriers in Saharanpur, Uttar Pradesh were compared using a Matrix scoring exercise in a horse-owning community. The community group set seven criteria, including patience and good animal handling, as important aspects of a good quality farrier. They scored each criterion using ten seeds. The group decided to invite the best two farriers to their next meeting, in order to build better relationship with them and negotiate a group rate for their services.

Figure T9a Matrix Scoring of the quality of service provided by farriers, India (2007)

			CP	ED	Т	AN	ALY.	SIS				
6	21	REST	ц	u F	OR		щ		THR	EAT		
OF CREDIT	ELIGABILIT	KATE OF INTE	MORTGAG	RETURN O	GUARANTI	LEGAL ACTION	AVAILABI IN TIME	LOSS OF ORNAMENTS	LOSS OF LAND	LOSS OF GUARANTOR	Loss of LIFE	TOTAL
MONEY LENDER	×	00		×	o (∧ o ()	um	000	×		000	×	000 000 00 (8)
BANK	* * * *	0	₩ ₩₩	×	\$ <u>₹</u>	tui mi	000	×	0000		×	°°° °°
CO-OPERATIVE SOCIETY	**	0	¥ ¥ ¥ ¥	×	× ×	111 111	000 0	×	0000	0000	×	°°° (5)
RELATIVES	۲	×	×	×	×	×	000	x	×	×	000	°°° (5)
0 0 0 0 GROUP SELF HELP	8	00	×	0	×	111	0000 0000 00	×	×	00	×	0000 000 (10)

T9b Matrix scoring of 5 different sources of credit, based on 11 criteria identified by a group of animal owners in Rupak village, Unnao, Uttar Pradesh, India (2009)

Guarantor

A group of animal owners from Rupak village, Unnao, Uttar Pradesh, analysed five different sources of credit against eleven agreed criteria. The exercise revealed some high levels of risk (threat) associated with borrowing money, including losing their land, guarantor or even their life if the money was not repaid. Through this exercise the group realized that the only way to benefit from the interest would be to borrow from their own self-help group. This initiated the interest and action to start saving money as a group, which could then be lent to members to help their animals and their families.

T10 Gender access and control profile



What it is

This tool analyses which members of a community have access to resources and services and how these resources and services are controlled. We have adapted it from its original (Thomas-Layter et al, 1995). This version focuses on animal-related resources such as water, feed and grazing, and on the services provided to working animals by outsiders, such as foot-trimming or veterinary treatment.

Purpose

The Gender access and control profile (see Figure T10) helps to create a common understanding of access to, and control of, animal-related resources and services by different members of a household or village. This understanding helps participants decide what type of action is needed to improve their animals' welfare, who can do it and who will benefit from a particular action. For example, we have used this tool to look at family decision-making around the use of veterinary services.

The profile is often used to explore differences in access and control between men and women in the village or household. Children may also be included. Another option is to look at differences in access and control between animal owners, animal carers and animal users or hirers.

How you do it		
Step 1	Ask the group to list all the resources and services they use to take care of their working animals. Draw a table and list all the resources and services down the side. Along the top make two wide columns, marked 'access to' and 'control over' (in figure T10 'access to' is replaced by 'who does it?'). Divide the 'access' and 'control' columns into as many sub-columns as you need - one for men and one for women, or three for 'owner', 'user' and 'carer', for example.	
Step 2	Facilitate the group to score all the listed resources and services relative to each other, using seeds or pebbles. Group members can give a score out of 10 for each item (or any number that they decide) according to who has access to the resource or service and who has control over it.	
Step 3	Enable participants to analyse the scores they have given and the differences between access and control by men and women. What is the effect of the difference on people and their working animals? Discuss whether changed or increased access and control over specific resources and services would benefit animal welfare and if so, what action could be taken to achieve this and who could take it.	





Before doing this exercise, decide whether it would be best carried out with men and women (or other subgroups) separately or in a mixed group. This will depend on the prevailing situation and your rapport with the community.



GENDER ACCESS & CONTROL PROFILE

Figure T10 Gender access and control profile of animal welfare services and resources, Saharanpur, Uttar Pradesh, India (2007)

This example (Figure T10) of a Gender access and control profile combines animal-related services and resources with management activities such as mixing feed and washing the animal. This profile was developed by a group of men who own working animals, as part of a situational analysis with the community (Chapter 4, Phase 2). The chart shows that women have access to most resources and services (10 out of 14) but only limited control over them. Men carry out several management activities, such as bathing animals, visiting the farrier, providing or seeking treatment and taking the animal out to graze. The group discussed the reasons for this and the effect of different access and control patterns on their animals' welfare.

T11 Changing trend analysis



What it is

Changing trend analysis is a matrix tool which helps the community to identify changing trends over time. Analysis of how change happened from past to present and what caused the changes enables you and the participants to understand their current situation more clearly.

Purpose

Changing trend analysis (Figure T11a) may be used to analyse many different aspects of peoples' lives and the lives of their working animals. Examples include how animal populations, feeding practices, disease patterns, availability of health services and availability of grazing land have changed over a period of time. The tool can show changes in the number of animals affected by disease or changes in the severity of the disease over time. This exercise can be good for starting to look at the causes of welfare problems in working animals and searching for solutions.

A variation is called Before-and-after analysis. This tool is frequently used with the community to analyse the care of working animals before and after implementation of their action plan to improve welfare. Village groups have analysed issues such as animal feeding, health service provision, harness repair, the number of times that animals are given water in a day, and many others. Before-and-after analysis is often used in the self evaluation phase of collective action (Chapter 4, Phase 6).

How you do it	
Step 1	Ask the group about the present situation relating to care of working animals in the community. Then ask how things have changed over time. Enable participants to list the things that have changed and to select the ones they feel are most important.
Step 2	Ask people to decide on a timescale for their analysis. This may be before and after you worked with the group to facilitate an animal welfare intervention. Or it may be based on other important activities, events or years. Some of our groups analyse animal management trends over generations, such as 'In our grandfathers' time, in our fathers' time and in our own time' (see Figure T11b).
Step 3	Ask participants to draw a matrix on the ground and show the time scale on the horizontal line. Depict the items for analysis on the vertical lines using symbols, seeds or pictures. With a Before-and- after analysis it may be easier to do this the other way around, showing time on the vertical axis. Decide with the group how they will display the situation, for example by scoring using seeds or stones, or by using symbols, leaves or sticks of different sizes.
Step 4	When the matrix is filled and the participants are satisfied, discuss the findings and trends over time. Ask why the changes happened and whether they are positive or negative changes. Explore possible options for action to continue with positive changes or reduce negative changes, carried out either by the group themselves or with support from outsiders.



Figure T11a Changing trend analysis of changes affecting potters and their working animals over four generations in India (2008)

10

5 ATTA

DISEASES

TREATMENT

TENSION/THREAT

HAIR CLIPPING

This matrix (Figure T11a) is the result of a Changing trend analysis carried out with a group of potters in Basantpur Sainthali village, Uttar Pradesh, India. It was used as part of a situational analysis (Chapter 4, Phase 2) and shows changes in work load, quantity and type of animal feed and fodder, grazing land availability, income and expenditure, animal disease prevalence and treatment options. The main profession of pottery has changed over the years and the group has become more dependent on their animals working in brick kilns. In the early days they were dependent on traditional treatment (pestle and mortar symbol) but gradually they are using modern veterinary treatments (syringe symbol) as well.



Figure T11b A group of animal owners and carers doing a Before-and-after analysis

T12 Dependency analysis



What it is

Dependency analysis helps to analyse a community's dependency on particular resources and service providers to sustain their livelihoods. It is adapted for animal welfare from an earlier version (Jayakaran, 2007).

Purpose

In the context of animal welfare, this tool can enable owners to analyse their control over the resources and services necessary to fulfil the basic needs of their working animals, such as dealing with a specific disease or providing water and good quality feed. It enables people to look at which provisions are within their own control (sometimes called internal control), which are controlled by other stakeholders or service providers (outsider control) and which are beyond the control of either owners or local stakeholders.

The first stage of Dependency analysis (Figure T12) is to identify the resources and services needed by working animals. This provides an opportunity to explore the group's perceptions and beliefs about the animal management and work practices which will prevent welfare problems from occurring in the first place. Analysis of their dependency on others encourages the animal owners to plan strategies for accessing resources and services which are not under their direct control, in order to improve their animals' welfare.



How you do it		
Step 1	Ask participants about the problems they face in managing their animals during work and rest. Alternatively you can start by asking about the needs of their animal. Draw a large circle on the ground, with a picture of the animal at the centre and show all these issues on the outermost periphery of the circle, using pictures or symbols.	
	one for each problem or need shown	
Step 2	Ask the group to indicate which of the animals' needs or problems that they can deal with themselves, which needs are met by outsiders (service providers) and which are beyond the control of both owners and outsiders.	
	Then ask participants to score each need according to their own influence over it. For the first need or item ask: How much influence do you have over providing the need? How many seeds or stones (out of ten) would show your level of influence? On the outside circle, ask them to place the number of stones in each segment which reflects their own control over that particular problem or need.	
Step 3	Discuss which needs are met with the help of outsiders (service providers). When do the group need to depend on outsiders to deal with their animals' problems or needs? Examples might include farriers (for shoeing), feed sellers or local animal health service providers. Out of the remaining seeds or stones, ask the group how many would represent the influence of outsiders (service providers) over provision of that need or item. Show this by placing stones in another circle inside the first one (see Figure T12 below).	
Step 4	Finally, the remaining seeds or stones are placed in the innermost circle, indicating to what extent the provision of each animal need is beyond the control of either the animal owners or local service providers.	
Step 5	When scoring is complete, begin a discussion with the group. Encourage them to search for ways to gain more influence or control over meeting their animals' needs or solving animal welfare problems themselves. Ask: How can the scores in the outside circle be increased? For each problem or need, analyse the factors responsible for dependency on others and the scope for reducing dependency on outsiders and increasing their own control. Include the items that are beyond anyone's control, such as diseases, disasters or environmental issues. Enable the group to discuss options for reducing the effect of these items on the welfare of their animals. Agree to take action, either individually or collectively.	



Facilitator's notes: Dependency analysis

- This exercise can take considerable time, so discuss this in advance with the group and agree on a suitable time to set aside for doing it.
- The same exercise can also be shown as a scoring matrix rather than a segmented circle, using vertical and horizontal lines to divide the needs or problems and the levels of dependency.





Figure T12 Dependency analysis by a community group at Bijouli village, Meerut, Uttar Pradesh, India (2008)

Figure T12 is the output from a Dependency analysis carried out by a community group in Bijouli village, Meerut in Uttar Pradesh, as part of a situational analysis (Chapter 4, Phase 2). The group listed seven needs of the animal on the ground using symbols: stable cleaning, veterinary treatment, hair clipping, farrier's services, early identification of disease, feed, and harness repair. The group felt that stable cleaning was almost entirely under their own control. They perceived that they were dependent on others for treatment and that sometimes even accessing treatment was beyond their control. This led to a lot of discussion on measures that could be taken to prevent disease and injuries. The group also found that they were more dependent on the farrier and hair clipper than on the harness-maker and feed seller, but still wanted to reduce their dependency on the feed seller, as food was a daily need for their animals. They decided on collective action to reduce this dependency by bulk-buying and storing feed as a group.

T13 Credit analysis



What it is

Credit analysis (Figure T13) is the collective analysis of existing sources of income, expenditure and different sources of credit, using scoring methods.

Purpose

The analysis of present sources of income, expenditure and credit enables the group to understand the constraints and compulsions of their livelihood situation and how these affect the welfare of their working animals. This can help a group to explore alternative sources of credit through collective regular savings or monetary contributions towards their self-help initiatives and animal welfare improvement action plans.

How you do it		
Step 1	Ask participants about their sources of income, encouraging them to depict all the types and sources of income they have. Then ask them to score each source of income according to its importance, using 10 stones or pebbles (see Figure 13). This generates further discussion and a better understanding of the income situation.	
Step 2	In a similar way, ask the group to depict their different items of household expenditure. After all items have been listed, again ask them to score each item of expenditure relative to their biggest household expense.	
Step 3	Discuss what they do when income is less than expenditure, or during a period of crisis. Ask them to show their various sources of credit, followed by relative scoring of each source of credit based on the source from which they borrow the most often or the largest amount.	
Step 4	After the diagram is complete, initiate a more in-depth discussion on the advantages and disadvantages of each source of income, expenditure and credit. Ask about issues such as interest rates, availability of credit and ease of access to credit. Based on these discussions the group can search for alternative credit options and this may motivate them to start their own savings group to help to pay for animal welfare improvements.	



Facilitator's notes: Credit analysis

For some groups this might be a sensitive discussion. Trust is important between group members before they will have an open discussion on income, expenditure and credit.





Figure T13 Analysis of income, expenditure and credit by horse owners in Subtu village, Muzaffarnagar district, Uttar Pradesh, India (2008)

Figure T13 shows the output of a Credit analysis exercise by a group of animal owners in Subtu village, Muzaffarnagar district in Uttar Pradesh, India, carried out as part of their situational analysis (Phase 2, Chapter 4). The diagram shows that they earn their main income though work with their horse cart. Additional income comes from selling buffalo milk and working as agricultural labourers. A few members earn money from animal trading and agriculture as well. Their major expenditure is on food for family members, and animal feed and care. Ninety per cent of the animal owners are dependant on their employers at the brick kilns for credit, and through loans from local moneylenders. Discussion during this exercise led the group to start their own savings fund in order to support their animal-related and household needs and reduce their dependency on loans.

T14 Group inter-loaning analysis



What it is

This tool provides a visual representation of the reasons for lending or borrowing money between members of the group. The group's savings fund or common contributions are lent (inter-loaned) for various purposes, such as buying animal feed, paying for services from different service providers, cart repair and maintenance, purchase of a working animal, and other household needs.

Purpose

Group inter-loaning analysis (Figure T14) provides you and the group with insight into the reasons for lending or borrowing money between its members. This can help participants to decide where collective spending might save them money and therefore reduce their need to borrow from the fund. For example, if many group members are borrowing money to buy animal feed, a common fund could be used to buy animal feed in bulk. The group may wish to arrange vaccinations for all village animals at the same time for a reduced fee. The same exercise can be used to assess the present status of repayment of loans and create peer pressure to repay the loans to the group fund as agreed between the group members.

How you do it		
Step 1	For this exercise the animal owners' group must have been meeting for at least one year, with members making regular contributions to a common savings fund. They must also have started lending money from the fund to the group members (inter-loaning).	
	Explain the exercise and start with a general discussion, such as asking questions about the group and its activities.	
Step 2	Encourage participants to discuss the collective fund they have generated and the amount saved by each member of the group. Ask them to make a big circle on the ground or on chart paper and mark the central point of the circle. Enable them to write the names of the group members on separate cards, or to identify group members using different symbols. Arrange the cards representing each person who has taken a loan around the outside edge of the circle.	
Step 3	Draw three inner circles and divide the circle into as many parts (segments) as the number of group members who have borrowed from the common fund. In the second circle indicate the purpose for which the loan was taken and in the third circle the amount of money borrowed (see Figure T14). All of these can be depicted using symbols and stones, or may be written on cards. If any member has taken a loan twice this should be reflected in their column or segment.	
Step 4	If participants wish, use additional circles to show how much of the loan has been repaid to the common fund and the amount of interest paid. Enable them to depict the number of instalments already repaid. Discuss the number of instalments remaining and the number of months until the final settlement will be made.	
Step 5	Encourage participants to discuss their need for further loans, the purposes for which they will borrow money and any action that they can take to reduce their need to borrow money. At the end of the exercise, ask the group to summarise their findings and highlight where loans have been used for animal welfare improvement.	



Figure T14 Group inter-loaning analysis carried out by Naya Sabera Equine Welfare Group, Bhakla village, Saharanpur, Uttar Pradesh, India (2008)

As part of their situational analysis (Phase 2, Chapter 4), members of the Naya Sabera Equine Welfare Group in Bhakla village, Saharanpur, Uttar Pradesh, India, analysed the use of money lent from their common savings fund. All members of the group had taken a loan at some point. The central circle in Figure T14 represents the status of the loan and number of installments still to repay. The second circle shows the amount of each loan. The third circle shows the reason for the loan; most loans are taken to buy working horses, buy animal feed or make repairs to the cart. This exercise helped the group to discuss where they could take action collectively for their animals, such as buying feed in bulk at a discounted price.

Facilitator's notes: Group inter-loaning analysis

- It is best to do this exercise without referring to the group's register or ledger of savings and loans. If any queries arise, look at the register together at the end of the exercise and make changes to the chart then if needed.
- Sometimes one particular member or group leader wants to lead the exercise and tell you about all the other members. Discourage this tactfully because information about borrowing should come from each member individually.
- The group should keep a copy of the exercise. You can repeat the inter-loaning analysis after 6 to 12 months and analyse changes with the group.
- Other aspects or conditions of being a member of the common savings fund may be included in this exercise, such as attendance at meetings, making regular monthly savings and reliable repayment of loans.

T15 Cost-benefit analysis



Animal welfare practices, animal-related service providers and animal feeding practices

What it is

This is a method of comparing the animal welfare and financial costs and benefits of a provision or resource.

Purpose

This tool explores the potential benefits, risks and affordability of various animal welfarerelated activities. It can show costs and benefits to the animal and also to its owners, users and carers. The exercise motivates the group to take action to improve the welfare of their working animals and we use it in many situations, such as to look at the costs and benefits of preventive animal health measures (such as vaccination), the use of different veterinary services and the most cost-effective combination of animal feeds.

In our experience, animal-owning groups will usually start by analysing financial costs and benefits, looking for the cheapest options. Your role as a facilitator is to ensure that animal welfare costs and benefits are included in the discussions, so that reduction in expenditure does not lead to reduction in animal welfare. The group may monitor whether their changes improve or reduce animal welfare using the animal-based welfare indicators developed in other exercises, such as Animal body mapping (T20), 'If I were a horse' (T17) or How to increase the value of my animal (T18).

Cost-benefit analysis of animal welfare practices

This version helps the group to decide whether to use a particular resource or service, such as grazing areas, water sources, vaccination, farriery or hair clipping. For example, a cost-benefit analysis on veterinary treatment may analyse the cost of paying the vet and buying medicines against the welfare benefits to the animal and the family's loss of earnings if their animal is not treated. This is described in Case study M on tetanus vaccination.

Cost-benefit analysis of animal-related service providers

This looks at whether the use of one particular service-provider has greater costs or benefits than another. It may be done by comparing different services against each other, or by comparing people who provide the same service. (See Figure T15a)

Feeding practice analysis

This special adaptation of the Cost-benefit analysis tool explores whether changes in animal feeding practices will lead to a better outcome for animal welfare while remaining affordable. It can assess current feeding practices, the nutritional content of different feeds and their effect on working animals, the availability of alternative feed sources and the best formulation for balanced animal feed at low cost. Animal feeding practice analysis combines more than one tool and is described in detail in T27.

How you do it		
Cost-benefit analysis is relatively simple when looking at resources that can be supplied by the community themselves. When analysing costs and benefits of animal-related service providers, aspects such as their location, distances from village households or quality of service make the analysis a bit more complicated.		
Step 1	If the group would like to assess the costs and benefits of using different service providers, start by asking who provides all the services they need to look after their working animals. Draw a matrix and list the service providers along the top of the matrix. Examples could include the veterinary doctor, community animal health worker, foot trimmer, animal feed seller, harness- or cart-maker, medical store or agrovet supplier (see Figure T15a below).	
Step 2	Discuss each service and ask the group to list factors that could be seen as costs or benefits of the service provider. These could include: their distance from the village, costs involved, mode of payment, quality of service and any other relevant issues, such as how well the service provider handles the animal. List these factors down the side of the matrix. Alternatively this can be done the other way around, with factors listed along the top of the matrix and service providers listed down the side.	
Step 3	Facilitate the group to fill in the matrix for each service provider, as shown in Figure T15a.	
Step 4	Once completed, ask the group to analyse the costs and benefits of different service providers. What are the possible alternatives when costs are high? Can the benefits be increased in order to improve animal welfare? Can the costs be reduced without a negative effect on animal welfare? Based on these questions the group can decide on what action they would like to take.	

Facilitator's notes: Cost-benefit analysis

- If you are discussing animal treatment services, ask the group about the occurrence of diseases during the last one or two years, the treatment services they used, duration of recovery period, costs involved and losses incurred when the animal could not work.
- The presence of technical people such as vets or community animal health workers can de-mystify diseases and their treatment, enabling the community to discuss them in more depth. This also helps the technical person to understand the community's perspective, bringing together local wisdom with experts' views and experiences.
| | LOCAL HEALT | FERRIER | HAIRCUPPE | FEED
SELLER | CART | MEDICAL | SAODLEZ |
|------------------------|---|------------------------|--|--------------------------------------|---|----------------------------|---------|
| WHERE | Fauji
Shyamli | Dhole Stand
Shahpur | Shahpur | Sisoli | Savatu | Sisoli | Sisoli |
| DISTANCE | 25 km | 7 Km | 12 Km | 4 Km | O Km | 4 Km | 4 Km |
| COST
(IN 3 MONTH) | 400/2 | 720/= | 180 = | 6390/= | 70/= | 50/= | 300/= |
| MODE
OF
PAYMENT | Cash | Cash | Cash | Cash | Cash | Cash | Cash |
| EFFECT
ON
ANIMAL | NO-INCOME
ANIMAL
WILL be
OF NO USE | Lameness | lonproper
Sweating
Leading
to Illness | Weakness
leading
to
Disease | More
Power
needed to
Pull cart,
Suffers | N o
Timely
Treatmont | wounds |
| QUALITY | Good | ak:
Good | Very
Good | ok | Good | ok | acod |
| (OUT OF 5) | 00 | | | | 0 | 0 | • |

Figure T15a Cost-benefit analysis of animal-related service providers in Subtu village, Muzaffarnagar district, Uttar Pradesh, India (2008)

The animal owners of Subtu village, Muzaffarnagar district, Uttar Pradesh, India, analysed the costs of animal-related service providers in terms of distance from the village, monetary costs and costs to their animal (animal welfare effects) if the service was not used (Figure T15a). The last two rows depict the quality of the service provider and his or her importance for their working animals. After drawing the diagram the group discussed their options for reducing costs and improving the quality of these services through collective action. They worked out how to engage each service at a reduced rate for the group and decided to maintain an animal first aid kit in the village to reduce expenses at the medical store (Figure T15b below).

192 SHARING THE LOAD

SERVICE PROVIDER	MONTHY MONTHY COST WAY OUT OF REDUCING COST
L.H.P COMUNITY HEAUTH SERVICE PROVIDER	400 . WE WILL FORM & ANIMAL SERVICE CENTRE AND CALL THE BOMMUNITY HEARTH GETWILE PROVIDER COLLECTIVELY
FERRIER	 WE WILL COLLECTIVELY CALL THE PERPIER. TWICE, IN THE VILLAGE / TONGA STAND AND MONTALY FIX RATE THE RATE FOR PERPIERING. WE WILL MAKE AN AGREEMENT REGARDING USED/OL SHOES
HAIR CLIPPER	180 . WE MILL CALL ONCE ONE PERCHER
	· LIKE PERHELING, HAIR CLIPTING WILL ALSO DE DONE COLLECTIVELY TO REDUCE THE COST.
FEED SELLER	6390 · COLLECTIVE PURCHASING OF-RICE BAIN, WHEAT STRAW ETC. COLLECTIVE PURCHASING OF • MAIZE, WHEAT & BARLEY AND ITS GRINDING.
CART REPAIRER	. WE WILL NEQOCIATE AND FIX THE PRICE OF WHEAT STRAW BEFORE HARVESTING _ . DAILY USE OF GREEN FODDER_ COLLECTIVELY NEGOTIATE FOR BETTER PRICE
MEDICAL STORE	50 - WE WILL START MMINIMANING FIRST AND KIT WITH US .
SADDEER	300 - COLLECTIVEET NEGOTIATE AL BETTEL PRICE PROPER SETTING OF SADDLE NE WILL GREASE THE SADDLE ON WEEKLY BASIS.
	· TIMELY REPAIR OF SADDLE

Figure T15b Village action plan to improve animal-related services in Subtu village, Muzaffarnagar district, Uttar Pradesh, India (2008)

Case study M. Cost-benefit analysis of tetanus vaccination in Mhallaur Anshik village

Source: Vineet Singh and Ram Raksh Pal Singh, Arthik Evam Jan Kalyan Sansthan, Lucknow, Uttar Pradesh, India, June 2008

A community in Mhallaur Anshik village carried out a Cost-benefit analysis to find out if it was beneficial to vaccinate their working horses against tetanus. After concluding that the benefits outweighed the costs, they explored whether it was possible to reduce the costs of vaccination. The group consulted their local animal health provider to gain a better understanding of what was needed. They agreed to vaccinate their animals as a group and to buy the vaccines in bulk from the nearest city. Money was collected in advance, including travel expenses to the city. They negotiated a discounted price with the animal health provider if he vaccinated all the horses, including booster vaccination. The community calculated that by doing this they had saved a considerable amount of money and helped all of their animals to avoid suffering from tetanus. The illustration below shows their financial cost-benefit calculations.



700/=

1500/=

COST OF VACCINATION - 16/= OF ONE ANIMAL (VACCINE, SYRINGE & VET'S FEES)

TOTAL COST OF VACCINATION OF 32 ANIMALS 16 X 32 = 512/=

TOTAL LOSS - 16700/=

2) COST OF TREATMENT

3) LOSS DUE TO NO WORK

FOR 3 DAYS (500/= ×3)

(MEDICINE & VET'S FEES)

TOTAL COST OF VACCINATION 512/=

T16 Animal welfare snakes and ladders game



What it is

Our community facilitators have found the Cost-benefit analysis tool (T15) to be an effective way to motivate groups to improve the welfare of their working animals. They came up with different ways to do it in a more fun and entertaining way: one of these is an adaptation of the traditional 'snakes and ladders' game.

Purpose

The Animal welfare snakes and ladders game engages the interest of participants, increases their collective knowledge about animal management and motivates them to act on poor welfare practices. Both adults and children enjoy this game.



Figure T16a Traditional snakes and ladders game large enough for players to walk around

How yo	u do it
Step 1	For this game you need to prepare beforehand. The common Snakes and Ladders board game is used for the exercise, either the small size available in the market, or you can make a big version using large sheets of cloth or paper. The game has between 50 and 100 squares in a matrix. Ladders and snakes are drawn or painted on, connecting different squares (see Figure T16a and b) To convert the game for animal welfare cost-benefit analysis, two types of information need to be collected before starting:
	 Existing animal management or work practices which are positive/good Existing animal management or work practices which are negative/bad These practices need to be recorded in advance on cards, using words, symbols or photos. Place one card in the square at the top and bottom of each snake, and one at the top and bottom of each ladder. Snakes are usually associated with cost or loss and ladders with benefit or gain. This cost or loss and benefit or gain can be expressed in both welfare and financial terms. For example, bad hoof care practices can lead to lameness (pain and poor welfare for the animal) as well as three days' loss of work for the owner, costing 300 Indian rupees or 30 Egyptian Pounds a day. Alternatively, causes and effects can be put at opposite ends of the snakes and ladders. For example, the card at a snake's head could show a lame animal, while the one at the tail could show poor hoof care practices (bad quality shoeing or untrimmed feet).
Step 2	Normally six to eight people play the game together using dice. Each participant is represented by a different counter or object (such as a bottle top, leaf or stone) placed on the first square. Everyone gets a chance to play by rolling the dice in turn. At the beginning somebody has to roll a six before the game can start. Then each player moves their counter the same number of squares as he or she rolls on the dice.
Step 3	When a player's counter lands on a square containing a card or photo, the card is turned and discussed by the players. If a player reaches a square showing the head of a snake, the counter must be moved down to the tail of the snake. When a player reaches a square at the bottom of a ladder they can climb the ladder to reach the square at the top.Before moving from a snake's tail, players must describe a situation that they have experienced which is similar to the one shown on the card. Encourage the group to discuss this and decide what types of action would turn the cost into a benefit, before moving on to the next player.
	1



Facilitator's notes: Animal welfare snakes and ladders game

- We have used many variations of this game, such as placing question cards about good and bad animal management practices in random squares on the board.
 The board can be made so large that players can walk around it to play.
- We have often used this game with children, with great success.



Figure T16b Snakes and ladders game for animal welfare sensitization, illustrated example from an original large cloth board, developed by Brooke Egypt, Cairo (2009)

T17 'If I were a horse'

... or donkey, mule, bullock, camel or yak



What it is

'If I were a horse' is a new PRA tool specifically designed to put the animal and its welfare at the centre of community analysis and discussion. This tool is very popular in the communities where we work. It is used to identify animal welfare issues for intervention planning and monitoring.

Purpose

The purpose of the 'If I were a horse' tool (Figure T17) is to enable people to visualise life from the point of view of their working animals, asking the question: 'If you were a horse (or donkey, mule, camel, bullock or yak), what would you expect from your owner?'

It moves owners from looking only at animal-related resources and services, to looking at the animal itself and what its appearance and behaviour tells them about its welfare.

You can use this tool to help the group to:

- 1. Identify the needs of working animals the resources, services, environment and management practices that will enable them to have good welfare.
- 2. Analyse how far those needs are met by their owners and other service-providers
- 3. Analyse the effects on working animals when their basic needs are not fulfilled
- 4. Identify signs visible on the animal or behaviour that the animal shows when each of its needs are being met or are not being met (animal-based welfare indicators).

We often use this tool as the first step in participatory welfare needs assessment (Chapter 4, Phase 3). The animal-based welfare indicators identified by the group during the If 'I Were a horse exercise' can then be used as a basis for the Animal welfare transect walk (T22).



Step 2 Ask participants how far they think their animal's expectations are currently fulfilled. Draw another circle outside the first one and ask the group to score the extent to which their animals' expectations are met, using up to ten stones, beans or seeds.



St	ep 4	Make a fourth circle outside the others. This is used to identify how each effect from Step 3 would be seen on the animal, either as physical signs on its body or in the way it behaves (see Figure T17). Facilitate the group to analyse these behavioural and physical signs very thoroughly. What are the signs on the animal if its expectations are not met at all, or if they are met to a small extent? How do the signs change if the expectations are met to a greater extent or if the needs are fully met?
St	ep 5	Ask the group how all these behavioural and physical signs (animal-based welfare indicators) can be measured and recorded, including where to look and what to look for. Discuss the importance of measuring these signs and how this can help people to understand what their animals are feeling and what they expect or want from their owners.
St	ep 6	Ask the group to list all the behavioural and physical signs from Step 4 as symbols, pictures or words on chart paper, or in a ledger or register. Include the decisions on how they will be measured. Agree a time when the group will assess all their animals by doing an Animal welfare transect walk (T22) together.



- Encourage everyone to express their own views and avoid using only one person's examples or contributions for the diagram. Allow enough time to discuss participants' own beliefs and traditional animal management practices.
- Take notes of important management and work practices for further discussion and action.
- As an alternative to the diagram shown above, you can begin by showing the animals' expectations using pictures or symbols on the outer periphery of the circle and continue the exercise toward the centre of the circle.





Figure T17 'If I were a horse' diagram from Burana village, Muzaffarnagar, Uttar Pradesh, India (2009)

Figure T17 shows the completed 'If I were a horse' diagram developed by a group of animal owners in Burana village, Muzaffarnagar, Uttar Pradesh as the first step in a participatory welfare needs assessment (Chapter 4, Phase 3). They identified eleven expectations that their animals have of them as owners: no beating, a clean stable, watering 4 to 5 times a day, grain twice a day, supplementary green fodder, free movement (loose grazing) daily, less load, grooming and massage twice a day, timely treatment, farrier every 15 days and a monthly hair cut (to keep them cool). In the second circle they scored their present practices out of ten: they scored lowest on not beating and highest on stable cleaning. Through discussion the group identified the effects of not meeting their animals' expectations, including fear, lameness, weakness and wounds. Finally they identified where they would look for the specific behavioural and physical signs resulting from not meeting the expectations of their animals. These were recorded and used by the group to assess their animals during an Animal welfare transect walk (T22).

T18 How to increase the value of my animal



What it is

This is a new tool designed to link the welfare of a working animal to its financial value, in order to motivate action for welfare improvement.

Purpose

The How to increase the value of my animal tool (Figure T18a) helps animal owners to identify ways to improve the financial value of their animal by improving their management and feeding practices. It can be used to:

- Provide insight into the perceived value of working animals, which are often seen as less valuable than other livestock.
- Increase knowledge about what a healthy and happy animal should look like.
- Motivate people to take action to improve the welfare of their working animals.
- Develop animal-based and resource-based indicators of good welfare for monitoring improvements. These can then be used in an Animal welfare transect walk (T22).
- Initiate competition between animal owners, who often try to have the highest value animal or the biggest change in value from the starting point.

How yo	ou do it
Step 1	Start a discussion about the present value of working animals belonging to the group and their value at the time they were purchased. Ask the group to agree on values collectively. This usually involves a lot of debate in order to come to a consensus for each animal. Ask participants to list the name of each owner and the present value of each of his or her animals on a chart or a piece of paper (see Figure T18a, Step 1).
Step 2	Facilitate the group to identify which animals have the highest and lowest value and ask about the reasons for the values given. Participants may mention age, breed, size, character, health and other animal parameters, management or work-related issues and the preventive health or husbandry practices of the owner. List these on the chart or paper.
Step 3	When this list of reasons is complete, go with the group to visit each animal (this is an Animal welfare transect walk, T22). Encourage the group to agree the welfare status of each animal using the reasons or parameters that they have listed (see Figure T18a, Step 2). Discuss and agree the value of each animal again, based on the findings of the transect walk.
Step 4	Ask people individually about how much they would like to increase the value of their own animal in the future. Encourage each group member to decide on an action plan to increase the value of his or her animal, by improving the animal parameters and management practices identified. Finally the group should agree collectively on what the increased value of each animal would be if the action plan were implemented successfully (see Figure T18a, Step 3).
Step 5	Monitor progress on the individual action plans during each group meeting. Repeat the Animal welfare transect walk regularly with the group to see improvement in the welfare and value of each animal.



Figure T18a Steps in using the tool How to Increase the value of my animal

Case study N. Increasing the value of my working animal

Source: Dev Kandpal, Brooke India, Saharanpur, India, October 2008

In the village of Khurana, twenty people each own one horse which they use for transport of people and goods. After rapport-building by Siyanand, the community facilitator, the owners formed a Horse Welfare Group in 2007 and started to meet regularly. Siyanand wanted to motivate the group to improve the welfare of their animals and during one of their monthly meetings he initiated a discussion on the estimated value of their horses. This led to tremendous debate and discussion before the group came to a consensus on each animal's value.

Siyanand went on to ask the reasons for differences in value and why the cheapest and most expensive animals were given those values. That analysis enabled group members to describe which management practices increased the value of animals and which ones led to reduction in value. The group listed practices such as grooming, stable cleaning, hoof cleaning, hoof trimming, feeding, and beating. Siyanand then asked the question 'What can you see on the animal which tells you whether the owner is carrying out good management practices or not?' The group made a list of signs, including hooves trimmed and not cracked, eyes clean, shiny skin, no wounds on the girth and wither, and many others. They agreed that they could use their list to assess the present value of their animals. Then they went to see each horse and assessed its real status compared with the value they had given initially while sitting together, changing the value if necessary. Animals were given a score of good, medium or poor for each of the agreed signs. Once the assessment was completed participants made a summary, adding up the number of good, medium and poor welfare signs on each horse.

The group found that Balveer's horse, which was valued the highest, had six signs scored as 'good', eight as 'medium' and only one as 'poor'. The horse with the second highest value belonged to Manoj with ten body signs scored 'good', 'medium' and two 'poor' (see Figure T18b). This led each owner to analyse the welfare scoring system critically and think about its relationship to the value of his animal.

NAME OF OWNER	Present value of animal (Indian Rupees)	GOOD	MEDIUM	POOR
Prem	17,000	9	2	4
Balveer	25,000	6	8	1
Ram Kumar	18,000	6	5	4
Subhash	24,000	7	6	2
Balesh	11,000	7	4	4
Manoj	22,000	10	3	2
Pawan	11,000	7	7	1
Gurdas	18,000	3	6	6
Kuldeep	24,000	5	9	1
Herphool	10,000	7	0	8
Megh Raj	20,000	8	4	3

Figure T18b Analysis of animal welfare status compared to the present value of the animal, Khurana village, Saharanpur, Uttar Pradesh, India (October 2008)

Based on this, everyone agreed that they would like to increase the value of their own horse and decided the value that they would like it to have. Siyanand facilitated the group to help each person make specific action points that would increase the value of their animal. The group leader recorded all decisions and actions on chart paper and in the following monthly meetings the group used this chart to monitor their action points.

After six months the exercise was repeated: each horse was assessed again using the same body signs and its value was decided by the group. Owners saw an improvement in the welfare status of all the animals and valued all of them higher than before (see Figure T18c).

NAME OF	VALUE OF ANIMAL (INDIAN RUPEES)		
OWNER	Present Value	After 6 months	
Prem	17,000	20,000	
Balveer	25,000	28,000	
Ram kumar	18,000	22,000	
Subhash	24,000	28,000	
Balesh	11,000	15,000	
Manoj	22,000	25,000	
Pawan	11.000	15,000	
Gurdas	18,000	21.000	
Kuldeep	24,000	25,000	
Herphool	10,000	12,000	
Megh Raj	20,000	23,000	

Figure T18c Increase in the value of working animals due to welfare improvement, Khurana village, Saharanpur, Uttar Pradesh, India (October 2008)

This tool was named How to increase the value of my animal and has since been used to motivate many animal-owning groups to improve their animals' welfare. People's sensitivity towards their working animals and knowledge about animal needs also grows through peer pressure and through increasing the value of an important asset.

Facilitator's notes: How to increase the value of my animal

• We like to extend this exercise by encouraging the group to list the cost of the management changes needed to increase each animal's value and the time that will be taken to achieve this.



In our experience, groups review these action plans frequently, usually during every monthly meeting. They also physically monitor changes in their animals at least once a month by doing an Animal welfare transect walk (T22) because increasing the value of their animal is highly motivating.

T19 Animal feelings analysis



What it is

Animal feelings analysis is a new tool which looks at the working animal's experience of its own life. It analyses how the animal feels, or its 'mental welfare' (see Chapter 2). Examples include how happy, sad, relaxed, tense, depressed or frightened the animal feels, and how these emotions can be seen in its behaviour. This tool can be used on its own, or incorporated into the Animal welfare transect walk (T22).

Purpose

The Animal feelings analysis (Figure T19) has been developed specifically to bring out the mental aspect of animal welfare, because existing PRA tools do not cover this. Other tools in this section, such as 'If I were a horse' (T17) and Practice gap analysis (T21), look at the physical aspects of welfare such as food, water, shelter, disease and injury, and their effects on the animal's behaviour.

We have found that the Animal feelings analysis tool is very effective for:

• Sensitizing animal owners, handlers and carers to the fact that animals have feelings.

How yo	ou do it
Step 1	The Animal feelings analysis is best carried out in small or medium-sized groups. Start by discussing what activities or types of work their animals do for them. Where and when do they use their animals for these activities? How much do they earn from these types of work?
Step 2	Ask participants what they do for their animals to keep them healthy and happy. Agree on the various animal expressions, body postures and behaviours that they look at in order to understand how their animals feel. An example given by our communities is that working mules use the position and movement of their ears, the movement of their eyes and the position of their head and neck to show if they are happy or sad.
Step 3	Categorize these behaviours into a matrix, showing the combination of behaviours that indicate a happy animal, those that indicate a sad animal, and those that indicate neither happy nor sad (neutral feelings). In our example (see Figure T19), a happy mule holds its head and neck above the level of its body, with ears forward and eyes moving. If the head and ears are in a medium position it has neutral feelings. If its head and neck are held below the level of its back, with eyes nearly closed and ears back, the mule is sad.
Step 4	This exercise can be done during a group meeting as a sensitisation exercise on animal feelings, or it may be incorporated as part of the Animal welfare transect walk (T22). If you are using it as part of the transect walk, first carry out steps one to three above. Then develop a matrix with the agreed behavioural signs written along the top and the names of owners and their animals written down the side. You can use either numerical scoring or traffic lights to indicate happy (green), medium/neutral (orange) and sad (red). Go with the group on a transect walk to visit individual animals and assess their behaviour. Discuss the body language of each animal in detail, to build consensus among all the participants about how each animal feels.
Step 5	At the end of the transect walk, sit together again and discuss which factors cause or influence the feelings of animals, both positively and negatively, and the reasons for this. Summarize the findings and decide on action points for individuals and the group in order to make their animals feel happier. Agree on a date to repeat the exercise and monitor changes in animal feelings.

- Demonstrating that animals express their feelings through their behaviour, or 'body language', in a way that people can understand.
- Identifying the signs and symptoms that people use to assess the condition of their animals.
- Analyzing positive and negative factors influencing the feelings and behaviour of working animals and discussing how to improve negative situations.
- Creating individual and group motivation to improve welfare.

Facilitator's notes: Animal feelings analysis

- Behavioural expressions or body language may be different for different species of working animal. There may be more than one type of behavioural expression for the same feeling. Encourage participants to discuss this.
 - This exercise helps the group to appreciate that animals, like people, are sensitive and have feelings about what is happening to them at any particular time. It shows people that they can recognize how their animals are feeling. It motivates the group to care more about the effect of their own actions on their animals' feelings.

	HAPPY ANIMAL	MEDIUM ANIMAL	SAD ANIMAL
	(SA	m	P.
	BRIGHT EYES	eves half open	TEARS IN EYES
Downe	PLAYFUL & SHOWS AFFECTION	LITTLE PLAYFUL	SHOWING NO INTREST
ALA	STRAIGHT & UPWARD EVARS	EARS HALF WAY	EARS DOWN
1	MOVING TAILS	LESS TAIL MOVEMENT	NO TAIL MOVEMENT
N.	WILL TAKE FOOD	NOT SO INTEREITED	WILL NOT TAKE FOOD
AL	TALK	LITTLE TALK	NO SOUND TAK
Ag	ALGERT FACE	NOT WERY ALLERT FACE	DULL FACE
M	RAISED NECK (FROM BACKLEVEL)	NECK ON BACK LEVEL	DOWN NECK 3 FROM BACK LEVEL
<``.	FAT	Medium	THUN

Animal Feeling Analysis

Figure T19 Animal feelings analysis by mule owners in Khurampur village, Ghaziabad, Uttar Pradesh, India (2008)

As the first step in Participatory welfare needs assessment (Chapter 4, Phase 3) a group of mule owners in Khurampur village, Ghaziabad, Uttar Pradesh, identified nine indicators that they could use to assess happiness and unhappiness of their animals. All animals were scored collectively based on these indicators, with three pebbles for 'happy', two pebbles for 'medium' and one pebble for 'sad'. Only one animal scored three pebbles for all the behavioural signs assessed. The animal owners discussed why this mule was found to be so happy and most of the other animals were not. Based on the discussion the group agreed on several action points to make the other animals happier.

T20 Animal body mapping

Animal body parts map, animal body wounds map, animal-based indicators body map



What it is

A body map is a picture of the body of a working animal showing the parts of the body, their functions, and the body areas affected by wounds or diseases. It depicts the animal's body or a particular part of the body as it is perceived by individuals or the community group.

Purpose

Body mapping is a useful exercise to explore the different perceptions that people have about their animals' body parts and the roles and functions of each part, because these perceptions will affect how they deal with wounds, diseases and other welfare problems. It can also be used to identify local names for the parts of the body.

We have included three different examples that we often use with the community:

Animal body parts map (Figure T20a)

This basic map looks at parts of the body and how they are perceived. It can be used to ask questions about how the group feels that a normal, healthy animal should look. We find this to be useful in places where all working animals have the same welfare problems, such as being thin, because owners may perceive this to be normal rather than unhealthy. The body map can initiate a discussion about what appearance is normal for a healthy animal.

Animal body wounds map (Figure T20b)

This map specifically indicates wounds or injuries and their causes.

Animal-based indicators body map (Figure T20c)

This exercise is often used as a starting point for discussion about prevention of welfare problems, and discussion of first aid measures for particular diseases or injuries. It can also be used to lead into other exercises, such as:

- Identifying how animal owners would assess problems on each body part (animalbased indicators of welfare), in preparation for an Animal welfare transect walk (T22)
- Looking in more detail at some of the problems identified, such as wounds and diarrhoea, using the Problem horse exercise (T25)

How you do it				
Step 1	Ask participants to draw an outline of the body of their animal on the ground or on paper. Identify the different body parts and the local names used for each body part. Initiate a discussion on the roles and functions of each part. This is an Animal body parts map			
Step 2	Agree what to show on the body map depending on the focus of the discussion (see the variations above). For example, ask where people normally find wounds on the body, or how symptoms of particular diseases are seen on the body. Encourage participants to draw these on the body map or represent them using symbols next to the appropriate body part.			

Facilitator's notes: Animal body mapping

- In our experience, it is best to use the Animal body mapping tool in a less crowded place so that onlookers do not distract the attention of animal owners.
- You can also use this tool to discuss traditional beliefs about the animal's body parts.
- In India we have adapted this exercise into a 'Broken Horse' jigsaw puzzle. We initiate discussion about the body of the animal using a wooden jigsaw of animal body parts, which owners put back together to make a complete picture of the animal. This puzzle is also very successful for starting discussions about animal welfare with children.

Figure T20a shows a simple animal body map drawn on the ground by ten animal owners from Jalalabad village, using sticks and coloured chalk powder. The discussion was initiated with the question: 'What parts of the body do you look at when purchasing an animal?' Once the body parts were identified by all the members of the group, they were encouraged to describe the health problems that could affect each body part. The owners showed all the places where wounds were found and indicated the causes of the wounds, producing Figure T20b – an animal body wounds map. In a later meeting the two maps were brought out again and the group discussed what they would see on each body part if the animal were in a poor welfare state. This exercise generated a long list of parameters for assessing animal welfare (Figure T20c) and was used to score all the animals during an Animal welfare transect walk (T22).



Figure T20a Simple animal body parts map of a working horse, Jalalabad village, Saharanpur, Uttar Pradesh, India (2007)



Figure T20b Animal body wounds map, indicating wounds and their causes on a working horse, Jalalabad village, Saharanpur, Uttar Pradesh, India (2007)



Figure T20c Animal-based indicators body map of a working horse, Jalalabad village, Saharanpur, Uttar Pradesh, India (2008)

T21 Animal welfare practice gap analysis



What it is

Animal welfare practice gap analysis is a tool designed to explore current animal management practices and activities which prevent working animals from experiencing poor welfare. It also identifies any gaps in these practices and reasons for the gaps. It has been adapted from other tools (Jayakaran, 2007) specifically to put the animal at the centre of the analysis.

Purpose

The first two steps are the same as in 'If I were a horse' (T17). However, in Animal welfare practice gap analysis the causes or reasons for not fulfilling the animal's expectations are analysed in much more depth. This helps the community to make more detailed actions plans for addressing the underlying causes of poor welfare by improving their animal husbandry and management practices.

Animal welfare practice gap analysis can be illustrated using a circle format (Figure T21a) or a matrix format (Figure T21b).



How yo	ou do it
Step 1	Ask the group: 'If you were a horse (or donkey, mule, camel, bullock or yak), what would you expect from your owner?' This encourages participants to try to see the world from an animal's point of view.
	Draw a big circle on the ground or paper and draw the animal in the centre. If you carry drawings or models of animals with you, one of these can be put in the centre of the circle instead.
	Show all the expectations using pictures or symbols on the outer periphery of the circle (or on the innermost circle if you prefer to work outwards from the centre). Have a look at 'If I were a horse' (T17) for more detail.
Step 2	Ask the participants how far their animals' expectations are currently fulfilled by their current management and work practices. Draw another circle inside the first one and score how far the expectations are met using up to ten stones, beans or seeds.
	Here we find that people usually score according to the how much they can afford to make available to their animal. With the group, discuss and analyse the reasons for the low scores (the expectations which are not well met).
Step 3	After the scoring, initiate discussion and analysis of reasons for any gaps between the animal's expectations and the owner's actual management and work practices. This will bring out the reasons why the group cannot provide particular resources and services, or protect their animals from environmental or work factors which affect their welfare.
	Enable the group to identify the three or four most important factors (causes) responsible for the practice gaps. Put them into three or four more circles inside the first two (see Figure T21a).
	 They may identify reasons such as: 'We were not aware that animals had this expectation until we all started to discuss it'; 'We don't know how to meet this expectation';
	• 'We don't have the resources available to meet this expectation'.
	 We don't have time to meet this expectation'; 'It isn't our habit to meet this expectation or we don't prioritise it', described in Figure 21a as 'carelessness'.
Step 4	For each expectation, use the stones remaining (out of ten) from Step 2 to score the reasons for the practice gap given in Step 3.
	For example, if one of the expectations was 'If I were a donkey, I would expect good quality food', four stones out of ten may be scored for current fulfilment of this expectation. The remaining stones are then divided among the reasons for the practice gap: one stone for 'not aware', three stones for 'habit/carelessness' and two stones for 'no resources'.
	You will find that coming to an agreement on this scoring will raise a lot of debate among the group.
Step 5	When scoring of all circles is complete, ask the group to identify the most important factors responsible for the welfare of their working animals. Analyse possible options for improving welfare by addressing some of the practice gaps, either individually or collectively. Issues which the group agree to act upon may be taken forward for further analysis using the Animal welfare cause and effect analysis tool (T26) and the Community action planning process (see Chapter 4, Phase 4).



Facilitator's notes: Animal welfare practice gap analysis

- This exercise can take considerable time, so discuss this in advance with the group and agree on a suitable time to set aside for doing it.
- Encourage every one to express their own views and avoid bringing in your own examples. In our experience this tool has a high risk of introducing the facilitator's reasons for practice gaps, rather than focusing on the community's reasons. Take care to avoid it becoming a facilitator-driven exercise.





Figure T21a Animal welfare practice gap analysis carried out by donkey owners in Sona-arjunpur village, Saharanpur, Uttar Pradesh, India (2007)

A group of donkey owners from Sona-arjunpur, Saharanpur, Uttar Pradesh, analysed their current animal management practices. They identified fourteen practices that their animal would expect from them and scored the extent to which they currently carry out these practices. The highest scores were for provision of shade (a shed) in the summer and taking animals to graze in a group (six out of ten each). The lowest scores were for good quality fodder and not overloading (three out of ten each). For two practices, lack of awareness was identified as a contributing factor to gaps in implementation, and for eight of the fourteen good management practices there were resource constraints. However, carelessness (not being in the habit of doing it) was identified as a contributing reason for gaps in all the management practices. The group agreed to make these good practices a daily habit and to monitor each others' progress against their individual action plans.

PRACTICE GAP ANALYSIS

		CAU	ises of Gai	2
/	IN PRACTISE	RESOURCES	CARELESSNESS	KNOWLEDGE
NO				
NO OVERIDADING				••
PROTECTION FROM COLD		••••	••	
SHED IN SUMMER		••		
PREVENTION AGAINST SEASONAL DISE	SE	••	••	
RAISED FEEDING THROUGH		•		
CLEAN STADLE	•••••			
GROOMING			:	
GRAZING IN GROUP	•••••	••	••	
PROPER Rest			****	
HAIR CLIMING ON TIME	• • • •		••	
FARRIERING ON TIME	•••••	•••	••	
WATER ON TIME	•••••		•••	••
QUALITY FODDER	•••	••	••••	
	NO BEATING NO OVERIDADING PROTECTION FROM COLD SHED IN SUMMER PREVENTION AGAINST SEASONAL DISE RAISED FEEDING THROUZH CLEAN STABLE GROOMING GRAZING IN GRAZING IN GROUP PROPER REST HAIR CLIMPING ON TIME FARRIERING ON TIME WATER ON TIME WATER ON TIME	IN PRACTISE NO BEATING NO OVERIDADIN PROTECTION FROM COLD SHED IN SUMMER PREVENTION AGAINST SEASONAL DISE SE RAISED FEEDING THROUZH CLEAN STABLE GROOMING GRAZING IN GRAZING IN GROUP PROPER REST NAIR CLIPPING ON TIME FARRIERING ON TIME	CAU IN PRACTISE RESOURCES NO BEATING NO OVERIDADING PROTECTION FROM COLD SHED IN SUMMER PREVENTION AGAINST SEASONAL DISESE RAISED FEEDING THROUZH CLEAN STABLE GROOMING ON TIME PROPER REST HAIR CLIPPING ON TIME ON TIME WATER ON TIME OU WATER ON TIME OU CULAN STABLE CLEAN STABLE CLEAN STABLE CLEAN STABLE ON TIME ON TIME ON TIME ON TIME OU CLEAN STABLE CLEAN STABLE CLEAN STABLE CLEAN STABLE OU PROPER REST CLEAN STABLE STABLE OU STABLE	CAUSES OF GAN

Figure T21b Animal welfare practice gap analysis matrix, Saharanpur, Uttar Pradesh, India (2007)

This figure shows a similar practice gap analysis for animal welfare practices represented as a matrix rather than a circle. The exercise is carried out in the same way as described above.

T22 Animal welfare transect walk



What it is

The Animal welfare transect walk is adapted from the original transect walk (Kumar, 2002) and is used to assess the welfare status of individual working animals by visiting each household to look at both the animals and their environment. It is used extensively by the communities who have shared in the development of this manual and is one of the most important tools of our work.

Purpose

The Animal welfare transect walk can be used to assess welfare, by making direct observations of the animals themselves, or more commonly by looking at the animals, the resources in their environment and the owner's management practices (see Chapter 1). Transect walk findings are used to prepare intervention plans for individual animals after analysing the contributing root causes for any welfare problems identified. This is a key tool for exploring animal welfare conditions and the realities of resources available to working animals. It is also used for monitoring changes in welfare over time.



An Animal welfare map (T1) gives an overall 'bird's-eye' view of the animal conditions in a community, as described by their owners without the animals present. The Animal welfare transect walk gives a more complete and detailed view of animal welfare, with the animals present for the group to check and agree on, so it strengthens or triangulates the information from previous mapping exercises.

How yo	bu do it
Step 1	 Explain the purpose of the Animal welfare transect walk to the group and involve all participants in the process of decision-making about which indicators of good and poor welfare are to be observed. The observations of animals, resources and management practices may be developed from use of one or more of the following tools: Animal welfare mapping (T1); 'If I were a horse' (T17); How to increase the value of my animal (T18); Animal body mapping (T20); Animal welfare practice gap analysis (T21); Animal welfare monitoring criteria developed for individual or collective community action plans (see Chapter 4, Phase 4).
Step 2	 Once the group has decided which observations to make, agree how the observations and discussions will be captured or recorded and who will take responsibility for this. The Animal welfare transect walk is very useful for regular monitoring of animal welfare status, as well as for action planning, so the records should be readily available to the community in the future. Decide what symbols will be used to record the result of each observation. Examples from our experience include: Traffic light signals: good/best animal condition, resource or management practice is shown with a green dot, moderate/medium by a yellow dot and bad/worst by a red dot (see Figure T22a). Sometimes just red and green are used. A tick for good and a cross for bad. Symbols or colours to represent a specific problem, as agreed by the group. For example when recording whether the animal shelter is good or not, a dot of one colour is used for lack of shade, a different colour for a dirty floor and a third colour for a rough or uncomfortable floor. Scoring each observation using numbers (see Figure T22b)
Step 3	Decide whose animals will be visited and the route of the transect walk. Fix a time when the group will go on the walk. It is essential that the owner and family of each animal visited are present when the group is visiting his or her animal and the surroundings.
Step 4	On the agreed day, the group should walk the route together, visiting all the households where animals are kept and the surrounding areas to look at each animal carefully. Discuss the agreed animal welfare indicators thoroughly with all members of the group as well as the animal owners and carers from each household visited and agree a score for each one. The group will often wish to make additions and alterations to the agreed observations. Any animal welfare issues which have emerged from other PRA tools and exercises may also be discussed with the group during the transect walk.
Step 5	 After returning from the walk, ask the group to summarize and analyse their record sheets (see Figure T21a): Adding up the scores or numbers of red, yellow and green dots vertically will give a summary of the welfare problems of individual animals. This can be used by the group to formulate individual action plans for their owners. Adding up the scores or dots horizontally will give a score for the whole village or group for that welfare parameter. This can be used to formulate a collective action plan to reduce that welfare problem in the village. Come to a consensus on the animal welfare successes and problems and discuss possible contributing factors. Find out together whether there are workable opportunities to improve the current situation. These opportunities can be put into an action plan directly, or their causes and possible solutions may be analysed further using the Problem horse tool (T25).

Parts	Indicators	unar	Islam	ahi	0	they be	, sed	liona	Julia
100.00	Twisted Hoof	0	1.	2	1er	Pa	San	We	W
LEGS	Swelling Hind	0	0	0	0	10	10		0
11	Foot Canker	0		0	0	10	10	-	-
)]	Injury/wound		0	0	0		0		
1	Lameness	0		0	0		0		0
	Stift Legs	0	0	0	0		0		
EYES	One Eyed	0	0	0	0	0	0	0	0
wery .	whitness of Eye	0	0	0	0	0	0	0	0
	Tears	0	0	0	0	0	0	10	0
	wound	0		0	0	0	0	0	•
ENDE	CutorBroken	0		0	0	0	0	0	
LARS	Dumb	0	0	0	O	0	0	D	
M	Proppings From	0	0	0	0	0	0	0	0
	Fever	0	0	0	0	0	0	0	0
MOUTH	Teeth for Age Determination	0	0	0	0	0	0	0	0
	Flat tongue	0		0		0	0	0	0
0	Like Snake	0	0	0	0	0	0	0	0
	Cut	۲	0	0	0	0	0	0	٠
	Suffocation	0		0	0	0	0	0	
	Hair round on Fore head	0	۲	0	0	0	0		0
BACK	Wound	0		0	0		0		
-mann	Equal back	0	0	D	10	0	0		0
	Broken bone	0	0	0		0 0	0	0	0
TAIL	wound	0	10	0		0 0	0	0	0
1	Fatty			10		0 0	0		
Chille and	Maggots	D		C		00	10		D
STOMACH	Ribs	0	10				0	0	0
5	wound	0		10		0 0	10		-
V	Bigbelly	0	Ø		0	01	DIA	10	1
	Low Fat	0	10	1.1	DI	010	0 0	10	10

TRAFFIC LIGHT

Figure T22a Animal welfare transect walk recording sheet using traffic light signals, Unnao, Uttar Pradesh, India (2009)

A horse-owning community in Unnao, Uttar Pradesh, carried out an Animal welfare transect walk using traffic lights to score 30 animal welfare indicators that they had identified during their previous discussions and exercises. After the walk the owners sat down together and analysed the score for each individual animal by summarizing the vertical columns on their recording sheet. Mena's horse was found to be in the worst condition, with 12 red ('bad') marks, followed by Islam's horse which had 11 red and two orange ('medium') welfare issues. After looking at all the individual animals, the group then summarized the horizontal rows to find out which welfare issues were most common in their village. Leg injuries and wounds were the biggest problem in their community, with four animals marked red and two more marked orange. The group followed this exercise with a Root cause analysis (see Chapter 4, Phase 4 and T25 and T26) and a community action plan for immediate action by individual owners and collectively.

OWNEVS	Equine Type	Statusof Animal	Firing	wound	Body	00 Hair clipping	Eye/Moud	stable	Manger	Water	Hobbling	Fast	TOTAL
Mahendra	Mule	10	10	10	5	10	5	10	10	5	5	10	90
Puran	Mule	5	10	5	5	10	5	10	10	8	5	10	83
Prahalad	Horse	5	10	5	S	10	5	10	10	8	5	5	78
Kallu	Horse	5	10	5	5	10	5	10	5	5	5	5	70
Bablu	Horse	5	10	10	8	5	5	10	10	7	5	10	85
Netar	Mule	0	10	0	5	10	5	10	5	0	5	5	55
Dharampal	Horse	5	10	6	10	10	10	5	5	5	5	10	91
Ravi	Mule	5	10	7	5	10	5	10	2	5	5	10	74
Pappu	Mule	10	10	5	5	10	5	10	10	10	5	10	10.
Sher Sinah	Horse	5	10	8	0	8	5	10	1	-	-		90
0	Mula	110	10	1 14	1 10	1.	1.	1.0	10	18	5	2	74
Kanveer	male	10	1 10	10	10	10	10	10	18	18	19	10	103

Figure T22b Animal welfare transect walk recording sheet using numerical scoring, India (May 2008)

The Dhanoura village community group (Bulandsahar, Uttar Pradesh) went on an Animal welfare transect walk and scored 11 animal welfare indicators out of a maximum of 10 marks each. Ranveer's mule was in the best condition, scoring 103 out of 110 overall, and Netar's mule was scored the lowest, at 55 out of 110. They also identified the overall status of animals in the village by adding up the scores for each column (not shown in this illustration), with the lowest scores representing the most common welfare problems. The lowest scoring problem overall was hobbling (scoring 55) followed by cleanliness of body (63), body condition (65) and eye and mouth cleanliness (65). After this exercise the group carried out a root cause analysis of the four animal welfare problems with the lowest score using the Animal welfare cause and effect analysis (T26) and went on to develop a community action plan for animal welfare improvement (see Chapter 4, Phase 4).

Facilitator's notes: Animal welfare transect walk

- Transect walks look in detail at the group's real experiences of animal welfare conditions, the existing use and availability of resources and the animal management constraints being faced by the whole community and by individual animal owners.
- Usually we meet on one day to agree all the observations and processes for walking and recording. The transect walk is carried out on another pre-determined day to suit the community.
- If there are large numbers of animals, carry out the same exercise over several days so that all animals or a representative number of animals and households are covered.
- Animal welfare transect walks may be repeated at regular intervals and the results compared with previous walks. This enables the group to monitor and evaluate changes in the welfare status of individual animals, changes in their owners' management practices and changes in the animal-related resources available.

T23 Three pile sorting



What it is

With Three pile sorting, cards are used to enable a community group to sort and discuss animal management and work practices according to whether they are seen as good, bad or neutral for animal welfare. It is adapted from a previous card sorting tool (Rietbergen-McCracken and Narayan-Parker, 2006).

Purpose

Three pile sorting is used to explore participants' understanding and perspectives on any animal welfare issue and to provide a starting point for problem analysis and action. For example, you might ask which management issues are commonly found in the community, whether they are good or bad and what might be done to reduce the effect of poor welfare practices. Issues such as putting animals to work at an early age, firing or branding and overloading may be addressed using this tool. Where management practices are seen as neither good nor bad, the group might discuss why this is so. We have also used it to analyse perceptions about animal diseases and their symptoms, causes and prevention.



How yo	ou do it
Step 1	For this exercise you need to prepare beforehand. Make a set of set of cards showing animal welfare or management practices which can be interpreted as good, bad, or in-between (neutral). These should be based on problems previously identified by the community during exercises such as 'If I were a horse' (T17), Animal body mapping (T20) or Animal welfare practice gap analysis (T21). Common negative practices which could be illustrated on the cards include beating animals, overloading, not offering water, incorrect feeding and lack of care for wounds.
Step 2	Organize participants into groups of no more than seven and ask each group to form a circle. Give a set of cards to each circle and ask for two or three volunteers to sit in the centre of the circle and sort the cards together. They should place each card in one of three piles: representing good welfare or management practices, bad welfare or management practices, and in-between or neutral practices (or practices where there is uncertainty or disagreement).
Step 3	After the cards have been sorted, ask the volunteers to arrange them so that each card is visible to the whole group. Encourage debate between participants to challenge their choices and analyse all aspects of their decision. Enable participants to understand why a particular practice may be better or worse for animal welfare.
Step 4	Ask the group to identify which of the animal welfare issues or management practices are occurring in their own village, especially the ones they have identified as bad. This discussion can be used to enable participants to identify priority welfare problems and to propose potential solutions or action to be taken.



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Facilitator's notes: Three pile sorting

- It is important that you to enable the group to bring their own perceptions and use their local terms for management practices, diseases, pain and animal suffering.
- The game can also be played using photographs representing the existing situations in the village. This needs advance preparation.
- Another variation is to ask participants to sort cards according to different types of animal welfare issue they have experienced, such as i) issues directly related to animals ii) issues related to service providers and other stakeholders and iii) issues related to animal owners, users and carers.

T24 Animal welfare story with a gap



What it is

This tool uses a 'before and after' story to stimulate discussion about how to change from a situation of poor animal welfare to a situation where welfare is improved. It is adapted from a similar tool (Rietbergen-McCracken and Narayan-Parker, 1996).

Purpose

Animal welfare story with a gap uses a pair of pictures, one showing a 'before' situation relating to a working animal and the other showing an 'after' scenario where the animal's welfare has improved. For example, the 'before' drawing might show an animal being beaten to make it work, and the 'after' could have the same animal being worked using only voice commands. Participants discuss both drawings and fill in the gap in the story by identifying the steps that would need to be taken to achieve what is represented in the improved picture.



How you do it					
Step 1	For this exercise you need to prepare the pictures beforehand: use drawings or photographs of existing animal management situations or practices in the community.				
Step 2	Divide the participants into several small groups and give each group the same set of 'before' and 'after' pictures. Ask each group to begin by considering the 'before' picture, such as a picture of a working animal with wounds, and to discuss why the situation has occurred. Next, ask each group to discuss the 'after' scene of the improved situation, such as an animal with fewer or no wounds. Then ask the groups what steps they think they might take to get from the 'before' to the 'after' scenario (in other words how they would fill the gap in the story), what obstacles they might have in their way, and what resources they would need to do this.				
Step 3	Bring the different groups together and ask each group to tell the stories they have created. Encourage the groups to weigh the benefits of each suggestion for welfare improvement and discuss more ways to overcome the obstacles.				

Facilitator's notes: Animal welfare story with a gap

- Your facilitation of the discussion of 'before' and 'after' scenarios should ensure that the animal welfare context is clearly shown.
- More interpretations and suggestions can be gathered by dividing the participants into several small focus groups (for example of women and men, young and old people, or other categories) and giving each the same set of pictures. After analysing the drawings, the focus groups can come together to report on their discussions and compare their views.



T25 Problem horse

... or donkey, mule, bullock, camel or yak



What it is

Problem horse is a tool that we have adapted from the Cause and effect diagram (T26) in order to carry out a Root cause analysis of animal welfare problems. The original version is described in *Methods for Community Participation* by Somesh Kumar (see the further reading and reference list).

Purpose

The Problem horse exercise (Figure T25) enables a group to identify the welfare issues affecting different parts of an animal's body and to recognize the relationship between each welfare issue and its possible causes. The first step is the same as Animal welfare body mapping (T20).

How yo	ou do it
Step 1	Ask participants to draw a large animal shape on the ground or on a piece of chart paper. Help them to identify welfare issues related to each part of the body and draw them on the picture of the animal. In the illustrated example below (Figure T25) the group identified watering eyes, colic and wounds on the hind leg, belly, girth and under the tail.
Step 2	Choose any one of the welfare issues identified in Step 1. Encourage participants to discuss the causes of the problem and draw or write the causes near the relevant part of the animal's body. Analyse each welfare issue in depth by repeatedly asking 'why?' questions. For example: 'Why does the animal get that wound?' - 'Because of the leather belt on the harness' 'Why does the leather belt cause the wound?' - 'Because it is not cleaned and oiled' 'Why is the belt not cleaned and oiled?' - 'Because we don't have the time' 'Why don't you have the time?' and so on, until the group reaches the deepest root causes of the welfare problem and cannot go any further. When one welfare problem is complete, take up the next one and repeat the questions until root causes are drawn or written next to all the problems shown on the body of the animal.
Step 3	As the discussion progresses and all the causes are identified, analyse any links or relationships between different causes and show these using lines or arrows (see Figure T25).
Step 4	Enable the group to identify the most important causes and use an exercise such as Matrix ranking (T9) to prioritize them.
Step 5	Discuss what action the group can take to tackle the causes of each priority welfare issue. If they are unable to remove the cause, ask whether there are measures they can take to reduce its effect on their animals. Encourage them to draw up a community action plan to deal with these (see Chapter 4, Phase 4).



Figure T25 Problem horse diagram, Kharkoda village, Meerut, Uttar Pradesh, India (2007)

This diagram was made by a group of animal owners from Kharkoda village, Meerut, Uttar Pradesh. First, the group discussed the problems affecting each part of the animal's body, then they analysed the problems in depth to find their root causes. The group found that wounds on different parts of the body have different causes, but there are also causal factors which are common to more than one body area, such as bad road conditions and the way that ropes are tied. Wounds at the back and wounds on the chest were found to be inter-related. The group drew up collective plans for action to address some of the root causes identified during this exercise.

Facilitator's notes: Problem horse In India we have used a 'broken horse' jigsaw puzzle as the starting point for this exercise. We initiate discussion about the body of the animal using a wooden jigsaw of animal body parts, which owners put back together to make a complete picture of the animal. This exercise needs a lot of patience and questioning in order to enable the deepest causal factors to come out of the discussion. We sometimes find that owners return to the Problem horse (T25) tool (or other root cause analysis tools such as the Animal welfare cause and effect analysis T26) when they have implemented an action plan and it has not succeeded in creating the expected welfare improvement. This leads the group to reflect on their analysis and ask whether they have missed any important root causes (see Chapter 4, Phase 5).

T26 Animal welfare cause and effect analysis



What it is

A cause and effect analysis is a visual representation of the relationship between the causes and effects of a specific animal welfare issue. The diagram used is sometimes called a problem tree, with the causes depicted as roots of the tree and the effects as branches of the tree. We have adapted this tool from its original use (Kumar 2002) to represent relationships between the community and particular individuals or institutions.

Purpose

The Animal welfare cause and effect analysis (Figure T26) is used to analyse an animal welfare issue or problem by identifying the complex contributing factors and any relationships between these factors, as well as their effects on the animal and its owner, users and carers.

In the context of working animals we often use this tool to identify the causes of welfare problems such as wounds, overloading and hobbling and to discuss the effects of these welfare issues on the animal and its owner or user. For example, discussing the causes of wounds on specific parts of a working animal's body may highlight causal factors such as the structure or cleanliness of the harness, the size of saddle tree or the design of the cart. Effects on the animal could include pain, weight loss and reduced working capacity. Effects of these animal wounds on the owner could include less income (from reduced work and increased expenditure on medicines) or lower status in the community.

How yo	u do it
Step 1	Ask the group to list the animal problems or issues that they have identified using other exercises, such as Animal body mapping (T20), Animal welfare practice gap analysis (T21) or the Animal welfare transect walk (T22). If there are too many problems to analyse in one meeting, rank them using Pairwise ranking (T8) or Matrix scoring (T9) to agree on the most important item(s) for an Animal welfare cause and effect discussion.
Step 2	Draw a circle on the ground or on paper, putting one welfare problem in the centre. Ask the group about the major factors which cause this particular problem. Identify the major causal factors and show them outside the circle using symbols, pictures or words. Connect these to the problem with arrows.
Step 3	Take up one particular causal factor and ask participants why this happens. The group will start to discuss the sub-causes which contribute to this major cause. Show these sub-causes outside the major cause, connecting them to the major cause with arrows (see Figure T26). For each sub-cause, again ask the question 'And why does this happen?' Keep asking the question and adding sub-causes, branching out like the roots of tree, until the group reaches a stage where no further answers can be found.
Step 4	When all causal factors are analysed and discussed, ask participants to identify the effect of the welfare problem on the animal and its owner. Draw two circles, one representing the animal and one for the owner, and connect these with the problem identified (see Figure T26). Draw the effects around the animal and owner circles, discussing each in depth.
Step 5	Work out which are the most important causal factors contributing towards this animal problem through discussion or by using Pair-wise ranking (T8) or Matrix ranking (T9). Encourage the group to develop a community action plan to tackle these causal factors and improve their chosen welfare problem.
Based on their analysis, the community can decide on appropriate action to improve the welfare problem and develop a community action plan containing both individual and collective actions. This tool also helps to sensitise and motivate the community to act on welfare issues which were not initially recognized as important for animals.



Figure T26 Animal welfare cause and effect diagram for wounds on the back, Ghaziabad, Uttar Pradesh, India (2007)

This diagram is the output of an Animal welfare cause and effect analysis by a group of horse owners working in a brick kiln in Ghaziabad, Uttar Pradesh. They were particularly concerned about reducing wounds on their animals' backs. Five major causes were initially identified: poor cart balance, bad road conditions, an improper saddle, beating and careless driving. These were analysed further to reach to the root causes. The effects of back wounds on the horses were seen as weakness, low appetite, pain and reduced ability to carry loads. The effects on the owners were found to be lower income, higher expenditure on treatment and always feeling tense. The group went on to take action on the root causes which were within their influence, by checking tyre pressures on the brick carts, driving more carefully and cleaning their saddles regularly.

Facilitator's notes: Animal welfare cause and effect analysis

- This exercise can take considerable time, so discuss this in advance with the group and agree on a suitable time to set aside for doing it.
- Avoid using your own examples and encourage everyone to express their individual views. Allow enough time for participants to discuss their experiences.
- This exercise needs lot of patience in order to facilitate the deepest causal factors to merge from the discussion.

T27 Analysis of animal feeding practices



What it is

The Animal feeding practice analysis tool is used to study feeding practices in depth. The analysis integrates the community's knowledge with the knowledge of an external expert, such as a veterinarian or animal nutrition specialist.

Purpose

In our experience many working animals are thin and community groups identify feeding as one of their major concerns. Root cause analysis often highlights difficulties in finding enough animal food of good quality and nutritional value; the high cost of animal feed and fodder is also a concern. Animal feeding practice analysis (Figure T27a) enables participants to look closely at their existing feeding practices and develop a low-cost balanced diet for their animals, based on feed and fodder that is locally available.



How yo This exe	ou do it ercise needs a veterinarian or animal nutritionist to join the group during Step 2, which should be
arrange	d in advance.
Step 1	<i>Identifying current animal feeding practices</i> Seasonal analysis (T6) can be used as the basis for identifying current feeding practices. Ask group members to list the types of feed they give to their working animals (using local names) and represent the quantity fed in a month using stones or seeds. Then add a new row to identify the cost of animal feed per day in each season. Alternatively feed costs could be listed in a separate grid, as shown in Figure 27a, Illustration 1.
Step 2	Identifying the nutritional value of each type of feed Develop a table or a circular diagram as shown in Figure 27a, Illustration 1. Enable the group to identify the purpose of different animal feeds by asking a question such as: 'What does this feed do in the animal's body?' Answers such as 'power for work', 'helps good digestion' and 'for filling the belly' are drawn or written on the diagram. Invite the veterinarian or animal nutritionist to join the group at this stage and provide technical input on balanced feeding using locally available feed ingredients (Figure T27a, Illustration 2).
Step 3	Identifying the feed requirements of working animals Ask the group to discuss whether they should provide equal quantities of a specific feed to all their animals or whether different animals need different amounts of each feed. Ask whether the amount that they feed their working animals is the same in all seasons or if it varies between the peak working season and the off-season. With the help of the veterinarian or animal nutritionist, develop a table showing feeding requirements for working animals, including factors such as body weight and work load.
Step 4	Developing options for balanced feeding Based on the requirements of their individual animals, the nutritional value of local ingredients and the feed costs, enable the group to search for several options for feed mixtures that are available, affordable and have appropriately balanced ingredients.
Step 5	Developing individual action plans Ask the group to decide on one of the feed mixtures for each animal, according to its owner's preference, and to experiment with feeding the new balanced feed mixture for a few months (see Figure T27a, Illustration 3).
Step 6	Monitoring the effects of the new diet Ask group members to decide on the indicators they will use to judge whether the new diet is successful; for example reduced visibility of the ribs, improved thickness in the neck and back region and not getting tired easily. Owners should provide feedback during their monthly meetings and discuss their findings, adjusting each animal's diet according to its effect on the indicators that they have chosen.



Facilitator's notes: Analysis of animal feeding practices

- This exercise can take considerable time, so you should discuss this in advance with the group and agree on a suitable time to set aside for doing it. Sometimes we divide it over two sessions to include all feeds and aspects of feeding practice.
- Facilitate the group to recall all the types of feed that they use in a year. We find that at first they only include the feeds which they are giving in the present season.
- Ensure that the veterinarian or animal nutritionist is sensitive to the constraints affecting animal owners and knows about local feeds which are not too expensive, complicated or difficult to obtain.





WH	AT DOES	5 FEED C	O IN TI	HE BODY
1	1 and a	LINER D	VIEW	>
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Time			X	Lanes Proc
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	1	- BOLY	1	

WHAT (FEDD)	AMOUNT	TOTAL EXPENSE (RUPEES)
WHEAT STRAN	4 *6	20
CHURRIE SCREANUM SUDANEST. CR MARE OR MIXOU BOTH	2.46	24
WHEAT BRAN	2 86	22
ORBEN ORASS	20. 40	20
MIX OF SPICES	91	1s
TOTAL COST	1.000	101

TECHNICAL PRESENTATION BY VET

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PADDY STRAW		1		1	~	
RICE BRAN	1	1.5		V	1	
BARLEY	1	1	1	10.000	1.1	~
OAT	1		1		1.000	1
GRAM	1		1			1
MOLASSES	1			1		1
CLARIFIED BUTTER	V		1111	1	1	1
MUSTERED OIL	1		1.2	1		1
MILK		1	1			1
BREAD		1	1.5	1		1



Figure T27a Process steps in the analysis of animal feeding practices

Case study O. Workshop on animal feeding practices with village leaders



Source: Kul Bahadur Fagami (Kamal) and Navneet Kumar, Bulandsahar, Uttar Pradesh, India, January 2009

In January 2009, 26 participants from 14 working equine welfare groups attended a workshop for animal welfare group leaders in Bulandsahar. The leaders had asked for the workshop in order to analyse their current animal feeding practices and generate a cheap and balanced feed for working

horses, mules and donkeys. The session started with a discussion on the topic: what is needed to ensure working animals have a happy and healthy life? Group members listed food, water, shelter, clothing (blanket), exercise and rest in between working periods.

This was followed by the question 'What are the things which most affect the life of an animal?' The group listed:

- feed and fodder;
- shelter;
- water.

Next they were asked: 'Which one is most expensive?' The group responded:

- water is available free of cost;
- shelter requires a one-time investment;
- feed and fodder require a daily investment, so they are most expensive.

The fourth question was 'Why do we feed our animals and why is the food important?' which resulted in a list of what food does in the body: supplying power, maintaining the body and filling the stomach. Participants were divided into groups and asked to sort all the feeds they used during the year into these three categories. At this stage a veterinarian joined the meeting and presented technical nutritional information about the feeds listed. The group compared the vet's presentation with their own lists and some discussion followed. With more help from the vet, participants determined the concentrate and fodder requirements for animals of different body weight and with different work loads.

In the last session of the workshop, the group discussed the basic principles of good feeding practices and were placed in groups again to formulate an improved feed mixture according to their new and shared knowledge. This was more balanced and cheaper than the mixtures that they were feeding originally (see Figure T27b).

FEED INGREDIENTS	PURPOSE	QUANTITY (KO)	COST (KG) (RUPEES)	TOTAL COST (RUPEES)
GRAM	Protein	0.50	30	15
CHANACHUNI	Protein	0.75	13	10
BARLEY	Energy	0.50	7	3.5
OAT	Energy	1.50	20	30
WHEAT BRAN	Energy + Bulk	1.00	10	10
CURD	Energy	0.25	2.0	5
VEGETABLE OIL	Energy	0.50	60	3
SALT		0.50	3	1.5
TOTAL		5.50		78

Figure T27b Balanced diet for working animals formulated by a group of village leaders, India (January 2009)

Several group leaders were very enthusiastic but others were a bit sceptical and wanted to try the new diet on their own animals before involving other members of their group. At the end of the day it was agreed that they all would offer the new feed mixture to their own animals for two weeks. If it was successful they would conduct a meeting to introduce it to group members.

The feedback received by the workshop organizers after two weeks was very positive. Twenty group leaders had tried the new feed and saw improvement in their animals. Several went to visit other group leaders to look at their animals and see if the new balance was successful. Most of these group leaders have started to sensitize their own group members to the new feed and have requested support from the vet to provide more technical input for individual animals.

T28 Village animal health planning



What it is

The Village animal health planning tool uses a combination of the tools in this toolkit to explore and address specific health problems affecting working animals.

Purpose

Village animal health planning is a flexible process which uses several tools to enable the group to gain a deeper understanding of animal health problems, including patterns of disease occurrence, causes, symptoms, treatments, disease-related expenses, recovery rates and preventive measures. This leads to a community action plan for improving animal welfare by preventing or reducing the effects of common injuries or diseases. If the village is affected by a disease outbreak or a specific animal health issue, health planning may be a good starting point for other welfare-promoting activities.



How you do it

Process box 10 below lists the tools which we use for the Village animal health planning, in the order we usually use them. However they can be carried out in any sequence based on your judgement and the particular needs of the community. You will see that we have suggested focusing some of these tools more closely on health issues than you would do if using them for more general animal welfare improvement purposes. Case study P below illustrates a real example of the process. Our field teams have made many adaptations to this process to make it fit the specific needs of the communities that they work with.

This is only a short introduction to the benefits and process of the Village animal health planning tool. A more detailed booklet will be published in the future.

Process box 10. Tools for village animal health planning

Historica Historical

Historical timeline (T7)

Historical events related to working animals in the village or wider locality and the diseases or epidemics that have affected them.

Changing trend analysis (T11)

Analysis of changes in the working animal population, feeding practices, nature of their work, occurrence of diseases, mortality rates, treatment practices, availability of animal health services and medicines, treatment costs, design of carts and harnesses.

Animal disease mapping (T1)

Mapping of households, including the number of working animals in each household, present health status, past occurrence of disease (for example during the last two years), location of veterinary services and medicine shops.

Animal welfare transect walk (T22)

The group discusses disease or health problems with their potential causes and possible sources of contamination or spread. Then participants visit each animal and identify any signs of disease on each animal and its causes in the environment. A discussion on the immediate and long term actions needed for prevention often follows straight away.

Seasonal analysis (T6)

Analysis of the occurrence of various diseases in particular seasons or months of the year.

Matrix ranking (T9)

Ranking of diseases and injuries according to their importance, in terms of their severity and frequency of occurrence.

Matrix scoring (T9)

Scoring of animal diseases and injuries against their common symptoms, causes, numbers of animals affected, mortality, severity, recovery rates, loss of working time, loss of working efficiency and loss of income or increased expenditure.

Problem horse (T25) or Animal welfare cause and effect analysis (T26)

Analysis of the causes and effects of a specific disease or health problem prioritised by Matrix ranking or Matrix scoring.

Analysis of present animal treatment practices

What do we do when our working animal gets ill? Use the grid below (or a similar one according to participants' choice) to discuss who treats which disease, recovery times, disease-related expenses, number of cases and the success rate of treatment.

DISEASE	TREATED BY	NUMBER OF DAYS TO RECOVER	TOTAL EXPENSE	NUMBER OF CASES TREATED IN LAST 1-5 YEARS	SUCCESS RATE
TRYPANOSOMIASIS					
TETANUS					
LAMENESS					
WOUNDS					
COLIC	2 CE - 12	1	-		

Figure T28a Village animal health planning: matrix of present treatment practices

Village action planning

Development of an action plan for immediate and long term disease prevention and treatment (Chapter 4, Phase 4).

Case study P. Village animal health planning

Source: Murad Ali, Brooke India, Jaisinghpur, Meerut, India, September 2009

Mukesh Kumar, an animal welfare facilitator in Meerut district, visited Khandawali village in September 2008. One owner brought his horse with the complaint that it was sick. He had consulted other animal owners but they did not know what it was suffering from. Mukesh called the veterinarian and the horse was diagnosed as suffering from equine influenza, a highly contagious disease. All the village horse owners realized that other animals were also affected so they held a meeting to discuss the disease.

They started by drawing a map of the village and used symbols and arrows to show the first animals with influenza and the way it had spread, such as by direct contact with diseased animals in vegetable markets, drinking water in a communal water trough and grazing with affected animals in village. The owners categorised the severity of each animal's infection using Matrix scoring of their disease signs, such as looking dull and depressed, having fever, a discharge from the nose and a dry cough.

There were still some animals in the village which were not showing signs of influenza. During the discussion it was found that those animals either did not work, or did not graze with other animals. A list of preventive actions was developed for all owners to follow, including use of individual water buckets, cleaning of stables and keeping diseased horses away from other horses while grazing. Several owners took responsibility for monitoring implementation of these preventive actions every second day. The group agreed to meet once a week to monitor whether fewer animals were showing signs of influenza.

During a later visit to Khandawali village, the animal owners told Mukesh that they felt particularly vulnerable to animal diseases and asked him to work with them to prevent disease, improve their treatment practices and in this way save money as well. During the day the horse owners were busy working at the brick kiln, so Mukesh agreed to meet them every evening for two to three days in order to start the process of Village animal health planning. The first meeting started with a disease-related Historical timeline to identify which animal diseases occurred in Khandawali during the last five years. The diseases were then scored for severity (the number of animals which had died in five years) and frequency (how many times the disease had happened in five years). Six diseases or health problems were listed in order of priority: surra (trypanosomiasis), tetanus, lameness, wounds, breathing problems and colic (abdominal pain).

The group of owners discussed the symptoms and causes of these diseases and health problems and realized that many of them could be prevented by good management practices. They invited local health providers to be part of this discussion and identified their own present practices for disease prevention and treatment and the practices of the local healer, medical store and private and government veterinarians. This discussion initiated an in-depth analysis of who does what, the recovery times, costs, and success rates of each treatment.

Based on this detailed situational analysis, the group developed a community action plan containing three types of intervention: short term, medium term and long term (see Figure T28b). They have used this to prevent wounds, infections and colic, identify diseases early and negotiate reduced prices for vaccination and treatment of their working horses.

	DISEASE	ACTION	MONITORING	
SHORT TERM ISSUE	WOUNDS LAMENESS COLIC INFLUENZA	 Regular transect walk to monitor welfare and identification of diseases Community medicine kits Two members of group monitor influenza on weekly basis 	Analyse transect walk recording charts at monthly meeting Group leader Keeps record of community medicine Kit Keeping treatment records in the group and analyse during monthly meeting Initiate immediate action if required and report in monthly meeting	
MEDIUM TERM ISSUES	TETANUS, RABIES and TRYPANOSOMIASIS PREVENTION	- Community led immunisation/ vaccination plan - Agree on community sanitation such as spray of lime and fly prevention	 Check vaccination records every 3 months in group meeting See action during transect walk 	
LONG TERM ISSUES	Firing done by local healer High treatment Cost of local doctor Availability of Government doctor	-Capacity enhancement healer request Brooke for Support - Negotiate with local doctor as a group reasonable prices - Availing services from Government veterinary hospitals	•Through transect Walk monitoring Cases of firing	

Figure T28b Village animal health action plan, India (September 2008)

References and further reading

This list of references and further reading includes materials on community participatory approaches, community outreach methods, animal welfare and working animals. References are organized according to the chapters where they are cited, with a general further reading list at the end.

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The Brooke is a leading UK animal welfare charity dedicated to improving the lives of horses, donkeys and mules working in the poorest parts of the world. There are an estimated 100 million working equine animals in the world and they are often the only source of income for many poor families, who depend on their working animal to survive.

The Brooke – along with our partner organizations worldwide – supports mobile veterinary teams and community animal health workers who provide treatment to working animals and advice to their owners. Our community engagement specialists build the capacity of animal owners, local healers, farriers, saddlers, feed sellers, harness- and cart-makers to look after their animals' needs in a sustainable way. We currently operate across 10 countries in Asia, Africa, Central America and the Middle East. We have over 800 staff working directly in the field.

In 2009 we reached 730,000 working horses and donkeys – benefiting over 3.7 million poor people who depend on them. Our goal is to improve the welfare of two million animals every year by 2016.

For more information about the Brooke please visit our website: www.thebrooke.org

