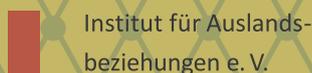


# Holistic Grazing Planning and Reciprocal grazing agreements approach

Enhancing sustainable Natural Resource Management in Pastoralists Dry lands areas



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Enhancing sustainable Natural Resource Management in Pastoralists Dry lands areas

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### Part 1: Holistic Management - Field Manual & Application.

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### Part 2: Shared resource use practices in pastoral areas-Reciprocal grazing agreements approach

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2012

### **Disclaimer:**

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## Foreword

This book is divided into two parts. The first part (Holistic Management - Field Manual & Application) has been designed as a field manual that has captured the main elements of holistic grazing planning so that it may be taught and implemented easily in field situations for pastoralists. It highlights the benefits of holistic grazing planning. Pictures, illustrations, and hands-on exercises have been used to convey the information. Ten topics have been identified to help users of this book appreciate the importance of Holistic Management (HM) Approach. It further provides practical experiences with regard to the application of the HM approach among the Dasanach Community in Kenya.

The second part of this book highlights the importance of shared resource use practices in pastoral areas using the Reciprocal Grazing Agreements (RGA) Approach. It is envisaged that users of this book will learn from experiences highlighted herein with regard to developing the RGA. It is our hope that this book will be invaluable to individuals and organisations supporting the livelihoods of pastoralists.



## Background information on the socio-economic status of Marsabit District in Kenya

North Horr is one of the highly marginalized areas in the Upper Eastern part of Kenya. It is situated on the North West part of Marsabit District with very sparse population. It borders the Republic of Ethiopia to the North and Lake Turkana to the West. With approximately 66,000 square kilometers, 4,956 square kilometers of which are covered by Lake Turkana, the foremost part of Marsabit District is an extensive plain which lies between 300m and 900m above sea level. It is characterized by a population density averaging two (2) persons per square kilometer and a distribution varying between a person up to twenty-two (22) people per square kilometer, depending on the scarcity of water as well as the amount of permanent and semi-permanent settlements. Marsabit is located in the driest region of the country and receives rainfall ranging between 200mm -1000mm a year. High elevation areas in the region receive a higher amount of rainfall. Notably the area that lies below 700m above sea level accounts for approximately 75% of its total land area. VSF-G operates in 2 Divisions; North Horr and Dukana of Chalbi covering 38952.7 sq km predominantly inhabited by the Dasanach and Gabraa communities respectively. The region falls within the arid and semi-arid Kenya that generally experiences extreme hot and dry ecological zonation of desert climatic conditions characterized by low rainfall patterns, poor soil, thorny shrubs and sporadic prolonged droughts. Pastoralists are the dominant residents of the area. Livestock (cattle, sheep, goats and camels) is their key source of livelihoods. Considering their pastoral livelihood, the two communities living in the area attach their socio-economic values on livestock products such as meat, milk, blood, skin. This importance is reflected on their social status (wealth determination, income, recognition, and dowry payment) and other household & community cultural values. This kind of livelihood has made them put a premium value to grazing areas (pasture and water) as a major livelihood sustainability resource. However, this resource has faced undesirable risks due to the effects of global climatic change resulting to recurrent droughts, land degradation, unsustainable land use, deforestation, diminishing pasture, human malpractices leading to soil degradation and biodiversity, pressure on pasture land as a result of increased livestock and human population, increased conflict due to resource based competition and negative cultural practices. Poor socio-economic infrastructure, vast distances from the government service delivery centres, marginalization and the slow political will to promote pastoral economy has made the situation worse.

Marsabit is mainly composed of poor soils as well as vegetation consisting of thorn shrubs. Therefore, the land has low agricultural potential and thus predominantly supports livestock and wildlife.

These area specific attributes are reflected by the fact that 80-90% of Marsabit's total population is made of pastoralists who rely on livestock and livestock based industries to sustain their livelihoods. .

The absence of permanent streams and the seasonal rainfall variations has forced people into a migratory lifestyle, dependent on the availability of water and grass for a limited time before the herds move on. The geomorphologic features of the area do offer, however, water sources under the dry river beds stretching from the mountains to the surrounding lowlands. These water sources have been tapped for generations through the digging of wells below the rocky underground. The small and perceived urban town of North Horr,

Ileret and Dukana owe their existence to the permanent availability of water and have developed into settlements of considerable size. The District being in a remote location has been neglected and the local population cut off from most development. Consequently the situation of health and education services, for example, is appalling. Due to the dependence on water and pasture, climatic variations have a potentially devastating effect on the livelihoods of the pastoralists. , There is a strong need to address disaster preparedness and drought response accordingly despite the many development challenges that do exist in the region.

## Introduction to the Holistic Management Approach

Holistic Management Planned Grazing is used for livestock to be in the **Right Place, at the Right Time, for the Right Reason, and with the Right Behavior**. The planning process integrates indigenous knowledge, cultural issues, and natural processes to create healthy land and sustain healthy livelihoods. It takes into account the social, financial and biological issues connected with pastoralism and serves as a means to enhance pastoralist livelihoods in the short and long term.

With grazing planning it is possible to: **1) produce the maximum amount of high quality forage during the rainy season and; 2) provide sufficient forage for livestock & wildlife throughout the dry season**. When properly carried out, planned grazing mitigates the effects of drought, increases rangeland health, stabilizes livestock production and improves wildlife habitat.

This manual has captured the main elements of holistic grazing planning so that it may be taught and implemented easily in field situations for pastoralists. Pictures, illustrations, and hands-on exercises are used to convey the information.

Grazing planning is one aspect of the Holistic Management® Decision Making Framework<sup>1</sup>. This manual does not cover all that is encompassed in Holistic Management. More information and training in Holistic Management is encouraged in order to receive the full benefit of grazing planning and the decision making process.

**What are the benefits holistic grazing planning?** Pastoralists who have participated in Holistic Management Grazing Planning workshops have listed the following reasons for planning grazing:

- Heal the land
- Make sure animals have grass year round
- Increase the number and health of animals.
- Coordinate various activities – cropping, milking and cultural activities.
- Move towards the better life described in *our* holistic goal
- More prosperous people enjoying food self-sufficiency

---

<sup>1</sup> The term "Holistic Management" is registered by Holistic Management International, Albuquerque, NM

- Healthy families
- Maintain an ecological balance
- Generate financial support: productive land = healthy business
- Tourism
- Attain development levels like other communities
- Healthy people

Holistic Management Grazing Planning has been used in communities based in East Africa, West Africa, South Africa, North America, and Australia.

## Training session preparations

### Who plans grazing?

**An old African saying goes: “If you are not at the table, you are probably on the menu”.**

Grazing planning in pastoralist areas takes community support. The more the people exposed to the concept of grazing planning the better. It is important to involve key people that are instrumental in grazing planning during the training sessions. It is important to establish the following before embarking on the training programme:

- Who has veto power whether planned grazing is carried out or not?
- Who will be responsible for carrying out the grazing plan on a daily basis?
- Who can help support the grazing plan with added knowledge & resources?
- Whose livestock will be directly involved through grazing planning?
- What stakeholders have we not thought of but would be good to have present?
- Have all these people been invited / are they in attendance?

There are limitations to what is practical and possible for the size of a grazing planning workshop. Do your best to include as many people as possible.

### What does it take to put on a Grazing Planning Workshop?

- **Time:** The topics laid out in this manual usually take to work through 12 – 16 hrs of training time (2-4 days). They can be done in one workshop event or over a series of workshops.
- **Setting:** It is best to be able to work in the shade and out of the wind. Either indoors or outdoors works. Comfortable seating helps.
- **Food & Refreshments:** Lunch and tea is usually provided for all-day workshops. Try to provide tea and snacks for workshops over 4 hours long. People think and stay engaged better when they are not hungry.

- **Reimbursements:** Sometimes it is necessary to provide money for transportation, and travel expenses to some participants. This depends on workshop sponsors and local customs.
- **Materials:** Each training venue has its constraints and focus. The materials needed are best determined by the facilitator(s) during the pre-planning phase. Pictures, flip chart paper, colored markers, and tape are necessary training materials.
- **Context:** Training becomes most effective when new information is linked to participants' needs, experiences and existing knowledge. The facilitator should always be thinking of how to create a context or opportunity for bringing in new information to the group.

## Why plan grazing?

There tends to be a disparity between a pastoralist community's current situation and their desired situation. Grazing planning is a means of aligning a community's needs and resources with their desired future. This manual is designed for a group to assess their current needs and to be provided with relevant information so they may choose actions that will address those needs.

Grazing is only one component in natural resource management. There is much complexity in managing social, biological, and economic resources. Grazing planning is a means of working with the complexity and creating practical, easy-to-implement actions.

## Training Workshop Format

### Introductions & Opening Blessing

**Objective:** To set the direction for the workshop and to create a comfortable environment for people to learn and share.

A general order of business for opening a training workshop may go like this:

- The workshop organizer starts the workshop by introducing himself/herself thanking the participants for coming and welcoming the workshop facilitator (if not the same person).
- A person from the group is asked to start the workshop with a blessing or prayer, if customary.
- The remainder of the group is asked to introduce itself.
- The trainer is the last person to introduce himself/herself, giving background about themselves and their experience with Holistic Management Grazing Planning.
- The workshop organizer (or facilitator) may give background and how Grazing Planning fits in.

### Establish ground rules for working together

**Objective:** To create an environment where all participants feel safe to engage in the process.

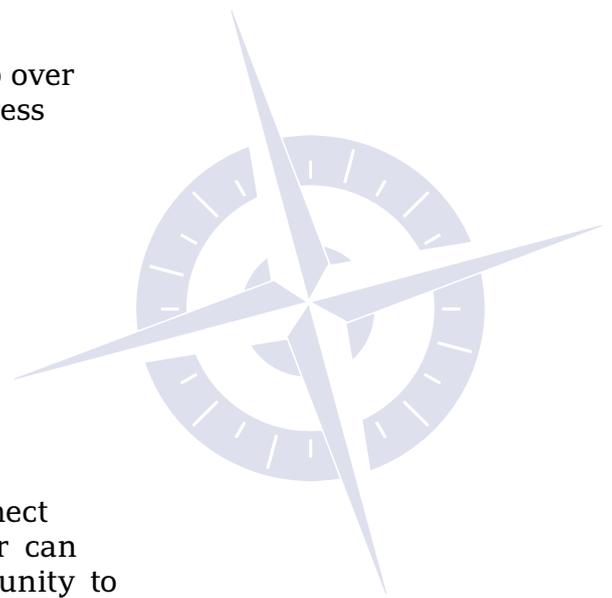
Since the participants are going to be working together throughout the training, it is helpful to establish ground rules early on.

- Ask the participants to describe the ground rules that they wish to have for working together and record on a flipchart, if possible and leave it hanging on the wall.
- Make sure that ground rules related to “equal opportunity” contributions get included – it is important that all persons feel that they can participate freely.
- Ask a participant to be responsible for seeing that the listed ground rules are upheld by the group.

## Layout a Road Map

**Objective:** To illustrate the flow of the workshop over time and to provide a prop for checking progress and giving review.

A group is comforted when they know where the training is going and what will happen along the way. The facilitator can provide a “road map” for the training session that illustrates where the group will start and end. Included along the way will be a variety of “stops” (topics).



Using icons for each topic can help visually connect the map with the topic content. The facilitator can point to the icons in review, using the opportunity to point out the links between the topics. Even though a road map is linear, the facilitator will be able to link the parts together to show how the parts create a dynamic whole.

## Review Workshop Topics

**Objective:** To reinforce and assess what has been presented & learned.

It is important to periodically review the information shared during a training session. Key times are at the end of a topic and at the end of the day. Persons from the group can be asked to describe certain items. Quizzes can be fun – especially if little “prizes” are given.

## Topics covered in this training manual

A grazing planning workshop may build upon previous workshops or it may be a stand-alone workshop. This manual includes the basic information needed for the grazing planning process to be relevant and understandable. The facilitator can embellish upon any of the topics to suit the group, their knowledge base, and the intended outcome of the workshop.

The topics covered in this training manual are:

- Topic 1: Creating Context
- Topic 2: Defining the Whole Under Management
- Topic 3: Creating the Holistic Goal
- Topic 4: Ecosystem Processes
- Topic 5: Tools to Manage the Landscape
- Topic 6: Recovery Time and Grazing Periods
- Topic 7: Benefits of Herding
- Topic 8: Planning the Grazing
- Topic 9: Monitoring the Plan
- Topic 10: Next Steps

Each topic has a “Training Points” checklist under each topic heading to help identify key learning points of each segment.

## Topic 1: Creating Context – Participatory Approach

**Objective:** For the group to identify their current situation, their desired situation, and possible solutions for reconciling differences between the two.

### Training Points Checklist

- “Current Situation” is explained by the community (issues, problems, positive things).
- “Desired Situation” is described by the community (how lives and land are to be).
- “Causes / Solutions” for resolving current issues are given by the community
- “Treating Symptoms or Causes” is discussed using Issues/Solutions subjects
- Qualities of an effective decision making framework are described & illustrated.

This is a form of Participatory Needs Assessment. It can incorporate the concept of a “problem tree”. It creates a context for the grazing planning process. When a group recognizes how planned grazing can help them achieve what they want, the participants become engaged in the process.

**Exercise 1:** Use this exercise to create context for a group.

A. Begin with having participants describe:

- What their lives and land were like in the past (usually a generation ago or more) and,
- How their lives and land are now.

Things change – sometimes for the better and sometimes not. This exercise will highlight issues that concern the group. Guide the discussion into social, ecological, and economic changes that have occurred.

ISSUES		ISSUE	CAUSE
	Present	(Drought) + landscape changes	<ul style="list-style-type: none"> <li>Climate change</li> <li>Pop. increase</li> <li>Sedentary life</li> <li>Insecurity</li> </ul>
		<u>SOLUTIONS</u>	
		<ul style="list-style-type: none"> <li>More awareness</li> <li>training on land management</li> <li>Planning of settlement</li> <li>More community support meetings</li> </ul>	

Figure 1: An example of a group processing issues, causes, and solutions.

- B. The second part of this exercise looks at the issues which concern the group and asks:
- “What do you think is the cause?” (of those issues) and;
  - “What do you think may be the solutions?”

The facilitator should highlight some of the listed causes and solutions and link them to the practical benefits derived from implementing holistic grazing planning and the planning process. This reinforces the context of “Why do grazing planning?” and establishes specific points that may be addressed while developing the grazing plan.

## Topic 2: Define the Whole Under Management

**Objective:** To have the group become clear on what natural, social, and economic resources they are managing and who needs to be involved with the process.

## Training Points Checklist

- Parts of the Whole Under Management are explained
- The group has described and mapped the natural resource base under management
- The group has listed people and people &/or entities in its social resource base
- The group has identified its economic resource base
- The group has identified the decision makers – those who has veto power over actions.

It is important to the grazing planning process to know what is being managed, by whom, and with what means. This exercise should focus on who will be involved with grazing management and what resources - including people and money - they have to work with. The group has been called together for a reason – the participants will have an idea of why they are here.

**What natural resources are being managed?** The purpose of this exercise is to:

- 1) Establish the extent and size of the grazing land;
- 2) Identify physical features and;
- 3) Identify cultural features.

Exercise 2: Draw a map of grazing area the group is managing or intends to manage. It is helpful to note on a map other places that affect the managed area but are not under direct control.



*Figure 2: Two examples of grazing area mapping; One started on the ground using ash & local materials, the other drawn on paper. Both are participatory with the community discussing and deciding on pertinent features.*

It works well to have the group draw a map on a large paper, blackboard or on the ground. On the ground, local materials can be used to identify features. On paper different colored markers can be used to highlight different features.

If detailed maps or aerial photos are available of the area being managed it is useful to use them as a reference for scale and features. For field training purposes it is sufficient to make a good estimate of the area's size and refine the estimate at a later time. Note the size of the area (in hectares or acres) on the map.

- Outline geographical features such as hills, mountains, ridges, and rivers.
- Outline predominant vegetation types if there are a variety of grasslands, woodlands, savannahs, etc.
- Locate important wildlife habitat areas and migratory routes, if any.
- Locate water sources used for livestock and used for people and note their seasonality.
- Locate villages (or areas of habitation), schools, dispensaries, places of worship, etc.
- Draw in roads and commonly-used pathways.
- If there are areas that are important for tourism – now or in the future – plot them on the map.
- If the grazing area is already divided up into grazing blocks, delineate them on the map and record their sizes.
- If the area does not have natural or established grazing blocks at this time, they can be added later during the grazing planning process.

Be sure to engage all members of the group in developing the map. This builds group unity and brings out more information that is helpful for the holistic goal and grazing planning process.

### **1. What social resources are being managed?**

This includes the people who decide what gets done or not get done in the grazing management area and the people, agencies or organizations that provide support and technical assistance. Ask the group the following questions:

- Who will be directly involved with the creation and adoption of the grazing plan?
- Who will be responsible for overseeing it?
- Who will be responsible for implementing it?
- Who needs to be supportive of it?
- Who will be affected by it?

List everyone mentioned either by name, position or role. Later you can sort out people or entities that act as technical resource and assistance but do not have direct influence over what is done or how it is done.



*Figure 3: Social Resources will include those who are considered “decision makers” and those who can provide support and assistance.*

In a group setting there is a mix of people and not all of them would be considered decision makers – they may be part of the resource base. Some people that ought to be there might be absent. Be sure to include them on the list.

**2. What economic resources are available for managing this grazing area?** This includes available money and assets that can be converted to money or traded for goods and services. Ask participants the following questions:

- Where can we get money when we need it?
- What can we trade for things we need?

Note possible sources of money both in the short and long term.

### Topic 3: Creating a holistic goal

**Objective:** To have the group describe in their own words what they want their future to be like and what they will do to create it and to sustain it.

#### Training Points Checklist

- Use the Whole Under Management as a basis of developing a unifying vision
- Highlight the utility of having a clear vision for the future based on what is desired.
- Three parts of a holistic goal are illustrated and explained
- Role of the holistic goal as a guide for decision making is understood

The participatory process of creating a long-range and comprehensive vision statement will help to unify a group. The long-range vision statement will be referred to throughout the grazing planning workshops with the guiding question being: “Will this decision lead us in the direction we want our lives to go?” In Holistic Management, a type of long range vision called a “holistic goal” is created and used to guide decisions towards a desired end.

It builds on what the group may already have in place, whether it is formally written or informally accepted.

A holistic goal comprises three parts:

1. Quality of life: How do you want your life to be? (What makes you happy / fulfilled?)
2. Forms of production: What can you do to create the life you want?
3. Future resource base: How does our land and community need to look like in the far future?

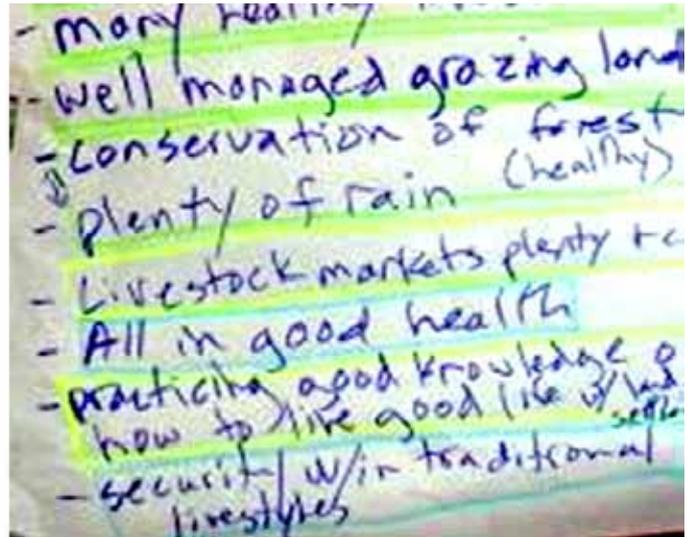


Figure 4: A way to visually represent the 3 parts of a holistic goal: Heart = what you value; Hand = what you will do; Sunrise = how the future needs to be to sustain what you want. Responses from the group are written down and colored coded to match which part of the holistic goal they represent.

The group facilitator can ask the group a series of questions such as:

- What is important to you and your family?
- What is important to have in a community?
- What do you like/want to do as a livelihood?
- What would you like your children to do?
- What does the land you live on look like – ideally?

The group's responses can be written down on flipcharts or in notebooks. The facilitator will then sort the responses into the corresponding parts of the holistic goal. These items can be referred to throughout the grazing planning process linking the group's desire – their holistic goal with actions that will take them towards it.

The holistic goal is work in progress – it is always being updated and refined. Do not be concerned if things are worded correctly or fit neatly into any section of the holistic goal. The purpose of this exercise is for the group to begin identifying what is important to them and what they are willing to do in order to support it.

## Topic 4: Ecosystem processes – The Basics

**Objective:** To be able to look at the land and see how well the water cycle, mineral cycle, energy flow and biological communities are functioning.

### Training Points Checklist

- The group understands the concept of “ecosystem”
- The group is introduced to looking at an ecosystem through four (4) “processes”
- The group can identify the qualities of an effective water cycle
- The group understands how covered soil can increase water availability
- The group is familiar with the three (3) things that can be done to capture the most sun.
- The group has the concept of the mineral cycle works: from soil to soil
- The group recognizes that living things exist in communities (habitats)
- The group sees how grazing can affect ecosystem processes

In order to manage the natural resources within our control, we can look into the ecosystem<sup>2</sup> through four “windows”:

- **Water Cycle:** Maximize the cycling of water through the plants and soil. Keep it local and reduce export and import.
- **Mineral Cycle:** Maximize the cycling of nutrients through plants and soils. Reduce export and import.
- **Solar Energy Flow:** Maximize the flow of solar fuel through plants and soils. It is the basis for regenerative natural resource management.
- **Biodiversity & Community Dynamics:** A way to view relationships within nature. Create the conditions needed for life to flourish and be resilient. (Increased biodiversity leads to increased stability in plant and animal populations).

Working with one ecosystem process will affect another. Therefore, concentrating on the management of water cycle and solar energy flow is sufficient for this level of workshop. The mineral cycle and community dynamics may be touched upon.

### 1. Water Cycle

Water is the most important issue in arid & semi-arid lands. For pastoralists, the central question is: “How can we keep and make the best use of the rain we get”? To answer that, the group can be guided through the following questions:

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<sup>2</sup> Ecosystem definition: “A community of organisms together with their physical environment, viewed as a system of interacting and interdependent relationships and including such processes as the flow of energy through trophic levels and the cycling of chemical elements and compounds through living and nonliving components of the system.”

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- Can we control how much rain falls?
- Can we control how long the rain season is?
- Can we control when the rain season starts & stops?
- What can we control? (record the answers)

Focusing on what the community can control and manage sets the basis for planned grazing.

Review what a water cycle is with the group. Some participants may know and can explain the water cycle for the group. Use the illustrations below to show how water cycles and to introduce the concept of effective and non-effective water cycles. It is helpful to draw it out on flipcharts as each step of the cycle is being explained.

### Effective & Non-Effective Water Cycle

An outcome of planned grazing is the creation of an effective water cycle. Go over the attributes of an effective or non-effective water cycle so the group may assess if their land is making the most of the water that falls onto the ground.

### Covered ground is key

The key to an effective water cycle is the capture and retention of precipitation in the soil as soon as possible. This requires covered ground. The teaching point is that grazing can be managed to produce covered ground. The equations are simple: covered ground = more water and; bare ground = less water.

### 2. Solar energy flow

Solar energy is captured by green plants. We harvest this energy either directly through crops or indirectly through animals. It continues to flow through the ecosystem fueling other insects, animals, and decomposers. There are three things that can be managed to maximize solar energy flow namely:

- 1) Growing time,
- 2) Plant leaf area, and
- 3) Density of plants.

### Plant Diversity is key

Livestock graze or browse on three major types of plant: grasses, forbs, and woody. Grasses and forbs can be annuals or perennials. A diversity of plants increases the amount of solar energy flow captured and retained throughout the year. This translates into more forage available for grazing and greater ability to maintain animal health & productivity. Planned grazing can be used to create greater plant diversity.

To build the link between the current situation and the benefit of planned grazing, ask the group the following questions:

- What useful plants grow in the grazing area?
- What nuisance or undesirable plants grow in the grazing area?
- What plants did grow in the area but are no longer present or are rare?
- Is the area better or worse for grazing now compared to the past?
- Do cattle, sheep, goats, donkeys, and camels eat the same thing?
- What do you think the reason is for the change?
- What plants would you like to see more of?

Write down the answers in lists. It does not need to be complete. This can be a good time to go for a walk around the training area and have the group point out where solar energy is being captured and where it is not (as in bare ground) and discuss how the possibility of improving it.



*Figure 5: Two types of grasses growing in the same area. Which one would support more livestock?*

Ask the group:

- What is needed to increase solar energy capture?
- Water is needed to sustain more plants. How can that happen?
- Can more plants help cover the soil and retain more rain?
- How can you grow more plants and get them to cover the soil?
- How does having a diversity of plants help your animals?

Use the answers to identify the three ways solar energy flow can be increased: 1) larger leaves; 2) more plant density; 3) longer growing period. Introduce the concept of managing grazing, animal impact and recovery time (topics to be covered soon) for increasing solar energy flow.

When grazing is properly used it can create and maintain desired plant diversity, increase plant size, increase the effectiveness of rainfall (allowing longer growing), and increase fertility of the soil - or when not properly used it can negate all of that.

### 3. Mineral Cycle

Plants take up minerals from the soil. Animals eat those minerals – nutrients – and excrete what they don't use back onto the soil. Other organisms break down the dung and plant litter and return it to the soil. Grazers are very important to the mineral cycle in seasonal rainfall areas.

Ask the group:

- How can the nutrients that came from the ground get returned to the ground?
- Which rots faster- little pieces or bigger pieces of plants (role of manure)?
- What happens when we graze plants and walk away without leaving dung and urine behind?
- How does covered ground help the mineral cycle? (the concept of litter decaying and the preservation of moisture)

### 4. Biodiversity & Community Dynamics

Every plant, animal, and insect plays a role in the functioning of the ecosystem. We can manage for a desired combination of living things. Managing for a diverse range of living things builds resilience into the ecosystem. A resilient ecosystem rebounds from drought, fire, heavy grazing, heat, pest infestation, etc more quickly. It can also reduce the incident of disease.

Ask the group:

- Are there plants that were abundant at one time but are rare or gone now?
- Are there animals that were abundant at one time but are rare or gone now?

- Did water seem more abundant at one time but not now?
- Do you think there could be a connection?
- What plants and animals would you like to see more of?
- Are there groups of plants you find growing together in specific places?
- Are there associated animals to these places?

## Topic 5: Tools to use

**Objective:** To identify and understand the “tools” we have available and see how they can be integrated into a holistic grazing plan.

### Training Points Checklist

- The group is able to see that grazing, animal impact and rest can be managed as tools
- The group is able to identify beneficial modes of grazing
- The group is able to describe what causes overgrazing
- The group is able to describe the benefits of using animal impact
- The group is able to describe what happens with extended rest in seasonal rainfall areas
- The group is able to describe the benefits of recovery time
- The link between recovery time and grazing periods is understood

### 1) Grazing as a Tool

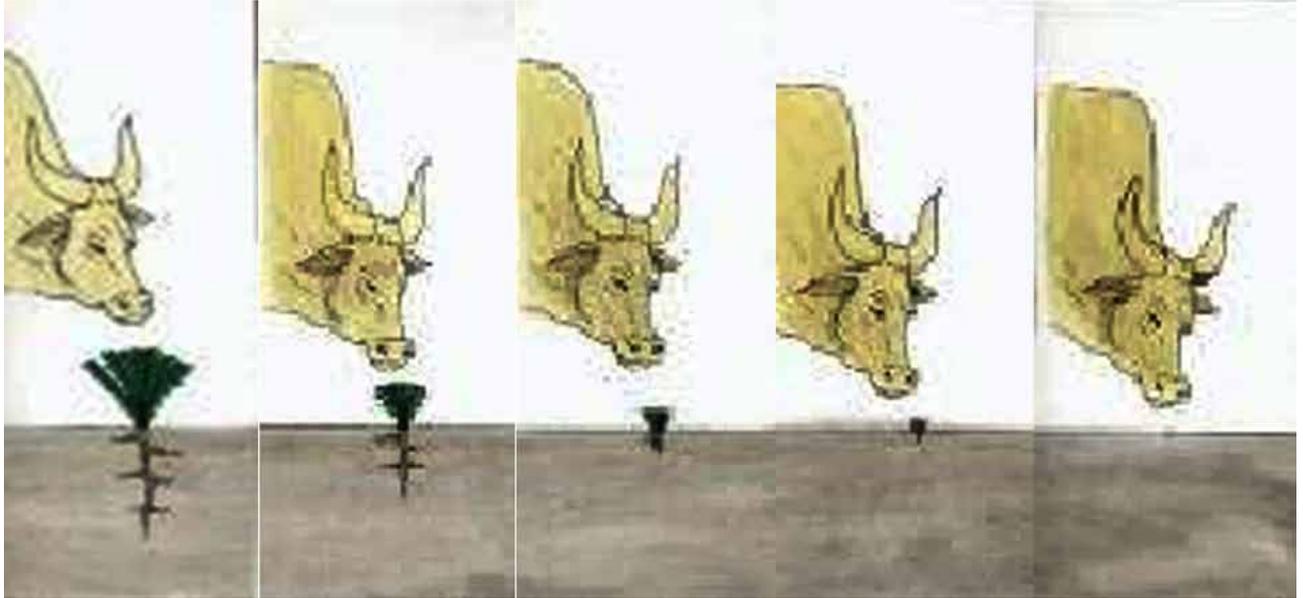
The greatest asset pastoralists have for creating sustainable livelihoods are their animals. Grass and grazers evolved together. Grazers play a very important role in maintaining healthy and productive land. Grazing is a tool because it can be controlled: when, where, for how long, and for what purpose an area is grazed is part of grazing management.

Ask the group:

- Can you (would you want to) live without your animals?
- Can your animals grow without grass (forbs/shrubs)?
- Can grass (forbs/shrubs) grow without your animals?
- What comes first, then: the health of your family, your animals, or the grass?
- How can you ensure healthy grass well into the future?

Build onto the group’s response to the above questions with the following topic segments.

## Overgrazing & Overbrowsing



Overgrazing is often talked about and pointed to as a problem. It is important to be clear on what causes overgrazing. **Ask the group to explain what overgrazing is and why it happens.**

Overgrazing is commonly attributed to too many animals. Technically, it is a function of a plant not being able to re-store energy it has used for growth. Therefore, overgrazing is more of a function of time than animal numbers. It is important for the facilitator to work with the group in understanding how plants grow and recover and how it is the amount of time, not number of animals that produces overgrazing. The concept is similar for overbrowsing of woody plants

Overgrazing can occur at three different times:

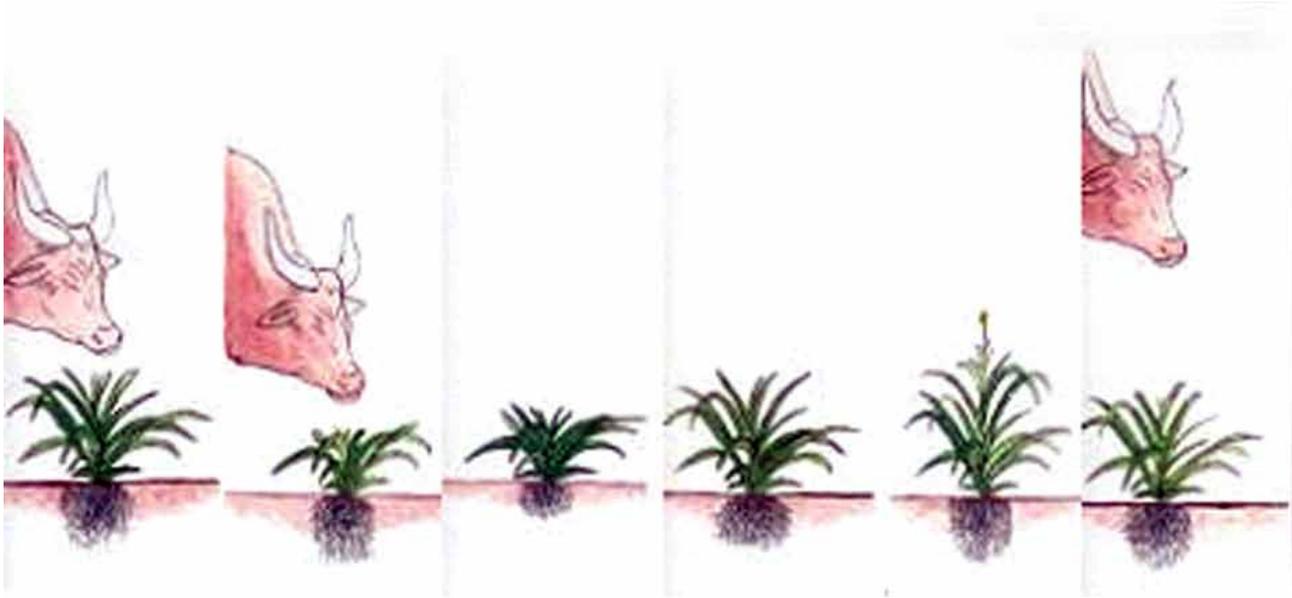
1. When a plant is exposed to the animals for too many days and are around to regrow it as it tries to regrow;
2. When animals move away but return too soon and graze the plant again while it is still using stored energy to reform leaf; or
3. Immediately following dormancy when the plant is growing new leaf from stored energy.

Use this series of illustrations to highlight the effect of grazing without adequate recovery time. Overgrazing can lead to the disappearance of desirable plants.

### Beneficial Grazing

Grazing can be managed to benefit the plants and animals.

This series of illustrations incorporates recovery time for the plant before livestock return to graze. Timing of grazing can promote the presence and vigor of desired plants. It can also provide a high plane of nutrition for the animal.



Grazing can be managed to: build up forage stocks, parcel out forage stocks, leave litter material, leave wildlife forage, cover ground, improve animal performance and better quality forage for more of the year.

## 2) Animal impact as a Tool

Ask the group the following questions:

- What else do livestock do besides grazing or browsing? (Possible answers may include: They dung, urinate, salivate, trample foliage, chip soil, break branches, etc.). This can be called “animal impact”.
- How can animal impact be used to improve the water cycle? (Possible answers may include: To chip soil for better water infiltration, to trample vegetation for better soil cover, etc)
- How can animal impact be used to improve solar energy flow? (Possible answers may include: By improving the water infiltration, by fertilizing the ground with dung & urine, by creating better seed bed for new plants to get started, etc).
- How is animal impact managed? (Possible answers may include: Through manipulation of stock density. Stock density affects the way animals behave.)

Use the exercise below to demonstrate how density affects behavior. Introduce the concept of herd effect – the behavior of animals when they are crowded and careless. How can this be used to your advantage?

### Exercise 3<sup>3</sup>:

Have the group stand where they have been sitting. Now ask the participants to fit into a space  $\frac{1}{2}$  the size of the area they are currently in. The facilitator(s) can act as “herders”. Continue halving the space until they are crowded. At this time you should hear laughter

<sup>3</sup> If the cultural situation is such, divide the group between men and women. Split the room (or a defined area outside) in half and ask the women to be in one half and the men to be in the other.

and slight discomfort. Use this as a moment to explain the difference between calm animals – just a few spread out - and animals that are kept herded together. What happens to the soil crust when you have these two types of animal behaviors?

Use this experience to introduce the next segment: Rest as a tool and how it can be managed.

### 3) Rest as a Tool

Ask the group the following questions:

- How can doing nothing be considered a tool? Have the group think about what it is like when they rest for the night or during the day.
- Do they feel refreshed? Something happens during that time. When the land is left alone from its usual use (from grazing or farming), it gets to rest.
- Can you sleep or rest for ever? What if you never got up to work and take care of thing?
- What would happen if you are never allowed to rest for long enough to feel refreshed?

There are two types of rest namely complete and partial rest. Complete rest is when all grazing animals are taken off from an area for an extended period of time. Partial rest is when grazing animals are routinely on an area but not in a way (behavior) that physically disturbs it beyond grazing. Too few animals wandering around will produce overgrazed, partially rested land.



*Figure 6: Left; Soil “capped” with moss indicating land being overrested - yet the nearby plants are overgrazed. Right; over rested grass plant with old, grey stems impeding new growth.,*

The negative effects of either type of rest can be a loss of biodiversity (decreased solar energy flow), increased bare ground (decreased water cycle function), and reduced cycling of plant material (reduced mineral cycling). The positive effects of rest can be the recovery of plant vigor, the incubation of new plants, the establishment of wildlife habitat, the breaking of pest cycles.

The tools of grazing and animal impact are counterpart to rest by default: if you are not using them, rest is being used as the main tool. Grazing planning manages rest to make it will remain beneficial. The term rest is commonly used as any period when an area is not being grazed. In grazing planning a distinction should be made between rest and recovery time.

#### 4) Fire as a Tool

Fire affects grazing planning – it consumes forage that animals would otherwise eat. Grazing planning can accommodate land that is not available due to fire – whether it has been prescribed or is accidental. Grazing planning is required in order for areas to have the fuel load needed for fires to be carried out and for their recovery period.

Fire affects the ecosystem processes in particular ways. Its possible affects need to be incorporated into a grazing plan in order to achieve resilient and desirable grazing lands. Specifically it affects the various cycles in the following ways;

Water cycle: Bare ground, hard soil

Mineral cycle: Immediate nutrient, loss of organic matter

Biodiversity: fire tolerant/intolerant species, brush encroachment & control, affects on other flora and fauna, tick reduction.

#### 5) Technology as a Tool

The most commonly used tool is technology. Man-made items such as ploughs, axes, vehicles, and pumps are technological tools. Dams, boreholes, water systems, fertilizers, and pesticides are tools too. Consider anything created or maintained by the hand of man to fit under this category.

### Topic 6: Recovery Time

**Objective:** To recognize that recovery time is key for grassland health and central to planning grazing periods

#### Training Points Checklist

- The group understands the need for plants to recover from grazing
- The group understands how productivity is increased with adequate recovery time
- The group is aware that recovery time leads to improved water infiltration
- The group is able to link recovery time with grazing periods.

## What is Recovery Time?

Recovery time is the number of days from the time grazing livestock leave an area until the time the herd returns. Ideally, it is a period that is long enough for grazed plants to regrow their roots which were sacrificed when the plants were grazed and pushed out new growth.

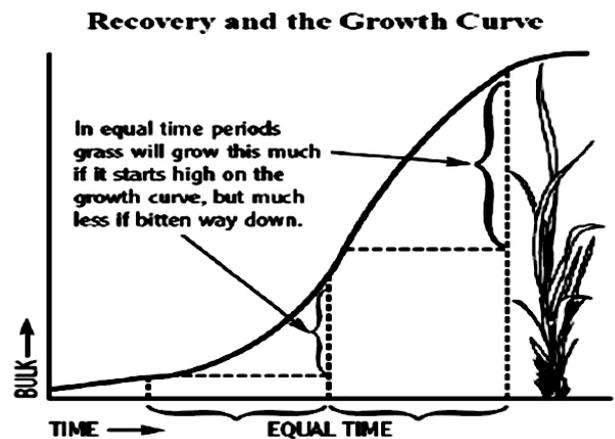
Recovered plants are able to rebound from grazing, fire, and drought with vigor. When plants are not given enough recovery time they are weakened and are considered overgrazed.

## Recovery Time (Letting plants grow) is key

Plants have a growth curve. The pictures represent the effect of grazing plants early in their growth stage: they do not attain vigor and mass.



*Figure 7: The short grass has been exposed to grazing since the beginning of the rain season. The tall grass was protected from grazing by a thorn shrub. All other conditions are the same.*



*Figure 8: Working with the growth curve of plants achieves greatest amount of forage grown during the wet season.*

Ask the group:

- Which grass would you want for the dry season?
- Which grass has material to cover the ground better?

This provides the context for introducing the concept of “Recovery Time” and how recovery time is central to grazing planning.

Illustrate the relation of growth over time. Point out how the delay of grazing for a short period in the beginning can produce more forage sooner in the season. Connect that concept to leaving standing foliage and not grazing plants down to the ground: Plants that have remaining leaves start growing sooner and are more vigorous. There will also be foliage to cover the ground and capture rain better – creating a more effective water cycle. This will also tie into the concept of planning for a “Drought Reserve” later in the training.

## Topic 7: Benefits of Herding

### Objectives:

- To recognize that recovery time is key for grassland health and central to planning grazing periods
- To stimulate ideas on how herding can be used most effectively in the grazing area.

### Training Point Checklist

- The group can list the advantages of herding
- The group identifies how herding ties into animal impact and rest
- The group can explain how herding can be used to prevent over grazing
- The group is prepared to look at the role of herding in the grazing planning process

Herding is used to maintain beneficial grazing patterns, create desired animal impact, and give appropriate amounts of rest & recovery. Herding creates the desired “right behavior”. Herding is essential to carrying out grazing plans in areas that are not fenced or naturally bounded.

Benefits of keeping animals bunched and on the move as they graze throughout the day.

#### HERDS IN TIGHT BUNCHES AND KEPT MOVING:

1. Dung and urine input on land goes up
2. Hoof action breaks surface and can get water into the soil better
3. Hooves break soil surface and set seeds
4. Grass gets eaten more evenly and if not eaten gets knocked down and trampled with dung and urine on it (better to break it down and get it cycling into soil)
5. Soil surface gets more litter on it and that can help it hold more water – keep soil moist

#### HERDS NOT BUNCHED OR NOT HERDED:

1. Lighter concentration of dung and urine
2. Less water into the soil
3. Seeds can't get under capped surface of soil
4. Grass gets more selectively grazed and little gets knocked down
5. Water runoff is higher

What are the key objectives to be achieved through herding?

1. Feed the animals - meet the forage, water and shelter needs of the animal
2. Feed the land - continually improve health of land to provide for health plants, soils and water
3. Provide for sufficient forage and cover for wildlife
4. Get animals in condition for breeding, calving, and market/sale

With herding it is easy to adjust the grazing plan to current conditions. In the fast growing season, you will likely over graze some plants if you are in an area more than three (3) days. In the slow growing season, you might be able to stay in an area longer. You will have to train your eye to see how fast the grass is recovering and know when to get off or not

return to an area and build your planning and management skills to be able to allow each area sufficient recovery.

Animal behavior is easily adjusted with herding. Most of the time calm animal movement is sufficient. When livestock are handled in a low-stress manner it is possible to:

- Move animals quickly and easily
- Improve health, reduce death loss, decrease stress, disease and weight loss
- Make the herders' job easier ,improve milk and meat production
- Cows less likely to hurt one another with horns, etc.

## Topic 8: Grazing Planning – The Process

**Objective:** To go through a series of steps and establish a holistic grazing plan for a growing or dormant season.

### Training Points Checklist

- Distinction has been made between growing and non-growing season grazing plans
- The group has produced a map with physical features, management issues and grazing 'blocks' (sometimes referred to in commercial circles as 'paddocks')
- The group has contributed the data needed for determining recovery time and grazing periods
- The group has determined the carrying capacity of each block

The following steps are designed to get livestock to the right place at the right time, for the right reason, and with the right behavior. This process is adapted from holistic management's aide memoire for use with communities in field situations.

At the end of this planning process participants will have produced a series of maps showing:

1. Blocks, physical features, water points, and cultural sites
2. Block stocking rate (i.e. number of livestock each block can hold over the period being planned for)
3. The number of days livestock will graze in each block and the moves of livestock between blocks over the planned period.

### **Step 1** Before the grazing planning session

Define who needs to be involved:

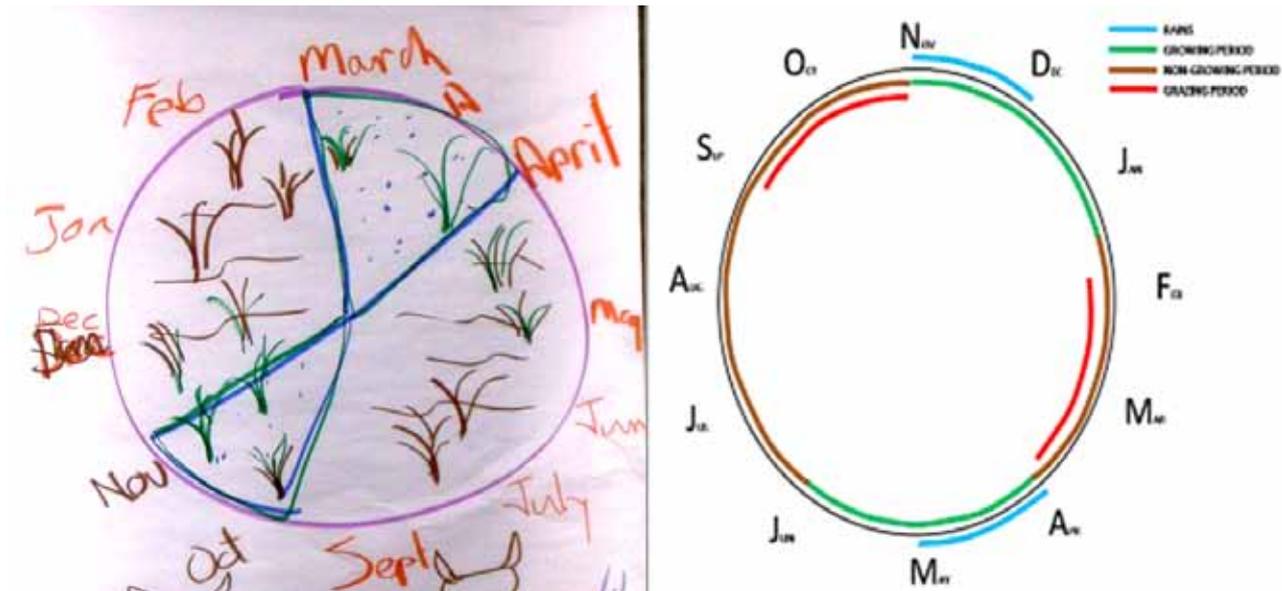
- Who are the stakeholders being served or affected by this plan?
- Who is needed to be present to create and implement the plan?
- Whose support is crucial for the plan to succeed?

Materials & time needed:

- Flipchart and colored markers (or at the least, paper and pen)
- Allow one day for the entire grazing planning process

## Step 2 Determine the type of grazing plan

Which type of plan do we need? There are two types of grazing plans: 1) growing season plan and 2) non-growing season plan. In a seasonal rainfall area, the best way to illustrate which type of grazing plan is applicable is to have the group map out the wet/dry times of the year.



Two examples drawing a growing/non-growing season map

Ask the participants the following questions:

- When do the rains usually start?
- When do the rains usually stop?
- When does the grass begin to grow?
- When does the grass stop growing? (this may be after the rains stop)

Then determine how long the herds will be grazing in this area for (a) the dry season (b) the wet season.

## Step 3 Refine the grazing area map

The purpose of this exercise is to delineate blocks within the overall grazing area. In field situations it is possible to use the map created by the group when they defined the Whole Under Management earlier in the training. If large topographical maps are available they may be used with tracing paper overlays.

It is assumed that most pastoralist areas do not have fenced boundaries or fenced blocks within the grazing area under management. Because there will not be investment in fencing and daily herding will be used, the boundaries remain flexible and can be changed in following years if other arrangements of blocks are more practical.

If it isn't already done, have the group divide up the grazing area into smaller management areas or blocks for ease of management.

Ask the participants the following questions:

- What would make good natural boundaries?
- What would make good customary or cultural boundaries?
- What would make good special management area boundaries?
- Is water accessible to each block? All the time or seasonally?

**Step 4** Set up grazing chart tables.

Calculations needed for the grazing plan are made on a grazing planning worksheet. (See an example of a completed grazing planning worksheet on page 29 below).

Now, working with the grazing planning worksheet:

**Step 5** Determine the Length of Recovery Period

When will the grazed area be ready to be grazed again?

For dry season grazing this will be after the following rains. Use the length of time the animals are scheduled to be in the dry season area. This should include time for drought reserve in case of late rains (add 2 weeks at the least).

For wet season grazing areas this is usually set between 30 and 180 days. Determine this according to the most common grasses present. How long depends on the types of grasses; and weather they are healthy or not (grasses in degraded areas will usually need longer recovery).

**Step 6** Determine the number of herds to be grazed within one block at a time and estimate the number of animals

- Combining herds is better for recovery time and forage utilization
- If combining is not possible, at least concentrate herds as closely as possible
- Animal impact is increased with large herds of bunched animals
- Fewer herds reduce the chance of over grazing and increase recovery time

Use the following units to estimate the number of animals:

- 1 cow = 1 animal unit
- 5 goats/sheep = 1 animal unit
- ½ donkey = 1 animal unit
- 1 camel = 1 animal unit (camels usually browse so they will not utilise the same amount of forage as a cow)

**Step 7** Calculate the average number of grazing days within each block

**For dry season:** Divide the length of grazing season by number of blocks to get the average graze period for each block. This is used as a reference and will be modified to reflect the reality of each block's productivity. The total number of days should equal the length of the grazing season. *Example: if the zone you*

are planning for has 8 blocks and the dry season grazing period is 120 days + 14 drought reserve = 134 days. Divide 134 days by 8 blocks to get 17 days average per block.

**For wet season:** Divide the recovery time by the number of blocks less 1 (because animals will always be grazing in one block). The total grazing days for the first round through the blocks will add up to more than the recovery time. Spread the remainder of days through the recovered blocks to equal the total wet grazing season. *Example: If your wet season is 60 days long, you have determined that the recovery time is 45 days and you have 8 blocks – divide 45 days by 7 blocks = 7 days per block.  $7 \times 8 = 56$  days for the first round of grazing. Balance of days = 4. Distribute these 4 days through the first recovered block.*

**Step 8** Adjust the number of grazing days in each block

- Estimate the relative size of each block
- Rate the blocks for high, medium, or low productivity depending upon their size and the quality and abundance of forage
- Adjust the number of days grazing in each block according to these ratings by increasing the days for some blocks and decreasing days for other blocks (see example at end)

**Step 9** Plot the moves of the herd through the blocks

Determine where the herds should leave at the end of the grazing season and work backward to the first block which the herds will enter. In the dry season consider the position of water and forage quality.

Identify any special management areas (badly eroded land, new gullies forming, invasive plant species, etc. where you would like to use overnight *bomas* (livestock enclosures). Plan the *boma* site locations for each block, making sure a *boma* is not used for longer than 7 nights (try 4-7).

**Step 10** Check each block and estimate the amount of available forage

The time has come to check the grazing planning calculation with conditions on the ground. The question for the group is: Will there be enough feed for the animals in each of the blocks for the duration of the actual grazing period?

One way to answer this question is to go out to the sites and visually estimate how many animals (including wildlife) can be in each block for the planned time.

A more accurate way is to calculate the size area in each block needed to feed only one animal for one day, according to your calculations. Follow the calculations in the example given in the grazing planning worksheet below (rows 5-8). The number in row 8 is the length of the side of a square that needs to feed one animal for one day in that block (on average).

Take the group out into a block and choose a place that represents the average grazing potential for that block. Using four (4) people, have each person stand as to make a corner of a square matching the figure calculated in row 8. Looking at the worksheet, for example, if the group is in Block 1, the distance between each person marking the corner of a square would be 14 meters (14 large steps apart).

With the four (4) people marking the corners, ask the group to estimate if one cow could get filled up on the forage within that square for one day. If the group feels that it can, the grazing period is good. If they feel it is too small, have the corner people spread out until the appropriate size is reached. Measure the length of each side and note it. Use the revised length to work back through the last series of calculations from the size of square needed through to what would be a workable grazing period (days) for that block.

Remember to estimate forage whilst leaving enough behind for ground cover and wildlife needs – depending on wildlife levels, this usually means leaving 50% of forage behind (20% for cover, 30% for wildlife).

If it does not seem there will be enough forage:

1. Reduce the number of animals (by moving them to another area or de-stocking) so that forage will last until the end of the grazing season;
2. Reduce the length of the graze season so that animals leave the grazing area earlier;
3. Re-graze blocks that have already been grazed with the understanding that:
  - In the dry season this will adversely affect recovery time for the wet season through severe grazing, reduce wildlife habitat and overall cover (plants and litter), and increase bare ground.
  - In the wet season if you have too many animals you are going to come back too early and you will overgraze.

Option 1 is preferable. As with all decisions, they should be based on the desired future for the land and community taking into account biological, social and economic factors.

#### Step 11 Manage the grazing

- Determine who will be responsible for overseeing and implementing the grazing plan.
- Educate the herders and community about the plan.
- Herders should keep the animals bunched as closely together as practical.
- Ideally, herds should graze a different part of the block every day i.e. if a block's grazing period is ten (10) days, herders should divide the area mentally or physically into ten (10) different parts, and graze a different section each day. Herds should never graze any one part of a block for more than 3 days in order to eliminate overgrazing completely.
- Grazing an area intensely and moving quickly increases utilization, leaves ground cover and avoids overgrazing of re-grown plants (see notes under 'herding' in Topic 7 above).

#### Step 12 Monitor the land and the animals for health

- Keep track of animal health (both wild and domestic).
- Check to see if the grazing plan is having the desired effect on the land. Are there enough plants and litter left behind? Is there too much? Are plants being re-grazed before the herds are moved on?
- Check to see if the community has concerns or issues with the way things are going.

### Example for calculating forage availability in a dry season grazing plan:

- A. Dry season grazing length = 180 days + 30 days drought reserve = 210 days (Step 2 above).
- B. Number of blocks identified in the zone = 8 blocks (Step 3 above).
- C. Recovery period – see A above (we assume recovery will take place during the subsequent wet season) (Step 5 above).
- D. Number of animals (Step 6 above)
- |           |        |                                 |
|-----------|--------|---------------------------------|
| • Type:   | Number | Conversion to Animal Units (AU) |
| • Cattle  | 500    | 500 au                          |
| • Shoats  | 1,500  | 300 au                          |
| • Donkeys | 200    | 100 au                          |
| • Camels  | 300    | 300 au                          |
| • TOTAL   |        | <u>1,200 au</u>                 |
- E. Average graze days per block – refer back to data from A & B (as per Step 7 above):  
Grazing season length + drought reserve = 210 days/8 blocks = 26.25 days per block.
- F. Adjust the number of days according to the productivity of the blocks (i.e. taking into account forage quality and block size) – see table on next page (Step 8 above).
- G. Estimate forage availability (see Table on next page) and check the results on the ground Step 10 above).

### Hypothetical example of a dry season grazing plan (continued)

	Parameters	Block ID								Total	Method of calculation
		1	2	3	4	5	6	7	8		
1	Av. No. Grazing Days/Block	26.25	26.25	26.25	26.25	26.25	26.25	26.25	26.25	210	Grazing Season Length/No. Blocks
2	Block Productivity	High	Med	Med	Low	Med	Low	High	Med	-	Estimate
3	Actual No. Grazing Days/Block	30	26	25	24	26	23	30	26	210	Adjust days based on estimates in Row 2
4	Size of Block (ha)	700	600	600	610	380	330	680	600	4,500	Estimate area or use GIS
5	No. ha/day (HD)	24	23	24	26	15	15	23	23	-	Size of block (row 4)/No. grazing days (row 3)
6	No. animals/day/ha (ADH)	50	53	50	47	80	80	53	53	-	No. animal units/No. HD (row 5)
7	Square metres/ animal/day = size of an animal day	200	189	200	213	125	125	189	189	-	10,000 sq m*/No. ADH (row 6)
8	Size of area that can feed 1 animal for 1 day	14x14	14x14	14x14	15x15	11x11	11x11	14x14	14x14	-	Square root of no. animals/sq m (row 7)

\* 10,000 square metres = 1 hectare

# TOPIC 9 IS MISSING!

## Topic 10: Next Steps

**Objective:** To wrap up the training workshop and to plot a course for further work to be done.

### Training Points Checklist

- The group has reviewed what they have covered in this workshop
- The group expresses where they would like to see this process go
- The group lists steps that can be taken to progress beyond this point and maintain momentum

With the group back at the training spot, review the Road Map with them. Have a question and answer period. A quiz with prizes can be a fun way to wrap up the training.

This is the time for the group to discuss: “Where do we go from here? What are our next steps”. Now that they have more information and a good idea of what grazing planning is and how it helps them meet their needs.

If appropriate a list can be created of action items that will need to be carried out before further training and before the grazing plan can be implemented.

Thank all of the participants for their time and energy. If customary, close the training session with a blessing or prayer.

# Annex 1: Sample Quiz Questions & Training Materials List

## Managing holistically

- What are the three ways in which we can maximize capture of solar energy?
- How does the holistic goal help us make better decisions?
- How do our rivers and springs recharge?
- What is your area's weakest link in the chain of production?
- How can we prevent overgrazing?
- List at least two benefits of putting our herds together.

## Grazing Planning

- Give three reasons for planning your grazing
- When you're planning your livestock moves, where do you start? At the end, where do you want to end up?
- What are the three legs of the stool (i.e. holistic goal)?
- What are the two pressures which keep your land from recovering?
- We have worked out that 1 ha can support 20 goats for one day. Let's imagine our area of land is 1,000 ha How many goats can that area support for one day?
- What two main things will you monitor when you implement your grazing plan?

(Adapted from *Holistic Management Practitioner's Workshop at West Gate Community Conservancy / Grevy's Zebra Trust*, June 2008)

## Training materials list

Colored markers, flip charts, duct tape, pair of scissors, twines, paper clips – big, sticky wall, note book, water bottles, sponges, trays, tape measure – 30 meters, camera, 1 meter square, 3x5 cards, masking tape, pens, pencils, compass, weighing scale, knife.

## Annex 2: Basic Vocabulary

Adapted from: *The Bespectacled Crocodile / Annexes, Page 259*

In preparing a training session, it is critical that the facilitator be in agreement with the relevant communities on the local-language equivalents for the terms most commonly used in presenting the holistic model.

<i>English</i>		
Annuals (plants)		
Brush fire		
Cause		
Conflict		
Cycle (of water, nutrients)		
Degradation		
Delimitation (of blocks)		
Ecosystem		
Effect		
Energy flow		
Environment		
Erosion		
Farmer		
Feed		
Goal (of the community)		
Grass		
Grazing (time)		
Grouping together (of livestock)		
Health		
Holistic (e.g., management)		
Landscape		
Litter (from plants)		
Manure		
Module (training)		
Monitoring-evaluation		
Nutrients (mineral, organic)		
Image (i.e., picture)		
impact (animal)		
Overgrazing		
Block (of grazing land)		
Perennials (plants)		

Planning; Programming		
Quality of life		
Range-land		
Reproduction		
Resting (time)		
Run-off (of water)		
Shepherd/herder		
Shrubs		
Succession (ecological)		
Sustainability		
Symbol		
Transhumant		
Watering (of livestock)		
Weak link/limiting factor		

## Practical Application of the Holistic Management Process: Outcomes and Experiences

### Dasanach Community, Ileret – North Horr District 2011

#### 1. Rationale for the choice of the Holistic Management Approach

An increasing number of organisations and institutions involved in the development of dry lands recognise that an approach which simultaneously tackles the environmental, economic and social aspects of communal rangelands is needed, not least because all of these aspects are interconnected and determine rangeland productivity for people and animals. In addition, many approaches tend to threaten or alienate pastoralists being predicated on first reducing livestock numbers, clearly a non-starter with people whose lives are so closely tied to livestock numbers for cultural and economic reasons.

The Holistic Management (HM) framework is an innovative approach to apply in communal rangelands for a number of compelling reasons:

- i) **The ‘Triple Bottom Line’ management approach.** The HM decision-making framework is specifically designed to simultaneously consider the environmental, economic and social dimensions of any given management setting – as necessary for true sustainability.
- ii) **Land regeneration know-how.** The HM approach includes livestock and grazing as two additional tools alongside other more conventional management tools. These apply basic biological principles to increase rangeland health and productivity, thereby regenerating ecosystems rather than just sustaining their current relative poor health.
- iii) **User driven approach.** The process is wholly owned by the owners and users of the resources. Combined with new knowledge, this presents an opportunity to the owners of the communal rangelands to draw on their own wealth base and culture as a tool to restore rangeland productivity.

The main objective of the HM approach in community settings such as the Dasanach region of Upper Eastern Kenya is *“to empower communities to improve their lives and the lives of future generations by restoring their land and natural water sources in a way that reinforces their social, environmental and livelihood values”*.

The HM approach contains several important elements worth noting:

- It is specifically designed to manage complexity under constantly changing conditions.
- It focuses on the whole management unit rather than the parts.
- It employs management *processes* (adaptive) rather than *systems* (fixed).
- It focuses on articulation of a long-term development ‘goal’.
- It requires the participation and buy-in of all those who impact progress towards such a goal.
- It employs concrete planning tools (grazing, financial & land planning; and a decision-making framework).

The HM approach seeks to positively influence – and hopefully correct - the dynamics that have created and reinforced sub-optimal rangeland conditions in the target area over many years. As a result, it must be recognised that such an approach will take longer than conventional technical approaches to bear fruit. The main need is for an approach that addresses common intervention issues. Popular conventional approaches which tend to see rapid short-term gains require high external inputs, lack long-term continuity without continuous external input, have little scalability, do not suit the communal land tenure scenario where there are multiple (100s or 1000s) decision-makers, tend to be outsider driven, technocratic, top-down, and thus tend to lack lasting and/or meaningful results.

The HM programme is designed and carried out by Obufield Limited under the auspices of Natural Capital, led by Richard Hatfield, a Certified Trainer in Holistic Management. Natural Capital is a consultancy firm, leading HM practice in Kenya and the region. The consultants have worked with different NGOs and private ranches to train the communities on HM approach on land management. The programmes have been implemented and well received in other areas of Kenya. Most of the pastoral communities understand and like the approach as it assimilates the way they used to manage their grazing and their livestock in the days of prosperity. VSF Germany sought Natural Capital’s support to train the Dasanach community on the HM principles.

The consultants’ main task was to set in motion a process for building capacity for improved rangeland management with the Dasanach community in Kenya, based in Ileret, Lake Turkana under VSF Germany’s wider programme in that region. Additional terms of reference were added later to at least introduce the approach to the Dasanach community in Ethiopia.

The expected outcome for this engagement included:

- Participants having a common understanding of basic HM principles and being able to confidently explain the same to others.
- Participants being able to organize the community to act to start implementing improved grazing practice.

## 2. Overview of planned work phases and completion status

Overall, the level of completion has been good, particularly when one takes account of the challenges involved, primarily access to the site; initiating the programme in a severe drought; and latterly the profusion of rains and flooding which made movement restricted at best and impossible at worst. One of the major factors contributing to the successful outcome(s) has been the community's enthusiasm, commitment and initiative.

## 3. Holistic Management field facilitation process

### Phase 1 Initial community engagement

- Sensitization meetings
- Core working group formation
- Learning, mobilisation & dissemination teams channels
- Community awareness and attitude change

### Phase 2 Exploring land & water issues / rangeland assessment

- Problem analysis
- Ecosystem processes
- Tools
- Management

### Phase 3 Joint planning process

- Goal setting
- Options analysis
- Prioritization
- Participants/area choice
- Formation of grazing management teams
- Solution trees development
- Action prioritization plan Year 1 & 1-3.
- Identification of planned grazing pilot sites (grazing control sites and animals impact) sites

### Phase 4 Intensive community participation and involvement in plans implementation

- Community mobilisation with grazing committees for validation, ratification and endorsements of proposed grazing plans
- Grazing agreements - Internal rules & regulations and commitments
- Reciprocal grazing agreements for joint grazing across ethnic and national boundaries other neighbouring communities - inter-community grazing agreements
- GPS mapping of area and grazing blocks

### Phase 5 Joint grazing planning & implementation

- Review of grazing agreements & set up (Grazing Assessments)
- Practice techniques - rotation period & grazing sequence (grazing plan, herding / animal impact management.
- Biological monitoring of pilot sites.

## Phase 6 Evaluation

- Monitoring progress, success and lessons learned (land monitoring data, plan vs implementation effectiveness, capacity added evaluation)
- Lessons learned, challenges assessed & evaluated.

## Phase 7 Scaling up / continuation

- Decision on extending the programme.
- Summary report.
- Community guide manual

## 4. Setting Context: The basic components of what we teach

This section seeks to familiarize the reader with the components and/or topics that the Holistic Management (HM) approach focuses on.

### Overall goal of the approach

The overall goal of the HM approach is to empower communities to improve their lives and the lives of future generations by restoring their land and natural water in a way that reinforces their values and the vision of the future they desire. The main principles used are those of the Holistic Management (HM) approach allied to some fundamental proven development approaches, such as Training for Transformation (DELTA training) approach.

### Main components of the approach

The training covers basic topics derived from the HM approach including basic principles and basic management guidelines which, when combined into a management framework, have profound implications for future land and livelihoods health.

### Major insights

- i) Development initiatives are exercises in social transformation
- ii) **Social transformation involves four (4) distinct components namely;** individual transformation; relationships transformation; community or collective transformation; and structural or systems transformation. All (four) 4 are interconnected in any outcome and therefore must be addressed in the pursuit of structural transformation.
- iii) **Nature functions in wholes** hence management must be holistic i.e. consider social, economic and environmental realms.
- iv) **Understand the environment you manage.** Drylands react differently to common tools (e.g rest) to other ecosystems. There is thus need for a different approach to management.
- v) **Livestock can improve land health** and indeed animals are critical to land health, with grazers co-evolving with grasslands. The lack of animal densities today is the main reason for the drylands degradation.
- vi) **Overgrazing is about time not numbers.** This is a major insight of the approach. Animals need to keep moving to avoid overgrazing.

## Major Management Guidelines

- i) **Define what you are managing.** There must be clarity on the decision-makers, resource base and income streams being managed in any one situation (the 'whole under management')
- ii) **State what you want.** Clarity of action is defined by clarity of what in any situation the quality of life any group is trying to achieve. This then defines the environment and economy that must be created to support that quality of life: these components are interwoven.
- iii) **Bare land is public's foremost enemy.** Bare land produces no plants (on which the planet depends), and produces drought and floods. Covered land is the number one priority for any society. The approach goes on to 'unwrap' the biological processes that create bare land; and the biological processes that create covered land; together with the necessary management needed.
- iv) **Play with a full deck of tools.** The main land management tools are identified and analysed for their role and impact; the approach adds 2 tools (grazing and animal impact) to the conventional 3 (technology, rest and fire).
- v) **Test your decisions.** Proposed actions need to be tested in a consistent manner to ascertain whether they move one towards the overall long-term goal (see 8 above), or away from it. Only positive actions can be taken.
- vi) **Monitor for results.** Once an action has been adopted, assume the decision is wrong, and monitor for the earliest signs of desired or undesired results; and correct.

## Major topics discussed with the communities

- Comparison and reflection: life in the past, present, future; and reasons for the changes.
  - A worldwide problem – disappearing grass & degrading land in all arid and semi-arid lands, not just the Dasanach region as well as the causes.
  - A technical solution is not enough: “Holistic Management is not a chewing gum, you extract flavour for a while, then spit it out and move on to something else. It is a wide and deep, carefully thought through and tested approach. It is not a machine or a product which does everything for you”. “This is not something we give you and you then “use it” to do the work for you, or worse expect “the project” to do it for you: every situation is unique to the individual, every piece of land and community is different”.
  - The problem with many projects and many “solutions” to development is that most “solutions” these days apply some ‘system’ or ‘structure’ (whether technical or organizational), and assume that once that is in place it will “cause” results. Failure to also address change/transformation in the areas of individual, relationships between individuals, and community is what leads many projects/solutions to fail.
  - Holistically – the ecosystem is put at the centre of the thinking framework used in this management approach. We are living beings, utterly dependent on air, water and food from the ecosystem. Without it we will die. If it is abundantly healthy and prosperous so will our lives.
  - Ecosystem processes: water cycle, nutrient cycle, energy flow and community dynamics (the web of intertwined life). The status of these in your area determines the health and productivity of your land – nothing else.
  - Types of grass (annual vs. perennial) and the need to focus on growing perennial ('permanent') plants.
-

- The significance of bare and covered land with bare land resulting in drought and floods.
- Over grazing- being a matter of time, not numbers.
- Under grazing also kills plants.
- Grass recovery- grazing movements must allow plants to recover sufficiently after being bitten.
- The significance of animal impact- regenerating grass / plants on bare land.
- Goal / direction formation-which provides a context for changing land management practice.
- The importance of commitment and the elements that constitute commitment.
- Planned and bunched (controlled) grazing components and systems.
- How to do planned grazing-practical steps and demonstration of techniques.
- Skill & significance of herding- the need to resurrect the status of herding as the main activity that will rebuild the land and, by extension, provide a future.

## 5. Key achievements of the trainings (July-December 2011)

**i) *Building the core group.*** At inception, it was found that the planned core group (Pastoralist Field School-PFS) did not contain all the necessary individuals needed to introduce a wide idea such as change of grazing practice. As such, the team spent time with the PFS group and VSF staff identifying and mobilizing the necessary individuals. This was successfully done such that a strong foundation has been set for dissemination and uptake of the training in future. The core group is known as the Natural Resource Committee and comprises 27 individuals chosen by the community, representing the five (5) clusters in the Ileret region including chiefs and councilors. All activities are jointly planned and implemented between the consultant team, VSF staff and the core group.

**ii) *Over 1000 people on the Kenyan side have received the training directly*** from the consultants at least once; others multiple times; and the core group up to 10 times. This repetition, in conjunction with 'learning-by-doing' is crucial for the internalization of such a wide-ranging approach.

***Support by the community for the approach, and adoption of their own term for it: "Remesen" meaning "management of today and tomorrow".*** The initiative has received overwhelming acceptance. Overall, the participants felt that these trainings had the ability to transform their lives and situations. Community leaders and representatives accorded the consultants their unqualified support.

**iii) *Self-supported mobilisation and awareness-raising amongst 1180 members initiated by the core group.*** The core group conducted its own awareness creation around the approach, taking the ideas village-by-village for 8 days ending in the Amarkoke and Dasanach communities in Ethiopia. The villages involved were: Sabare, Telesgayie, Elgele, Nangolei, Elbogouch, Iollo, Bubua, Natabaruk, Olonte, Ikaye, Buthino, Naikaya. Participants at each village moved on to the next village, and so on, building each day to a total of 1180 participants on the last day, coinciding with a blessing from one of the last remaining senior elders. 30 cows were slaughtered in the process. This marks the significance with which the community is holding this initiative, and their investment into the process.

**iv) *'Rebirth of the Naab.*** This was the community leaders' initiative to resurrect the highest traditional authority, the Naab, which has been lost in modern times, as the main governing body protecting and guiding the welfare of their community.

v) Identification of 18 distinct Dasanach grazing areas:

1. I lgele	5. Ilkimere	9. Bulluk	13. Moite	17. Hiryamogor
2. Nangolei	6. Naibor	10. Alid	14. Aberegaye	18. Gombe
3. Guomude	7. El-gor-etha	11. Langai	15. Derde	
4. Iiwarata	8. Mailbe	12 Had gabiye	16. Nabual	

**vi) Establishment of 5 pilot sites and implementation of basic planned grazing steps by communities amongst 5 clusters in the greater Ileret area.** The community made a collective decision of moving away the Dasanach larger herds of livestock migrating from Ethiopia and those within Kenya beginning from the settled areas and start wet season grazing from the farthest areas that do not have permanent water sources at this time of the season where surface water is reliable due to recent rains. The sites nearer settlements are to recover and be used as pilot learning sites. This arrangement is within a radius/ or stretch of twelve kilometers along the lake. The consultants continued to provide additional trainings and mentoring on an as-need basis through the progressive steps and techniques (for example, bunching animals).

**vii) Building of GPS maps covering the Dasanach Kenyan territory.** Mapping is necessary for the Dasanach to inform their grazing planning, specifically, the size of their areas. This helps in the assessment of the number of animals they can accurately plan to carry and identification of 'grazing blocks' that can be more easily planned for and implemented more efficiently in terms of grazing. Maps are being produced by the consultants using GPS cameras in conjunction with Google Earth maps of the relevant areas, with residents helping in boundaries and landmarks identification. Initial mapping estimates that the territory covers 391,205 hectares (approx. 1 million acres), underlining the challenge of improving grazing practice. *The overall map is at 'first draft of first draft' stage, and needs to build up given the size of the area concerned.* To date it includes:

- 65 place names, including some hills
- 35 lugga tags
- 31 significant water courses traced out
- 5 well/springs
- 370 GPS photographs (not shown, but available to confirm visually a location), and these helped greatly in tracing some of the roads.
- A number of significant roads

The map so far is at least an accurate to-scale layout of the land, though the outside boundaries are only estimated from large scale maps. With this map, and enlarged copies of parts, it should now be possible to plan a data gathering journey with people who know given areas, and achieve a great deal very efficiently.

## 6. Strengths of the community

- i) The **participants' openness, participation and resolve** to take on new practice that can change the state of current levels of poverty / eroded livelihoods impressed the training team. There is a general perception that significant achievements are possible.

- ii) **The core group** teaming up with the community in sharing/ disseminating eco-literacy knowledge with their community members and their neighbours.
- iii) **Unity**- members are willing to walk the HM talk and community's talk ('Remsen').
- iv) **Understanding the cause of negative results:** *improving the health of their land and reduction of hunger by the means of preparing to address land degradation in relation to respond to the effects of droughts.*
- v) **Respecting their institutions' authority** by complying with the decisions made in adoption of planned grazing.
- vi) **Collective thinking and actions** towards planned grazing.
- vii) **Readiness:** Being committed to the understanding and conviction they have about the HM approach in helping them move towards the future they anticipate, in relation to land and community future health.
- viii) **Leaders' support.** Obtaining the consolidated support from the leaders was an added advantage to the implementation process for the community.
- ix) **The Dasanach are very practical and proactive** in taking action, talking and in acting - particularly with respect to land issues, livestock issues and security issues.

## 7. Lessons Learnt

The following factors contributed significantly to the success encountered:

- Pastoralists herding systems and HM systems complement each other.
- The community is still relying purely on livestock products, therefore, connects them to the value of land, and to the value of livestock.
- The community's commitment to the land and livestock for its continued existence.
- Recent rains had been perceived as a problem to programmes implementation but it had been a blessing to the soil and to the land since it accorded the community opportunities to achieve their goal(s) of healing the land; growing more forage for the dry season and acting together.
- The community trusted the facilitators and regarded them as one of their own because of their background and associated experiences in herding.
- *HM* and *VSF* commitment to the process.

## 8. Main Challenges

A number of challenges exist and/or were encountered. These included the following:

### Severe drought

The first two trainings were conducted under severe drought conditions. This affected the initiative in two ways: first, mobilisation and training were compromised in drought conditions due to peoples' focus on survival, and lack of means to participate as fully as they may like. However, in this context, the consultants found that the Dasanach community spirit compensated for this situation, and their attendance and commitment were impressive. Secondly, training in implementation of planned grazing was severely compromised by lack of forage, animals or owners/herders. This was only possible in the third training (November-December); which detracted from the time period the consultants had to work with the community on implementation. However, any continuation of the programme will nullify this disadvantage.

## Too much rain

The onset of the rains heralded constant deluges and flooding affecting part of the second training session and dominated the third. The consultants lost 2 days travelling to Ileret, whilst their remaining time was affected by restricted movement / difficult travel. The consultants were then stranded for a further 4 days in Ileret – whilst having to travel back to Nanyuki by road for a further 2 days. Furthermore the rains meant that the consultants had to travel in and out of the region by road more often than not, rather than flying direct to Ileret with the ECHO flight.

## Accessibility

One of the greatest challenges is the general remoteness and harsh road conditions within the Ileret region. Maps reveal that the territory concerned covers 391,205 hectares (approx. 1 million acres). Much time is spent travelling and one has to rely on ECHO flight to Ileret. The flight was inconsistent - too often it was diverted to North Horr which then entailed a whole day's extra journey.

## Over-reliance on consultants

The field staff need to be more engaged in the initiative and have more ownership of it. It is understandable that field staff may not have benefited from advance preparation, do not understand the approach being employed hence play a passive role in the process. Feedback from communities indicates that the responsibility for all aspects – including planning, logistics and communication – was vested in the consultants and as a result, field staff tend to be passive between consultant visits; whilst pro-active follow-up is what is needed. In future, modes of operation need to be more harmonised between VSF field staff and the consultants.

## HM is a long-term process

Not only does the HM approach encapsulate new concepts and practices, it also involves a long-term process by its very nature. This increases the pressure to deliver results in the short-term; whilst also requiring long-term resourcing and commitment by all involved. The latter does not lend itself to typical donor funding cycles.

## Mapping Challenges

The greatest challenge at the outset of this exercise was the inability to get to locations with local experts to identify and map them with GPS beyond doubt (because of widespread flooding).

## 9. Recommendations

This initiative has shown great potential in the short time that it has been underway. VSF-Germany should consider continuing its support for the initiative to build on its early success. Feedback received from the community suggests that this approach is relevant to their situation and interests; it makes sense to them; it uses an approach that they feel can transform their development; and is the best intervention that they have encountered

through development agencies. VSF-G should consider the following recommendations to further strengthen the HM approach.

#### **A. Community awareness-raising and mobilization**

- i) Continued support to resurrection of the Naab as the main unifying community decision-making body.
- ii) Continued dialogue with community clusters to build a community vision of the future.
- iii) Continued facilitation of community's capacity to identify what needs to be created or what is out of place, and actions to be pursued, to build towards that future vision.

#### **B. Planned Grazing**

- i) Keep working with the 5 pilot grazing areas in the Ileret area to help them continue the trajectory towards best practice.
- ii) Establish what grazing areas / blocks people currently identify over the whole region, trace them on the map, and calculate their areas.
- iii) Have a conversation on whether further division of the blocks could help management.
- iv) Further develop the record of watering places, luggas etc and their seasonal life span/ reliability to the point where it is complete for all significant sources.
- v) Put in place an ongoing record of movements the herds are from week to week.
- vi) **Strengthen reciprocal grazing agreements** with neighbouring communities of resource sharing (*Gabraa, Hammer, Borana, Turkana and Arbole*).

#### **C. Mapping**

As the map stands, it should help to draw out the current grazing areas/grazing blocks that are currently not clear at all. Some landmarks are badly needed in the more remote east and northern areas. Roads, if at all they exist, have not been traced in the area. Some GPS points on the boundaries with someone who knows the limits would be very useful.

#### **D. The Ethiopian side (Dasanach)**

- i) Whether or not the consultants can attend and help facilitate that session remains to be worked out.
- ii) There is need to attempt carrying out the "Planning preparation" steps with the Hamar community in Ethiopia. Even if they are not yet trained, the basics should be achievable by support staff working there. At least the map should be present. Also, ensure some herders and some youth leaders, and some women are present.
- iii) There is need for clear, specific reports on the state of progress on community actions, and of the state of affairs on the ground. E.g. are different owner's animals being put together and bunched as one herd? Are different village communities putting all their herds together in larger herds and moving together? Where are the animals now, and where do they plan to go next? Are goats and sheep also being bunched? Are shoat (sheep and goats) herds being bunched together in big herds with cattle, or at least following them inside 3 days? Are the water availability dates clear? If the bulk of the livestock are away, what is happening with the milking animals kept at home – are they grazing randomly (continuing to kill grass near the village/homesteads) or are they moving round the village, leaving ground to recover in a planned sequence?

- iv) Are they now linking up with their colleagues in Kenya to share lessons learned? For instance, the society/community aspect in Kenya is benefitting from the revival of the Naab. Also, instead of grazing all the animals near home now, they are starting at the furthest points while there is water and rain, saving the areas closer to home for the harder times which may come later.
- v) Finally, it would helpful to have discussion to obtain greater clarity how VSF sees their role, and/or the roles of others involved in the community of people – including ourselves. This applies to all areas to set context, but in particular it then applies to VSF-community goals for introducing HM approach, and how it should continue to evolve.

## Part 2:

# Shared resource use practices in pastoral areas; the Reciprocal Grazing Agreements (RGA) Approach



Enhancing Natural Resource Management in Pastoralists Dry lands areas

## 1. Background Information on Marsabit County

### 1.1 Socio-economic context of the Marsabit County

Marsabit County is predominately inhabited by pastoral communities with 98% of the population depending on livestock as the main source of livelihood. The communities have both customary and conventional (government) governing structures that complement each other. Each of the ethnic communities have almost similar customary governing structure with very distinct leadership status which is clearly stipulated but linked to roles and responsibilities in terms of societal legislative enactment and execution, decision making, traditional ceremony officiating, dispute settlements, penalties reinforcements, leadership, meetings steering, grazing planning and management (water and rangeland), information dissemination, cleansing outcasts or forbidden members for re-integration back to society and family disputes settlements. Security, takes lead in the ethnic cultural practice operations and functions while the government structure provides the overall policy, administrative and development functions.

Approximately 90% of the population's main source of household income comes from livestock products. In Ileret which is situated at the shores of Lake Turkana 20% of the Dasanach community are involved in fishing activities which supplements their household income. Other sources of livelihood incomes are village savings and loans, income generating activities, subsistence farming and trade. Although barter trade was the main sources of trade the use of money has increased in the area due to livestock marketing and trade initiatives.

Wealth in the pastoral livelihood zone of North Horr District is relative and determined on the basis of number of livestock owned, ownership of business, and formal employment. Thus, three main socio-economic groups in the areas can be described as:

- a) The better-off  
This group accounts for 10% of the population, and is defined by households that own more than 20 camels, 300 sheep and goats (shoats), and 50 cattle. They include traders, and high level government and NGO employees
- b) Middle  
20% of the district's population is estimated to lie within this group that includes small shop owners, teachers, and middle level GOK employees. Furthermore, these households own less than a hundred (100) shoats and fewer camels and cattle.
- c) The Poor.  
The majority of the population (70%) consists of the poor. This group owns little or no livestock and mostly depends on gifts, relief and remittances as a result of low social status.

### 1.3 Challenges and constrains related to the pastoral ecosystem

- Recurrent drought phenomenon in the arid areas due to failed precipitation, shortened drought cycles and increased drought frequency worsened by human malpractices in attempt to counter their fast depleting resources and weakened coping mechanisms.
- Breaking social fabrics and governing structures have reduced functions of traditional governing structures in addressing effects of drought such as food insecurity, poverty due to loss of livelihoods and lives, conflict and depleted natural resources
- Resource based conflicts
- Prolonged failed rainfall and in the last decade have led to a protraction in the recovery of affected areas. Furthermore, taking the large percentage of people that depend on livestock into account, sustainability of livelihoods is declining rapidly. Additionally, the accompanied increase in malnutrition in children under five has reached 26% in Marsabit against an acceptable maximum of 15% (FAO, 2011).

## 2.1 Context and nature of conflict in cross border pastoral environment - Northern Kenya (North Horr District) and Southern Ethiopia (Southern Omo Zone)

The North Horr District and the South Omo Zone in Northern Kenya and Southern Ethiopia respectively, are home to the Dasanach, Hammar, and Gabraa communities. Their close proximity to each other, long history of fighting, scarce resources as well as different cultures and traditions has increased tension and conflicts by a large extent. The Dasanach are located on the East of Lake Turkana across both sides of the area bordering Kenya and Ethiopia, the Gabraa are situated across the Southern and Eastern parts of the Chalbi District whilst the Hammar are in the Southern Omo Zone, Ethiopia. Conflict mapping, done during a reciprocal agreement meeting between the Dasanach in Kenya, Hammar, Borana, Dasanach in Ethiopia and Turkana in May 2008 (when VSFG started working in the area) showed that the relationships between these communities were completely broken due to tensions and several conflicts incidences in many hot spots and unutilized grazing areas / buffer zones. The main cause for intense violence among the concerned communities were identified as competition over available resources, their different traditions and values, negative cultural practices that legitimates conflict factors (e.g cattle raids, recognition and rewarding of raiders and killers, praise to recognize war heroes) and more importantly, an everlasting history of hatred promoted in their child socialization process,.

Besides having devastating effects on livestock and crops, drought nurtures conflicts due to a scarcity of natural resources. The vast majority of Marsabit County's and South Omo's inhabitants consist of pastoralists for whom livestock not only represents wealth but life. The failure of the rain seasons in 2010 and 2011 has forced many pastoralists to decrease the number of their herd (through destocking) as well as having to watch their livestock morbidity and mortality. Livestock represents the wealth of a household (HH) hence the higher the number of shoats, cattle, and camels, the higher the household's social status in the community. A fair number of livestock is also necessary for a man to get married in pastoral communities, since only a man who is sufficiently wealthy and able to pay highest dowry (number of livestock) will be able to get a wife. This high value attached to livestock thus often leads to raiding of other communities, cattle rustling, and petty thefts. These actions are normally followed by revenge acts by the affected community eventually resulting to a conflict cycle. This has been fuelled by the ease access to illicit fire arms easily acquired at the price of a cow and used to protect cattle herds, the community, the land but also more frequently to raid other communities. Youths in Northern Turkana have been blamed for organizing raids and presenting part of the raided livestock as a gift to the elders.

These traditional conflicts have a long history and seem to be part of the traditional pastoral culture despite being more destructive and less manageable over time. Karimi (2003) identified the main causes of conflict as: "Proliferation of illicit arms, inadequate policing and state security arrangements, diminishing role of traditional governance systems, competition over control and access to natural resources such as pasture and water, land issues, political incitements, ethnocentrism, increasing levels of poverty and idleness amongst the youth". These violent conflicts have severe impact on all concerned communities. Despite the loss of human life other effects include, but not limited to: "loss of property, displacements of large segments of the communities, disruption of socio-economic activities and livelihoods, increased hatred between communities, degradation and threat to water catchments areas, increased economic hardships as a result of loss of livelihoods, high levels of starvation and malnutrition among the displaced groups and unprecedented dependency syndrome on relief food a", (Karimi, 2003)

## 2.3 Traditional Conflict Coping Mechanisms

Pastoral communities had traditional grazing systems of wet & dry season grazing areas and grazing reserves for acute drought. However, frequent and recurrent droughts destroyed these systems due to diminishing pasture and water leaving no option but to migrate to border areas hence increased resource based conflicts.

The most traditional mechanism to cope with conflicts among pastoral communities is the unification of kraals. By merging the individual kraals and thus creating one large community, the communities will have stronger and secure defences, due to increased numbers of warriors offering protection. Better coordination as well as the increased number of loyal warriors that are ready to protect their community make them a greater threat towards their enemies and thus might prevent attacks.

To reduce the severe impacts of cattle rustling the communities have traditionally coped by spreading the herd across the range. However, with the introduction of firearms, conflict prone areas are often avoided and livestock is kept close to the settlement, semi-settlements

(*foras*) and community police (Kenya police reservists in Kenya) presence or where a group of armed men function as the herders.

It is common for conflicts occur in areas where scarce resources are found. Consequently many communities opt to establish their settlements relatively far from these areas (e.g. from a borehole) with temporary *foras* for nomadic grazing. Customary structures that were responsible for peace negotiations have also been getting weaker due to the impact of conventional leadership structures. Those who managed to graze far from home ensured they had a good number of armed youths and combined their herds for security. They conducted frequent scouting errands.

## 2.4 Peace Building Mechanisms- Challenges and Constraints

The peace building mechanisms have evolved over time and can be divided between the traditional as well as the contemporary approach (conventional administrative structures).

### Traditional Approach

Whenever rivaling tribes recognize the need for a peace agreement, most commonly after huge losses of lives on both sides, the elders would agree on a peace ceremony. During this ritual, spears, bows, and arrows will be buried as a symbol for peace. This ritual was fostered the perception that a curse will befall whoever broke the peace. Conflict resolution mechanism and actors were clearly articulated in the governance structure and system. Each of the four communities (Gabraa, Dasanach, Hamar, Albore and Turkana have their own customary leadership structures. For instance, the “Arika” in the Dasanach community is for the “warrior group” in the traditional governing structure. Their roles involve cultural practises and peacemaking.

The introduction of illicit firearms and the attendant decrease in superstitious beliefs has diminished pursuit of , the traditional peace building approach.

### Contemporary Approach (conventional)

Nowadays, outside parties often play a major role in initiating peace agreements between different communities. This is commonly being done by facilitating NGOs and government structures with the aim of reinforcing and complementing the customary institutions. Their functions are mediations and facilitations for both communities as well as law reinforcements respectively. The facilitation process includes first talking to each community separately followed by inter-communities mutual agreements through dialogue meetings to resolve conflicts on reciprocal agreements/ declarations establishment and review meetings, inter-community contingency and preparedness planning meetings as well as sensitization and awareness creations outreach services. Furthermore, the planning meetings also help develop conflict transformational and peace building initiatives such as joint cross border projects that help bring the communities closer together in terms of trust and co-existence and sustainable development e.g. roads and markets construction, youth events, cultural and sports activities, common schools or other activities both get a chance to recognize their similarities.

Unfortunately, this approach is sometimes not welcomed by all communities due to the perception that international NGOs only want to pursue their own interests in order to obtain donor funds. Therefore proper coordination with government administration responsible for security and proper facilitation skills is paramount to ensure the communities recognise the need for search for peace through attitude change and self reflection process to encourage ownership of the initiative.

### 3.1 Drought in pastoral situation

The immediate effects of droughts in pastoralist settlements include a decline in food production, different migratory patterns, exacerbating resource-based conflicts, increased pressure on useable land by increasing human and livestock population, losses of livestock and a rise in food insecurity for many communities. Since pastoralists derive their livelihood from livestock they are among the most vulnerable people when it comes to droughts. Several coping strategies are thus being applied, such as decreasing the number of meals eaten in a day, relying on less preferred foods, gathering wild fruits or seeking support from other households or aid agencies. The ability to cope with an ongoing drought over time varies, depending on the socio-economic features of the affected region and status of the household. Furthermore, the increasing frequency and intensity of droughts weakens the ability to cope as households are given less time to recover from the losses.

In the pre-colonial era pastoralist's movement had no boundaries. Walking long distances across borders was a common practice so as to reach water and pasture during droughts. The traditional movements became impaired in the 1930s as international borders were fixed. As a result, droughts developed into an increasingly severe threat as foreign pasture and water resources became less accessible.

The demographic pressure, the increasing severity of droughts which are often accompanied with conflicts, the decrease in livestock assets, and increased destitution has currently forced thousands of people to rely on food relief.

### 3.2 Impacts of Drought on Conflicts

Droughts can trigger a variety of different conflicts.

**Conflict over grazing area:** Failures of rainy seasons prevent wet-season grazing areas from flourishing as dry-season areas start decreasing in size. The high demand for pasture results in competition over the remaining areas and therefore triggers a series of conflicts.

**Conflict over water resources:** As shallow wells become obsolete and the number of water containing boreholes declines, people cover large distances by foot in order to meet their water needs. As the drought conditions advance, people tend to settle around the functioning boreholes that start serving more people than possible and ultimately are often lead to violent conflicts. **Conflict over cattle rustling:** Pastoralists rely on livestock for their livelihood. In order to re-stock animals that died during drought or suffered from diseases as well as to replace livestock stolen in the past, raiding is a common solution. Moreover, the availability of illegal arms has led many men into banditry and organized cattle rustling whilst at the same time claiming an increasing number of lives.

**Conflicts for cultural reasons:** A significant reason for banditry and cattle raiding is the lack of a meaningful activity for many young men during drought conditions in pastoral settlements (Berger, 2003). Thus, wealth and heroism can be most easily acquired by stealing cattle and harming the warring communities.

### 3.3 Challenges in dealing with drought in a pastoral setup

There have been a variety of strategies developed in order to address drought related challenges. However, even though significant amount of benefits result from these actions there have been challenges and drawbacks. Most pastoral communities have been passing on their negative perceptions, attitudes, traditions, values, and norms from generation to generation for centuries now. A community that was seen as an enemy decades ago is often still being perceived as such due to information passed on to children. Coping with droughts by initiating reciprocal grazing agreements has proved to be the best practise in ensuring access rights to other communities' grazing areas or conflict prone border areas.

Kenya is worldwide known for its breathtaking landscapes and large variety of wildlife. Reciprocal agreements allowing pastoralists access to national parks and wildlife reserves corridors due to drought seasons not only make needed resources available but also lead to a loss of wildlife due to increased competition over pasture and water sources in protected areas as well as a rising number of poaching incidents. This not only endangers the wildlife but also destroys the ecosystem and eco-tourism.

In order to make pastoralists less vulnerable to droughts attempts to develop alternative income sources to livestock are being pursued. Fewer livestock would lead to a longer sustainability of natural resources but being a new concept very few alternatives have been exploited in arid areas. Livestock marketing, destocking, savings, IGAs fishing and farming are being piloted while planned grazing and re-seeding efforts are being practised.

The insufficient infrastructure in Northern Kenya, delays an immediate response to droughts and other emergency situations by the government or other relief agencies. Inhabitants of these areas are faced with limited access to markets due to a lack of transport and consequently an inability of destocking livestock for cash at the right time, an attitude change that is limiting de-stocking.

When drought hits, pastoralist tend to relocate to locations where resources are in sufficient amount. However, deforestation is a common outcome as trees are being cut around the new settlements for fencing and other usage. This is accompanied with a continuous increase in land degradation and soil erosion that limits thrive of grazing areas during the wet season to some extent.

## 4.1 Resource sharing and management reciprocal agreements / declarations process

Eunice Obala (2011) argues that the reciprocal agreement concept is a resource sharing strategy that guarantees mutual access and access rights to resources that one had prior limited access to. It is a process through which parties involved in resource based conflict could reach a win-win negotiated mutual agreement.

## 4.2 Methodology of Reciprocal Grazing Agreements (Best Practice - Eunice Obala, Andreas Jenet, 2011)

Reciprocal grazing agreement builds on holistic natural resources management outcomes such as planned grazing and controlled grazing giving room for negotiations to neighbouring areas access.

- Step 1 Mobilization and sensitization of communities** - Communities are sensitized using the participatory rights integrated approach in which they acknowledge their problems and identify the underlying and possible solutions. The community selects a core working group using participatory developed criteria through general community meetings.
- Step 2 Establishment of Core working groups** – Gender sensitivity and Do No Harm principles are applied. Representation ensures all categories work with clear understanding of the community boundaries, existing resources and historical information. The group’s roles and responsibilities are clearly stipulated.
- Step 3 Drawing of resource use maps** – Core group develops a map showing boundaries and neighbouring communities, all existing resources, dry, wet and reserve grazing areas, migration routes to markets and grazing areas (water & pastures), conflict prone zone and existing institutions. The map is then critically analyzed through plenary discussions and triangulation trying to unearth information in relation to resilience and coping capacities in case of prolonged drought, utilization of reserve grazing forming the basis to negotiate beyond the community boundaries hence the need to engage neighbouring communities in order to access conflict prone areas through sharing of grazing resources with clear resource sharing plan. Community maps drawn by three groups; youths, women, men are triangulated and the most comprehensive adopted with additional inputs from plenary discussions.
- Step 4 Community validation of resource use maps** – Maps are shared with entire community members in general meetings where they are analysed, inputs given and endorsed to ensure ownership. The process of the map presentation leads to self reflection by the community to recognize the fact that they can't live in isolation and hence the need to make informed decision to seek inter-community meetings for consensus and mutual agreement with neighbours. This process is never easy if people feel dissatisfied with the maps hence the importance of plenary discussions and triangulations.
- Step 5 Inter-community meetings** - These are several meetings depending on the facilitation process aimed at creating understanding and building trust among communities. The teams involved in the meetings are drawn from selected representatives from each community's peace committee to negotiate the process. The maps developed at the community are not shared at this stage due to the foreseen and sensitive overlapping boundaries in order to avoid very sensitive boundary based disagreements. However, outcome of the discussions at community levels are shared at the inter-community meeting. Special focus is given to the identification of common grazing areas which have been under-utilized due to resource based conflict (e.g. Gabraa from Kenya had pasture with no water, while Borana had water but no pasture could negotiate mutual exchange use of their resources).

The first two to three meetings helps create attitude change and build trust to create members' ownership of the process and dialogue in a conducive environment. The subsequent meetings are aimed at identifying the conflict zones and other resource (e.g. pasture and water) for joint use proposals. The inter-community representatives then share the proposals of their meetings with their community members in general community dialogue meetings for validation and endorsements. The endorsed proposals are again harmonized by the selected representatives who later present the final resource use proposal for approval and ownership.

- Step 6 Inter-community resource use strategic planning** – The elements that are agreed upon during the cross border or inter-community meeting in consultation with respective communities are then translated into action plans in a systematic framework that can be monitored. It forms the terms and conditions on how the agreement will be operationalised. The plans consist of answers to programming questions such as what, where, when, with whom, by whom, for whom will reciprocal agreement form part of joint plans activities to be implemented and monitored.
- Step 7 Ratification and validation of the proposed plans elements** – The draft plan is shared again with the community for common understanding and endorsement in dialogue meetings by the core committee to ensure that the reciprocal grazing agreement is owned and receives support and commitment from the communities.
- Step 8 Final Reciprocal Agreement signing** – Once the Reciprocal agreement is approved or endorsed by community members it is then signed by the communities' representatives in an event witnessed by local opinion leaders, political leaders, government district or zonal security team for reinforcement and attended by as many members as possible. For cross border reciprocal resource use agreement plans, the inclusion of governmental administrators from Kenya and Ethiopia is crucial.
- Step 9 Implementation of Reciprocal Grazing Agreements** - The peace committees, leaders, and general community are responsible to ensure that the agreements are implemented. Outreach meeting are conducted at community meetings, chiefs barazas and market centres to increase publicity and awareness on terms and conditions of mutual reciprocal agreements and joint plans.
- Step 10 Monitoring of the Reciprocals Agreements** - The peace committees have the responsibility to facilitate the implementation process and monitor early warning indicators of violation of the reciprocal agreement and take strategic/proactive measures.
- Step 11 Declarations Signing** – It is important to let the communities test the reciprocal agreements within an agreed period in order to create confidence and commitment to signing declarations which are perceived as binding documents to ensure mutual shared use of resources and co-existence. These declarations therefore need to be signed at the final stage. Once the reciprocal agreements have been developed, pre-tested and reviewed to realign them with the conflict context, the communities feel comfortable and own the process and are held accountable. The signing is done in an occasion involving community members, local and opinion leaders, legislatures' and senior government administration etc.
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## 4.3 Reciprocal Agreements facilitated by VSF-Germany

### Dasanach – Gabraa

The first workshop aimed to initiate reciprocal resource agreements between the Dasanach and the Gabraa, was implemented by Eunice Obala at the Bulluk AP camp on the 10<sup>th</sup>-11<sup>th</sup> of July 2009. The main objective of this workshop was to enable both communities share the previously unused grazing areas and water resources around Bulluk, which were inaccessible due to conflicts. The workshop sought to make both communities aware of the benefits and need for peaceful co-existence. By using the “Do No Harm” framework the communities analyzed the context of conflicts, the dividers and connectors between both communities, which resulted in a better understanding of each other’s culture, appreciation and coordination with each other, mutual agreement , joint plans and the awareness on the need for the reciprocal agreements.

In May 2010, another meeting between the Gabraa and the Dasanach was held at the Illeret Primary School. Part of this meeting was to review previous verbal reciprocal agreements, conflict mapping review to determine progress on the context of conflicts, and to actively include participants in developing peace building strategies. This meeting was successfully completed and endorsed by the community. Additionally, the Dasanach in Kenya promised to inform the Dasanach in Ethiopia in order to attain their participation in future negotiations.

After the proposals were endorsed by the entire community members of both tribes, the Gabraa and the Dasanach selected 40 community representatives and an agreement was declared during the 6<sup>th</sup>-7<sup>th</sup> of June 2010. This final meeting focused on the formulation of functional grazing control systems, the management of security in conflict areas as well as fines and penalties. Moreover, peace focal points, a cross border peace committee and improved communication through regular meetings were declared to ensure peaceful co-existence along the borders around Bulluk and Darate. *The content of this reciprocal agreement was to be shared with the Dasanach and Hammar of Ethiopia on the 8<sup>th</sup> of June 2010 in order to obtain a greater impact and acceptance of these agreements.*

### ii) Inter-Country Agreement- Hammar, Dasanach, Gabraa

Following the reciprocal grazing agreement between the Dasanach and Gabraa in Kenya, the Gabraa and Hammar of Ethiopia who had obtained a verbal agreement in May 2009 after inter-community planning meetings, requested to sign the agreement. During a meeting in June, 2010, the documented agreement between the Dasanach and Gabraa (Kenya) was shared with the Gabraa (Ethiopia) and Hammar in Omorate, Ethiopia, in the presence of the Kenya District security team, Dasanach and Hammar Woreda administrators. Due to several preceding meetings with the concerning communities the agreement was easily reached in June 2010.

### **Gabraa Resource Management Rules**

Coping with a rising number of severe droughts over time became increasingly difficult and thus induced the Yaas to develop overall resource management rules which were to be obeyed by all Gabraa communities. The Yaas consist of a group of elders who have the power and authority to resolve disputes within the community as well as to implement new customs and to decide on grazing regimes (Berger, 2003).

During the Gabraa General Conference in February 1998, consisting of Yaas from almost all clans, the following Resource Management Rules were passed:

1. Forest guards should be posted in every sub-location in the North Horr constituency, in order to prevent the destruction of trees and other vegetation.
2. In the areas surrounding every trading centre, reforestation should be started and effectively protected by fences and proper rules.
3. Restrictive norms should be established regarding stock grazing in the areas surrounding trading centres and water points.

### **iii) Turkana – Dodoth**

The RGA between the Dodoth community of Uganda and the Turkana community of Kenya was established as part of the ECHO funded DMI project undertaken between 2008 and 2011. This activity, undertaken within the first year of the project, started off by mapping the entire district in order to identify high potential grazing areas that were prone to conflicts and thus only offered limited accessibility. These areas included: Naporoto, Loile, Pire, Matakul, and Kalopeto, which were easily accessible by the communities bordering these areas after the agreement was signed. Further actions undertaken by the village planning committees of the two communities included: land use planning, early warning sensitization, and drought preparedness planning of the communities. After some delays caused by heavy rains in Uganda in early 2010, a CBO -Dodoth Agro Pastoral Organization (DADO), assisted in community mobilization as well as in engaging the Dodoth in drought preparedness planning together with the Turkana. By organizing a forum of stakeholders with the key community leaders of the Dodoth, DADO managed to improve the relations between the two communities.

In December 2010, the agreement between the Turkana community of Oropoi village in Kenya, and the Dodoth community of Kotido-Kaabong villages in Uganda was signed together with the following statements:

- a) Coexist peacefully with each other as a result of reduced resource-based conflict.
- b) Share scarce resource especially pastures and water to their livestock during the dry season when there is scarcity of these resources.
- c) The established Village Land Planning Committee (VLUC) members to ensure that the above agreement is adhered to by all parties through regular participatory monitoring & evaluation meetings.

#### iv) Turkana – Toposa

The RGA between the Turkana bordering South Sudan and the Toposa had been implemented during the Drought Management Initiative project together using a similar methodology. However, due to the government of South Sudan's active engagement in civic education, mobilization of communities, and campaigns for the referendum in 2010, this activity was postponed till January 2011. Together with a local CBO, Losilia Relief Rehabilitation and Development Agency (LRRDA), an agreement allowing the Turkana to access dry season foliage on Toposa grounds was reached. Since the communities were hesitant to sign the agreement as they were uncomfortable making documented agreements, they vowed to keep the peace and acknowledged the existence of stability.

#### v) Intergovernmental agreement between Kenya and Ethiopia

In February 2010, VSF-G facilitated an intergovernmental meeting between the Kenya government and Ethiopian government administration following the official closure of the Kenya –Ethiopia border between the Dasanach, Hamer and Gabraa communities. The border closure by the Kenyan District Commissioner (DC) for Marsabit North in September 2009 took place after a Gabraa community was raided by the Dasanach community resulting in deaths of five (5) people and the loss of thousands of livestock in Darate. However, the closing of the border negatively affected the lives, livelihoods and resilience of communities living in the area including the Hammar, Dasanach Kenya/Ethiopia, Borana, Gabraa, and Albore whose capacity and coping mechanisms had been weakened and broken by drought effects. A cholera outbreak along the Dasanach community from October 2009 to January 2010 worsened the negative effects of the restricted movements on herders and traders hence impairing project implementation for development and relief agencies as well as government departments' service delivery.

The agenda during this meeting included:

1. The relationship between Dasanach, Hammar, and Gabraa communities in relation to conflict.
2. Security along the Kenya – Ethiopia Border
3. Cross border trade
4. OLF and rebels
5. Possible effects of Ethiopian Elections on Kenya

It was concluded that the two governments should agree on reinforcing the RGA developed by both communities and further stated that disobeying these regulations would result in penalties in order to maintain peaceful co-existence. VSF-G was requested to facilitate a peace meeting between the Gabraa, Hammar and the Dasanach. This meeting was held in Turmi, Ethiopia in March 2010.

The two governments further agreed on frequent meetings in order to share information and improve the coordination of their actions across the border, and more importantly, opened the Kenya – Ethiopia border.

## 4.4 Field Visits in Turkana

### July 2011-Oropoi, Kenya

Community elders in the village of Oropoi in Turkana gave insights with regard to the current Reciprocal Grazing Agreements (RGA) facilitated by VSF-G. The goal of the RGA was to bring peace to the Turkana community in Kenya and the Dodoth in Uganda. Both sides have experienced a prolonged history of conflicts that have led to several raids leaving behind a large number of victims. The RGA was part of the Drought Management Initiative (DMI) which helped these communities to achieve sustained access to dry season grazing and water areas as a way of coping with the extensive drought that has been threatening the livelihoods of pastoralists at the Horn of Africa. Although this project was completed successfully in May 2011 leading to an increase of grazing land by approximately 110 square miles, new conflicts arose recently between the Oropoi and the Dodoth communities.

In the past, peace agreements were made between the two communities with minimal involvement of outside parties like the government or NGOs. In order to do so, spears, arrows, and bows were buried by both sides as a sign of peace. This ritual was accompanied by the belief that whoever acted against this agreement will be a cursed. This view has changed and with the introduction of illegal guns, conflicts within these communities have intensified.

Prior to VSF-G's interventions in these areas there had been previous attempts to bring peace to the communities led by the governments of Uganda and Kenya as well as local NGOs such as LOKADO, RIAMRIAM, LOPEDO, and APEDI. None of these attempts succeeded since all agreements stopped the conflicts for some time. Due to these failed agreements the Oropoi claimed that they were not sufficiently involved in the process. They alleged that the government "forced" the agreement upon them instead of including both sides in decision making.. The Oropoi elders were of the opinion that previous local NGOs-led agreements did not sufficiently involve the communities in the decision process.

At the moment, the RGA implemented by VSF-G is no longer being recognized in the area between Oropoi and Uganda. The RGA had stated that in order to gain access to the grazing area, the Oropoi had to leave their weapons behind to guarantee a conflict-free zone. Although Oropoi first accepted this rule, they were attacked by armed Dodoths. Therefore, the Oropoi no longer believe that the RGA is valid. With regard to the failure of past agreements, Oropoi also sees insufficient decision makers as the main cause. Their wish is to bring both communities together for lasting peace to be realised. The youth should be targeted in making the peace agreement last since they represent future warriors. By bringing children from both tribes together (e.g. one school for both tribes, joint activities), better relations might result hence lead to few conflicts. The governments of both countries were blamed for the ongoing conflicts. The Oropoi wishes for a better demarcation of the Uganda border as well as increased border control to sustain security. This border control has already been implemented by the government of Uganda, which makes the Turkana feel less favoured. Further emphasis was placed on the Dodoth, who are perceived by the Turkana as not being ready for peace. However, in the history of the Dodoth, war has always played a part. Unless the Dodoth are willing to change the roots of their culture, peace will never be possible.

## July 2011 – Mogila, Kenya

The recent reciprocal grazing agreement by VSF-G resulted in a tremendous reduction in the number of conflicts, raids, and improved security for the Turkana as well as the Toposa. Unfortunately, this state only persisted for a short period before cases of conflicts soared. The Turkana (community of Mogila) reneged on the RGA six (6) months after it was implemented claiming that it is no longer reliable.

The first peace agreements between the Toposa of South Sudan and the Turkana of Kenya were negotiated and controlled by the British during colonial times, and as the Turkana assert, this was the only period in which peace was actually realised between the two communities. They argue that the weapons during the colonial days were less harmful and the British managed to control the movement of illegal arms. The situation changed once Kenya declared attained independence. Conflicts and the number of illegal weapons increased.

Before VSF-G's intervention the local community based organizations (CBO), APEDI, LOCADO, and LOPEO, tried to bring peace to both communities. Although tension was decreasing, conflicts started soaring soon after. Mogila residents blamed the Toposa for violating the agreement hence its failure. They raided them in early June 2011. During the incident a large number of livestock was stolen further resulting in increased poverty for the effected households. According to the Turkana also VSF-G's agreement failed due to the Toposa. They emphasized the need to educate the youth of both tribes about each other in order to bring peace to these communities, since they represent the most war-oriented segment of the tribe, and thus often opt for retaliation. In order to solve the everlasting problem of rivalry between the Toposa and the Turkana, the Mogila elders pointed out that if the governments of Kenya and South Sudan weren't able to stop the flow of illegal weapons, the conflicts will not cease to exist.

### Context of conflict after VSFG interventions

In 2010, a follow up conflict mapping to review the progress in the relationships of the communities showed that Gabraa and Hammar have enjoyed a relatively peaceful co-existence. The Dasanach show the other extreme. While the Dasanach in Kenya and Hammar have a shaky relationship due to recent raids, the Dasanach in Ethiopia and Hammar have broken relationships similar to the Dasanach in Kenya and the Gabraa who had some tensions due to some failure in meeting the reciprocal agreement elements due to cattle rustling in Darate.

## 4.5 Testimonies by conflict resolution actors

This process helps to get feedback from the receiver's point of view.

### 1) Dasanach-Kenya Peace committee perspective

Individual members from the community constituted the peace committee whilst *organizations such as the EPaRDA, Catholic mission, Human Rights, KWS, Office of the President and Kenya Police were involved in RGA process.*

Members of the Dasanach Kenya perceived the benefits of the RGA to include:

- Sharing pastures and water in Surge, El-nyakwaga with Hammars
- Returned stolen and lost livestock (in Bulluk-returned 50 cattle to Gabra called Korka,; in Bulluk-received 400 sheep and goats to Maade and Yeri jalgno of Dasanach; in El-Nyakwanga-Dasanach called Aike received 2 cattle while Hamar called Lokwale received 6 cattle)

Members of the peace committee as well as community members of the Dasanach-Kenya perceived a positive change in the security situation and sharing of natural resources after the signing of VSF-G's RGA. Initially, conflicts over pasture and water, raiding of livestock, and murder on both sides were frequent. Only the Dasanach Kenya and Arbore have no history of conflict between one another. Although measures had previously been taken to address this issue by other NGOs as well as interventions by the Government of Kenya, peace was never fully obtained. , These interventions were expected to improve the situation of pastoralists in the area. The failure of previous similar interventions has attributed to rushed processes, Do No Harm Approach and insufficient follow-up of the agreements which led to further conflict. Moreover, natural circumstances such as the prolonged drought contributed to resource-based conflict over natural resources.

VSF-G has been quite successful with the current RGA and the affected communities see the change as "very necessary and important to all communities". According to the Dasanach in Kenya, the evidence of change include an improved security situation, a reduction of mass raids, return of stolen livestock, and the mutual sharing of the few pasture and water resources that are available. However, the participants also mentioned the need to further engage the customary institutions and link them with conventional administrative system. There is need for support to review the RGA elements to reinforce gaps in implementation.

## 2) Dasanach-Ethiopia

The Dasanach-Ethiopia saw their livelihood threatened due to conflicts with other bordering communities (Hammar, Turkana, Gabra). This issue was first addressed by the local organization EPARDA and the Government of Ethiopia. However the participants claimed that even though there was an improvement in their situation, the agreements had no sufficient impact to make a lasting difference. Since meetings were rare and there was poor follow up, livestock were not always returned hence conflicts arose shortly after.

VSF-G's intervention has been perceived as having a greater impact, due to large number of livestock being returned, close collaboration between GOE, GOK and other NGOs as well as increased peace and stability in the area. According a chief in the area, "a young child can now sleep well without disturbance". Furthermore, previously inaccessible pastures and water resources such as Fajaj, Girgilam, Narama, Surge and El Nyimor are now being shared. The Dasanach in Ethiopia hope for continued VSF-G's peace interventions as well as an enforcement of such by other NGOs like EPARDA and the Government of Ethiopia in future. Cross border committee meetings and agreements have been developed making sharing of resources and joint activities easy.

### 3) Dasanach-Woreda

Other organizations involved in RGA include EPaRDA, EPDA (Ethiopia Pastoralist Development Association) and the Government of Ethiopia (GOE)

Just like the Dasanach-Ethiopia, the Dasanach-Woreda faced considerable conflicts with the surrounding communities (Turkana, Nyangatom, Hammar, and Gabra) before VSF-G implemented the RGA. Previous interventions by other NGOs and the GOE greatly improved their situation in the short run by implementing natural resource agreements, human rights awareness projects, formation of peace committees, and improving farming techniques. However, in the long run a shortfall in follow up actions, the habit of cattle rustling and the different beliefs of each community led to escalation of conflicts. Stimula-Chumareng, Deputy Woreda, Dasanach Woreda, notes that there have been improvements in the livelihoods of the affected communities due to the interventions of VSF-G. These include the return of stolen or stray livestock, better security situation, and sharing of the available few natural resources. He proposes that in future more possibilities for interaction between conflicting communities (e.g. exchange visits, sport activities) which could help to decrease prejudice and better communication should be explored. Increased meetings and peace trainings for all stakeholders should be encouraged. These actions could lead to a better understanding of one another's culture and thus to a reduction of conflicts.

### 4) Gabraa

Initially, peace agreements were made by the affected communities during dialogue meetings. However, due to lack of authority these agreements were often broken and thus were not successful. Conflicts between the Gabraa and the Dasanach, the Borana, the Arbore and the Wotawendo have resulted in the death of several people most notably during the Kokai-massacre and along the Bulluk and Darate pasture areas. Several NGOs such as PACODEO, IGAD, Arid Lands, Diocese Development Office, Shade Initiative, GoE and Oromo Pastoralist Association, Care and Eparda have addressed this issue in the past. Although these interactions have led to an increased level of communication between the different communities, refund of stolen livestock, and better security, conflicts did not completely disappear and arose soon after. The Gabraa representatives blamed this failure on the Dasanach due to dissatisfaction and different interests. They reckoned that the need for peace agreements should originate from the communities instead of the government or other NGOs. The increase in population is seen as a general threat to available resources.

VSF-G's interventions have been perceived as having a great impact on the current situation. Joint road construction between the Hammar and Gabraa, the sharing of grazing areas as well as VSF-G's cross border coverage has made this possible. Further evidence of change includes the return of livestock and the reduction of raids. In order to keep and further strengthen these improvements in the long run it is proposed that VSF-G helps in resolving issues of administrative boundaries, facilitates community meetings, and involve an increasing amount of people in the peace committee. Furthermore, the different governments should interact by implementing and legalizing the process. Finally, like the Dasanach also the Gabraa call for a dialogue meeting to resolve current tensions at Bulluk junction.

## 5) Hammar

According to members of the Hammar community interviewed, previous interventions have been implemented the correct way by frequently monitoring the peace situation, having sufficient meetings to come to a conclusion as well as achieving proper peace declarations. However, it was stated that these interventions became useless as the Dasanach did not honor the agreement which led to an increase in conflicts. Further interventions by local NGOs and VSF-G managed to bring peace with the Gabraa, Borana and Arbore. In addition, grazing agreements managed to access grazing areas more efficiently. The Minogelti-Bulluk road is now open and in use. The Hammar community would like VSF-G to continue working with them and improve water structures in the Hammar region.

## 6) OCS- Ileret Police Station

Prior to VSF-G's intervention the Ileret area had no other NGOs tackling the issue of conflicts between different communities. The intensity of conflicts between the Gabraa, Dasanach, Amarkoke, Turkana, and Arbore could not be resolved by the GoK alone. As a result of educating locals and constructing wells, VSF-G's actions had a great impact in the whole area by bringing communities together. Additionally, grazing agreements managed to increase stability and return stolen livestock to their rightful owners. A large number of pastoralists now benefit from newly established animal health services. Unfortunately, there is still a communication barrier between different communities as well as the GoK. This situation represents an obstacle in resolving conflicts. Therefore, it is suggested that VSF-G continues its work in the area to support all communities and improves watering points and grazing areas in order to reduce conflicts over natural resources.

## Lessons Learnt

### 1) Peace Committee

- Selection process must be very participatory using a participatory selection criteria
- Their composition should be inclusive and very representative
- They must be functional (clear rules and regulations, objectives, tasks clarified and proactive)
- They must have developed action plan to be implemented and monitored
- They should have structured linkages from community level to District//Woreda and county levels
- Process of member selection should not be rushed.
- Technical capacity of members assessed for appropriate capacity building (Do No Harm participatory planning approaches, conflict resolution, leadership and governance trainings)
- Proper institutional capacity
- Simple and clear plans with monitoring systems
- Networks with other external services and support institutions.

## 2) Conflict sensitive capacity building and strengthening of peace structures

- Capacity assessment and strengthening of community, inter-community structures, Woreda/District/County security teams
- Review of reciprocal agreements, continuously monitoring and plans
- Link leadership and governance training to conflict sensitivity
- Inter-governmental (Kenya/Ethiopia) administrators linkages and coordination strengthening
- Link structures to IGAD cross border framework.
- Link structures to CMDRR process, contingency plans and contingency funds at all levels (community and District, Woreda and County)

## 3) Limitations/assumptions/shortcomings

- Reciprocal Agreements must be tested to be seen to be reliable and appropriate
- Not all components of the reciprocal agreement may fail and therefore need to be reviewed and reinforced.
- Reciprocal agreements cannot be fully adhered to but takes a process of growth
- Theory of change must be clear to all parties involved in the agreement in order to achieve desired objectives
- Reciprocal agreement development process should not take less than six (6) months to allow for greater participation involvement, validation and endorsement of majority of the target community members.
- Language barrier and high illiteracy levels in the target communities lead to many translations and time taken making the process longer and costly.
- Need to link the natural resource managed contingency plans and funding to incorporate reciprocal agreements in order to boost replication and scaling up through ecosystem based planning
- Sustainability factors should be thought of at the planning process
- Involving peace committees and government in the process and letting them take the leading role
- Socio-economical and political will are crucial to resource agreements

## Recommendations

- The capacities of the communities are limited and therefore there is need for further capacity building, quality facilitation by practitioners and back-stopping, replication along the region for sustainability.
- Some pockets of incidences between Gabraa, Dasanach and Borana affected the positive growth in the implementation process of the reciprocal agreement therefore retarding the rate of success and impact hence creating need for further reflection and reinforcement of the gaps.

- There is still a gap in documentation of the different grazing agreements developed by various stakeholders in attempt to link them, learn from each other and mainstream harmonization of approaches.
- There is missing link between the reciprocal grazing agreements developed at local levels with the sub-national, national and regional – AU Pastoral policy framework
- There is need to enhance the recognition and implementation AU Pastoral Policy Framework in order to strengthen and create more ownership and formal functioning of the reciprocal grazing agreements developed by various communities.
- IGAD and FAO could support the strengthening and streamlining of the RGAs from local, district, sub national, national, regional levels.
- Reciprocal agreement and cross border joint resources planning should not be rushed. At least 6-10 months of active engagements are required.
- Reciprocal Agreement is value addition to Holistic Management or Ecosystem based planning.



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