ILRI
International Livestock Research Institute

Research Report 4

Review of VSF-Belgium's 'Turkana emergency livestock off-take' intervention 2005

DIERENARTSEN | VETERINAIRES ZONDER GRENZEN | SANS FRONTIERES BELGIUM

DFID Department for International Development

Review of VSF-Belgium's 'Turkana emergency livestock off-take' intervention 2005

David J Watson and Joep van Binsbergen

ILRI
INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

International Livestock Research Institute

DIERENARTSEN | VETERINAIRES
BONDEN GRENZEN | SANS FRONTIERES
BELGIUM

Veterinaires sans Frontieres Belgium

DFID Department for International Development

Department for International Development

Authors' affiliations

David J Watson, International Livestock Research Institute (ILRI), Nairobi, Kenya

Joep van Binsbergen, Development Specialist – Ministry Quality Team, World Vision International (WVI) Africa Regional Office, e-mail: joep_vanbinsbergen@wvi.org

Disclaimer: This publication is an output from a project funded by the Department for International Development (DFID) of the United Kingdom for the benefit of developing countries. However, the views expressed here are not necessarily those of DFID.

ISBN 92–9146–209–8

Correct citation: Watson DJ and van Binsbergen J. 2008. *Review of VSF-Belgium's 'Turkana emergency livestock off-take' intervention 2005*. ILRI Research Report 4. ILRI (International Livestock Research Institute), Nairobi, Kenya. 95 pp.

Table of Contents

List of Tables

Acknowledgements

This research report is one of a series of publications arising from the collaborative project between the International Livestock Research Institute (ILRI) and Veterinaires sans Frontieres Belgium (VSF-B) on the 'Development of monitoring and evaluation tools for livestock development activities in pastoral production systems'.

The authors would like to acknowledge the vital support and interest of VSF-Belgium staff during the field research, particularly, Dr Bruno Minjauw, Dr Robert Allport, Dr Dan Irura, Michael Ameripus, Francis Anno and Mueni Kimulu. The comments of Dr Dannie Romney, Dr Rob Allport, Dr Patti Kristjanson and Keith Sones on earlier drafts of this report were invaluable.

Finally, we acknowledge the support of the UK Department for International Development (DFID) in funding the aforementioned project.

Executive summary

Introduction and aim of project

Livestock off-take (destocking) interventions have been conducted in Turkana, as an emergency relief measure, for the past two decades and have experienced differing degrees of success. In more recent times, VSF-Belgium has also been active in the field of destocking. Initiated in September 2000 and culminating October 2005, the Turkana Livestock Development Programme Phase 1 (TDLP1) has been the flag ship of VSF-Belgium. The overall objective of TLDP1 was to improve the viability of the pastoralist way of life in Turkana. To achieve this, TLDP1 focused on four primary interventions, which formed the specific objectives of the program. These were to: a) improve animal health and production; b) increase access to dry season grazing areas; c) increase opportunities for the marketing of livestock and; d) to support peace building activities. In 2000–2001, VSF-Belgium initiated a combined intervention that provided both free fresh and dried goat meat to schools and health centres in Turkana and the subsidized transportation of goats and cattle to markets inside and outside the district. In 2005, VSF-Belgium was involved in two major livestock interventions of which destocking comprised an implicit or explicit component. A small number of goats were destocked as part of the Drought Response Programme, as payment in kind for part of the veterinary intervention package of the program. However, the principal destocking activity of VSF-Belgium, and the focus of this report, occurred in January and February 2005.

The 2005 'Turkana Emergency Livestock Off-take' (TELO) intervention contributed to VSF-Belgium's overall goal to 'improve the socio-economic status of the pastoral communities living in arid areas of Kenya by creating markets for their livestock and improving the nutritional status of identified target populations'. The intervention had six outputs/objectives, namely to: increase household income (cash economy) among pastoralists; reduce pressure on water and pasture resources; increase food security for vulnerable school children; improve utilization of assets with livestock owners gaining benefit from vulnerable livestock before the condition of the livestock deteriorates beyond the point of selling; increase access to funds made available to livestock owners for future restocking and; use money saved from the school feeding program for school fees and/or other relevant projects for the pastoralists' school children. Viewed as a significant success, and used as a model for subsequent destocking interventions, it is the aim of this report to evaluate the efficiency and effectiveness of this destocking intervention to highlight both strengths and weaknesses of the approach used and to suggest improvements for future destocking interventions.

Methodology

The research conducted as part of this analysis utilized a broad Actor Network Theory approach that set out to 'follow the actors' involved and analyse their specific contributions, both negative and positive, to the eventual outcome of the destocking intervention. In order to generate the insights required for a thorough analysis, both key informant interviews and Focus Group Discussions (FGDs) were undertaken. Key informant interviews were conducted with key individuals involved in the identification of drought-related problems and their causes, and with those who deliberated potential solutions to the problems identified and that eventually chose the course of action which they believed would achieve a range of humanitarian objectives. In addition, key informant interviews were also conducted with representatives from schools and health centres that benefited from receiving consignments of free goats. FGDs were held with key groups involved in the destocking intervention, namely, groups of pastoralists and livestock traders/LMA members in order to ascertain their actual role in the intervention compared to the role assigned to them by the architects of the destocking intervention. Key responses from key informants and FGDs were triangulated in order to validate the accuracy of the data generated.

In addition to a review of relevant literature, a significant volume of secondary data was analysed comprising VSF-Belgium's records of buyers, sellers and recipients of goats, prices paid, amounts purchased, delivery dates and the condition of goats delivered etc. This data was used to either corroborate or invalidate the findings of the key informant interviews and FGDs.

Key results

1. There was substantial evidence of excellent, efficient and effective multi-partner collaboration at the strategic planning and intervention design level. Discussions at this level appeared to be highly inclusive and collaborative, with the District Steering Group (DSG) and the Livestock Service Providers (LSP) forum acting as a proactive umbrella group for development actors in Turkana. Most of the principal development actors in the district were extremely supportive of the DSG's role and were satisfied that the Group provided a forum for them to air their own ideas and concerns in an inclusive, almost corporatist environment. Unfortunately, however, analysis detected little community-level involvement in the planning and design stage of the intervention.
2. Whilst the team's analysis suggests that the TELO intervention was a success, one of the most important results generated by the analysis was that in many cases the TELO field data did not always corroborate data contained in the official TELO Report. For example, whilst there is general agreement regarding the total number of goats

destocked (6264 goats in the TELO Report and 6, 338 goats in the TELO field data), the TELO Report tended to overestimate the numbers of pastoralists (3212 in the TELO Report compared to 2, 565 in the TELO field data—involving over 1000 adakars with an average of 2.5 households benefiting per adakar) and livestock traders (523 in the TELO Report compared to 336 in the TELO field data) benefiting, and underestimate the number of institutions that benefited from receiving free goats (90 benefiting institutions in the TELO Report compared to 105 the TELO field data). In addition, it appears that the majority of goats were not slaughtered on same day as suggested by the TELO Report. Indeed, there is only slaughter records for 49% of the goats received.

3. Awareness raising activities (i.e. local barasas) did not reach all vulnerable pastoralists.

4. Many pastoralists did not receive the set price of Kenya shilling (KES)[1] 800 for their goats; 435 pastoralists were underpaid for their goats (receiving as little as KES 350), whilst a minority (130) were overpaid.

5. Many goats were purchased on a first-come, first-served basis. This appeared to bias pastoralists with good local socio-political contacts and those closest to main arterial roads and market towns.

6. Traders purchased an average of 19 goats for the intervention. However, many traders complained that the intervention generated low profit margins due to high bank charges for cashing their cheques (payments for the goats delivered to the recipient institutions), delays in receiving cash payments, feeding costs and goat mortalities (between goat purchase and delivery to recipient institutions). There was almost a consensus amongst sellers and buyers that, in future, pastoralists should receive KES 1000 per goat sold and traders should receive KES 500 margin for purchasing and delivering goats to recipient institutions. These values were suggested to reflect the market value of goats, and pastoralists' willingness to sell to external institutions, and the traders costs associated with buying and delivering goats (including feeding costs and goat mortalities).

7. While the intervention did not affect market prices, it did improve market attendance during, and for a few months after, the destocking intervention. Whilst traders suggested that the destocking intervention was only a small part of their total business, they complained that it tied up much of their working capital for up to 4 weeks.

8. There was a general consensus amongst institutions receiving free goats (schools and health centres) that too many, often unhealthy, goats were delivered over a short period of time. Most institutions suggested that they could not either consume, or store, the amount of goats scheduled to be delivered. In many cases goats were held at the schools and health centres until they were ready to eat them or traders were asked to

1. In March 2008, USD 1 = Kenya shilling (KES) 68.90.

delay deliveries until the recipient institutions were ready to slaughter and consume them. It is likely that the miss-match between supply and demand resulted in the processing of slaughter records for only 49% of goats supplied through the intervention.

9. Recipient institutions suggested that unforeseen costs were accrued in feeding and caring for the goats, delivered by local traders, until they were slaughtered and consumed.

10. Schools and health centres used the free goat meat to substitute the provision of animal protein in their pupils' and in-patients' diets rather than to supplement. However, due to the high volumes of goat meat supplied to recipient institutions, the free goat supplied both substituted and increased the usual animal protein content of pupils' and in-patients' diets.

11. Savings that accrued from not having to purchase the usual quantities of goats consumed and from the sale of goat skins (which should have been collected by the Local Off-take Community Committees (LOCCs) were used to buy essential items for the institutions). However, these expenditures were not accounted for.

General recommendations

- There should be greater community-level involvement in the design of pastoralist interventions.
- Future interventions in livestock systems should bolster existing drought mitigation strategies.
- VSF-Belgium should continue to promote the market economy in Turkana via bolstering local livestock markets and market institutions.
- Future interventions should seek to enhance and expand general livelihood strategies.
- Emergency interventions should incorporate a key research component as it can contribute to the process of improving the effectiveness and efficiency of future livestock system interventions.

Specific recommendations

- There should be greater involvement of local communities in the future design and implementation of destocking interventions.
- The creation of new apolitical community-based institutions should be considered. It is recommended that LOCCS could be transformed into permanent or semi-permanent local crisis committees.
- Crisis committees should also play an active, transparent, and participatory role in devising the logistics of free goat meat distribution in a transparent, verifiable and participatory manner.
- In conjunction with executive implementing agencies, local crisis committees should play a proactive role in the identification of free goat meat beneficiaries.

- Future destocking interventions should consider using local crisis committees to monitor pastoralists in their local areas and to identify the most vulnerable pastoralists in the most vulnerable pastoralist households.
- Ideally, future destocking interventions should consider prioritizing the provision of free goat meat, and/or other key necessities, to the most vulnerable households (identified by local crisis committees). Where this is not possible, the provision of free goat meat to schools and health centres is also recommended.
- In order to achieve a greater nutritional impact, day schools should be targeted before boarding schools, as children in day schools do not usually consume meat in their daily diets. Only after all day schools have been reached should boarding schools be considered.
- Systems should be developed, and strictly applied, that better match free goat supply to consumption demand and ensure that free goat meat supplements, and not merely substitutes, usual animal protein consumption (particularly if the supply of goat meat mirrors the institute's usual goat meat consumption). A system should also be devised for verifying school childrens' additional consumption of goat meat.
- Future destocking interventions should account for the need to hold goats until they are ready for delivery and slaughter. This includes internalizing the costs associated with feeding and caring for the goats. It is also suggested that goat skins could be sold by recipient institutions.
- It is imperative that, in future destocking interventions, verification protocols are both comprehensive and rigorously adhered to. It is important that recipient institutions should provide detailed and verifiable accounts of what savings from suspended goat meat purchases, and goat skins were used for. It is also imperative that clear and accurate records are kept for the number, condition, timing, and slaughter of goats received, as well as for verifiable details of their consumption.

Future destocking interventions should consider adopting a two-tier system. In this system, relatively less vulnerable households, with larger livestock holdings, would be encouraged to actively destock and receive salvage payments for their goats. Conversely, the most vulnerable households would become net recipients of free goat meat and/or key necessities.

1 Introduction

Designated as one of Kenya's ASALs (Arid and Semi-Arid Lands), Turkana District is located in northwestern part of Kenya bordering Ethiopia to the North, Sudan to the northwest and Uganda to the west. Turkana District covers an area of approximately 77 thousand km^2 (Ajele 2005) and has an estimated population of 497,779 (ITDG 2005). Turkana is the largest, yet least developed, district in the country. Rainfall in the district is bimodal (long and short rains). However, it is becoming increasingly erratic, with average precipitation ranging from 121 mm in the east to over 540 mm in the northwest. While droughts are a regular feature in Kenya's ASALs, it is widely believed that droughts are occurring more frequently and are becoming more severe. For example, the 1999–2001 drought in Turkana was more severe than the previous droughts of 1992–93 and 1996–97 (Aklilu and Wekesa 2002). Traditionally, during both short and long rains, pastoralists spread themselves across the plains. When drought begins, pastoralists migrate to the high mountain areas and even to neighbouring countries of Uganda and Sudan and into the Pokot Mountains in search of pasture and water for their livestock. As a direct result of the low and erratic precipitation, high temperatures, localized occurrences of highly saline soils and soils of low mineral content, there is relatively little vegetation cover and the district is predisposed to soil erosion. Less than 3% of the district has agricultural potential, which is generally restricted to the hinterlands of permanent rivers (Ajele 2005). However, most of the land is suitable for grazing and browsing. Nomadic pastoralism, based on the subsistence-based exploitation of shifting grazing and browsing opportunities, is central to the Turkana District's economy. At least 64% of the population are dependent on pastoralism for their livelihoods, with a further 16% dependent on agro-pastoralism. Livestock forms an integral part of the communities' social and spiritual life. In addition to providing life sustaining products (such as milk, blood, meat, hides, skins and ghee), goats, sheep, cattle and camels are used as payment of bride price and in local rituals. The remaining population in Turkana District relies on fishing around Lake Turkana (12%), which is also a drought mitigation strategy for nomadic pastoralists during severe droughts, and 8% who rely on income from numerous small businesses in Turkana's urban areas. There are also small-scale gold panning enterprises at Lochoremoit, Namoruputh and Ng'akoriyiek along the Lodwar–Kakuma highway.

During the past 20 years or more, the survival of nomadic pastoralism as a traditional subsistence-based livelihood strategy has been increasingly threatened by increased human population, livestock diseases, persistent droughts and low rainfall, reduced access to traditional rangelands, and general insecurity. In a recent study undertaken by the International Livestock Research Institute (ILRI), 100% of pastoralists surveyed in Turkana indicated that drought was a key livelihoods challenge. In addition, 97.5% cited raids and insecurity and 65% cited the lack of permanent water nearby as key livelihoods challenges

(ILRI 2006). During times of drought, 82.5% of respondents indicated that a lack of water and food, lack of pasture (62.5%), livestock fatalities (60%), and human and livestock diseases (45%) were the principal problems faced during times of drought. Persistent droughts and low erratic rainfall have undermined the pastoralists' traditional drought mitigation strategies of migrating in search of water and pasture, and the preservations of grazing areas for times of extreme drought. Other drought mitigation strategies include division of large herds into smaller units (species and production specific); keeping of multiple species; stock loaning between relatives and friends; additions to the diet, such as wild fruits and bartered cereals and; begging for food (VSF-Belgium 2006). According to ILRI (2006), 52.5% of the respondents surveyed in Turkana traditionally migrated to water and pasture, 25% slaughtered livestock and preserved meat, 17.5% collected wild fruits and gums, and 15% initiated small businesses as a means of drought mitigation. In response to the drought of October 2005, 27.5% suggested that they were initiating alternative businesses, whereas 15% were doing nothing. Access to grazing land is also becoming increasingly difficult as local authorities have expropriated land from the pastoralists, which should have been held in trust. Furthermore, private property rights, associated with private land tenure, and urbanization excludes pastoralists from many vital grazing and water resources. All this is exacerbated by pasture degradation through over-grazing and the encroachment of an exotic plant known as Prosophis.

In attempts to ameliorate the devastating impacts of these recurrent threats, various international and regional organizations sought to support the livelihoods of pastoralists in Turkana by reinforcing local management capacities; assisting control of livestock pests and diseases, destocking and restocking interventions and; improving the sustainability and use of natural resource management. In addition, in recent years, organizations have attempted to introduce pastoralists to the cash economy and promote market integration through the development of livestock sell yards, slaughter houses, market days and marketing associations. Interestingly, in the ILRI research discussed earlier, 80% of respondents cited a lack of livestock markets and poor livestock prices as key livelihoods challenges (ILRI 2006). Furthermore, 60% indicated that, in response to drought, they traditionally sold livestock in order to purchase food. In response to the drought of October 2005, 62.5% of the pastoralists surveyed indicated that they were selling livestock in order to purchase food and water. When asked about their preferred livelihoods interventions, 67.5% of respondents prioritized food relief and financial support for small-scale business, 60% preferred assistance in enhancing community water storage, and 57.5% requested assistance in restocking. When asked about their preferred livestock intervention, 100% indicated animal health care, and 50% indicated the provision of water.

1.1 Destocking initiatives in Turkana

Destocking initiatives in Turkana have met with mixed success. One of the earliest destocking interventions was undertaken by the World Food Programme (WFP) in 1990. Designed as an emergency intervention, the aim of the Emergency Livestock Purchase intervention was to: improve ecological balance through destocking; increase pastoralists' purchasing power through direct income transfer and; improve food security amongst some of the most food insecure pastoralists in the district. Agents working on behalf of the Government of Kenya (GoK) bought 2768 shoats at auction sites and then sold them on to traders; the money formed part of a revolving fund. Unfortunately, many shoats were emasculated and unhealthy and died before they arrived at the project's holding ground. Reviews of the intervention suggested that, while it could be seen as a success in many ways, the intervention was based on many unrealistic assumptions. Firstly, they assumed that GoK buyers would be able to detect and select the most vulnerable pastoralists at the livestock auction sites. Second, architects of the intervention assumed that the price offered for shoats would only attract the poorest and most desperate pastoralists; in reality, the price offered was attractive to both small-scale and large-scale livestock owners. The fact that buying took place on a first-come, first-served basis exacerbated the situation. Third, it was assumed that the shoats offered for sale would be weak but healthy. In reality, a number of emaciated and unhealthy shoats were offered for sale, but many died before they could be sold to local traders. Lastly, the scale of intervention was far too small to affect stocking densities—something the review team believed could only be achieved through regular market interventions. However, the review team did uncover evidence to support the claim that the intervention would increase the purchasing power of pastoralists and, by default, enhance food security. The review team concluded that while the intervention was not a model destocking exercise, it was a legitimate tool to provide emergency support directly to pastoralists (Bush 1997; Wekesa 1997).

In more recent times, VSF-Belgium has been active in the field of destocking. Initiated in September 2000 and culminating October 2005, the Turkana Livestock Development Programme Phase 1 (TDLP1) has been the flag ship of VSF-Belgium. The overall objective of TLDPI was to improve the viability of the pastoralist way of life in Turkana. To achieve this overall objective the program focused on four primary interventions, which formed the specific objectives of the program. These were to: improve animal health and production; increase access to dry season grazing areas; increase opportunities for the marketing of livestock and; to support peace building activities. The target population of TLDP1 were the pastoralist communities in four divisions of the Central Region of Turkana District, namely, Turkwell, Kakuma, Kerio and Loima. The program was implemented by a core team of VSF Belgium in close collaboration with other development actors, namely, CBOs, local NGOs,

government departments, regional bodies and international NGOs. In 2000, as part of TDLP1, VSF-Belgium launched an emergency livestock off-take intervention based on the promotion of livestock marketing. This intervention comprised a small component of a suite of interventions in the north of Kenya, part of the 'Livestock Intervention Programme', the most significant emergency intervention in Kenya's history.

Funded by the Community Development Trust Fund (CDTF), to the value of USD 120 thousand (or KES 9 million), VSF-Belgium, together with the Netherlands Development Organisation (SNV), planned to purchase 18 thousand kg of dried goat meat and 1702 kg of fresh goat meat. The proposal was initially discussed by members of Turkana's District Steering Group (DSG) and in its technical advisory committee, the Livestock Service Providers forum (LSP). Together with SNV, VSF-Belgium proceeded to organize community dialogue workshops (CDWs) to sensitize communities to the forthcoming intervention and to solicit their participation. CDWs were conducted in all areas targeted for the intervention: Kaleng, Kaikorr, Lodwar, Lorugum, Kalokol, Lokori and Lokichar.

The destocking proposal had four main objectives:

- to salvage some of the capital in the animals at risk by providing the opportunity for livestock owners to sell stock before it died;
- to support relief efforts by distributing dried meat to vulnerable groups, such as school children, and feeding centres;
- to increase the cash available to pastoralists and
- to relieve pressure on scarce water and pasture resources.

The project began in November 2000, and continued until January 2001. The intervention was designed so that pastoralists' used their own money to purchase small stock. After slaughter, and inspection by Public Health Technicians, the meat was dried, weighed and purchased by the executing agency. Implemented in Central and Southern Turkana, the executing agencies paid KES 7.4 million, averaging KES 569 per animal, for 5951 kg of dried meat, far short of the 18 thousand kg stipulated in the proposal, and 1702 kg of fresh from 13 thousand small stock. The total cost of preparing and drying the meat from one animal amounted to KES 950. Meat was then sold to the project at KES 1200, leaving a profit of KES 250 per animal; with offal sold separately for an additional KES 150, leaving a total profit of KES 400 (Aklilu and Wekesa 2002). During this part of the off-take intervention, VSF-Belgium supplied 6398 kgs of dried meat and 2376 kgs of fresh meat to 41 schools and health centres, directly benefiting approximately 9000 malnourished children and 304 tuberculosis in-patients. According to Aklilu and Wekesa (2002), the destocking intervention injected a total of KES 7.14 million into the local Turkana economy.

The intervention was praised for targeting the areas most devastated by the drought. However, whilst there was evidence of adequate community consultation, participation and involvement during the implementation phase of the intervention, greater community involvement would have been beneficial in the planning phase of the intervention, particularly in determination of the type of meat destined to be processed. Suggestions for improvement for future destocking activities include the need for simpler and speedier reimbursement procedures. Unless circumstances dictate otherwise, pastoralist communities also prefer fresh meat to dried meat.

As part of the same intervention, VSF-Belgium, using USD 51,021 from CDTF, aimed to increase off-take rates of goats, sheep and cattle and encourage market integration by providing subsidized transportation. The intervention aimed to facilitate the movement of 12 thousand small stock and 900 cattle out of the district. The intervention was bimodal: providing a 40% subsidy for the purchase and sale of livestock both inside and outside Turkana District. However, despite the fact that the implementing agency introduced rigorous accounting procedures and administration protocols, their reliance on many local actors, with their own internal agendas, allowed for fraudulent behaviour that quickly exhausted the project's budget, as well as cutting into funds originally allocated for the dried meat part of the intervention. In total, the intervention was able to facilitate the transportation of 1175 cattle and 3584 sheep and goats out of the district, plus a further 20,688 sheep and goats moved internally. According to Aklilu and Wekesa (2002), the intervention's impact on water and pasture resources was negligible.

In 2005, as part of the Drought Response Programme (DRP), a massive veterinary intervention across nine districts in Northern and Northeastern Kenya, four teams of veterinarians, under VSF-Belgium leadership, conducted mass treatments of many shoats and cattle in Turkana District. Whilst livestock vaccinations were offered at no charge to the pastoralists, treatments (wormers etc) were undertaken on a full-cost basis. As a result, VSF-Belgium received 2199 goats as in-kind payments for livestock treatments. Ultimately, goats were given away to a total of 61,852 beneficiaries, namely, vulnerable school children and families in the areas of operation.

In January and February of 2005, VSF-Belgium undertook its penultimate destocking intervention. The overall goal of the intervention was to 'improve the socio-economic status of the pastoral communities living in arid areas of Kenya by creating markets for their livestock and improving the nutritional status of identified target populations. The intervention had six objectives/outputs: to increase household income (cash economy) among pastoralists; to reduce pressure on water and pasture resources; to increase food security for vulnerable school children; to improve utilization of assets with livestock owners

gaining benefit from vulnerable livestock before the condition of the livestock deteriorates beyond the point of selling; to increase access to funds made available to livestock owners for future restocking and; to use the money saved from school feeding program for school fees and/or other relevant projects for the pastoralists' school children. Viewed as a significant success, and used as a model for proceeding destocking interventions, it is the aim of this report to evaluate the efficiency and effectiveness of this destocking intervention, to highlight both strengths and weaknesses of the approach used and to suggest improvements for future destocking interventions.

2 Methodology

2.1 Conceptual framework

Actor Network Theory (ANT), supported by neo-classical economics, forms the conceptual framework for the evaluation. ANT has been utilized throughout the past 20 years to analyse the interactions between society and technology (Callon 1991; Latour 1991). Unlike theories of social determinism, where technology is viewed as being defined by the social and technological determinism, and where technology develops according to its own internal necessity and is beyond human control, ANT attempts to demonstrate that technological and institutional changes are not guided solely by either society or technology. ANT demonstrates how the interactions between humans and non-humans, humans and humans, and non-humans and other non-humans are a result of both parties. As viewed by ANT, there is always a goal for the interactions between different actors. That goal involves the transference of some intermediary from actor A to actor B. Both actors are inscribed with certain properties which will assist in the transference. But these inscriptions also prescribe the ways in which the actors are allowed to interact. If there is a failure to follow these prescriptions, no transference will occur. ANT is concerned with the processes by which ideas are accepted and tools and methods are adopted. ANT describes a progressive constitution of a network in which both human and non-human actors assume identities according to the prevailing strategies of interaction. Actors' identities and qualities are defined during negotiations between representatives of human and non-human actants.

ANT follows four basic steps, each with its specific tools (Gray et al. 1997). The first step involves the identification of problems and driving forces. The second step involves the identification of each agent's interests. The third step is enrolment, which involves collective deliberation of the most appropriate form of action to take. The fourth step is mobilization, which consists of trying new technological and institutional practices.

According to ANT, the role of the principal actors involved in the 2005 destocking intervention was to:

- identify key problems and driving forces;
- identify the interests of key actors and;
- catalyse the enrolment of key actors and actants and mobilize actors in a coordinated network of activities.

This primarily consisted of the enrolment of both human and non-human actors in order to achieve their goal(s). Developed by VSF-Belgium, in close collaboration with other key development actors, the destocking proposal formed the principal tool for guiding core destocking activities and, in conjunction with their staff on the ground, for facilitating action

at a distance. The proposal (text) can be understood as a means of aligning heterogeneous elements (development actors, pastoralists, livestock traders, Livestock Marketing Associations (LMAs), school head masters, health centre managers, other texts, equipment, procedures, and more) to achieve the goals set out in the proposal. However, according to ANT, each of these aligned elements has a reality outside the text. In the case of VSF-Belgium's destocking intervention, it translates to mean that, just because the destocking proposal and implementation protocols, developed by VSF-Belgium, delineated the role of each actor, there is no guarantee that all, if any, actor(s) will execute their roles according to the logic laid down. In effect, two possible scenarios exist. The first is that, if properly enrolled, all actors and actants will play the role assigned to them. The second is that, if improperly enrolled, all, or some actors and actants will deviate from their roles to a greater or lesser extent. Depending on the centrality of the actors and actants with regard to the success of the intervention, and on the extent of deviations, the unfurling of interactions between actors and actants will either substantiate the assumptions contained within the text or undermine them.

2.2 Empirical methodology

Methodologically, ANT has two major approaches. One is to 'follow the actor' via interviews and ethnographic research. In this respect, ANT was utilized to shed light on the socio-technical and institutional networks that VSF-Belgium created in order to achieve their goals. The other major approach is to examine inscriptions such as the destocking proposal and implementation protocols (texts), which make action at a distance possible. Both approaches were utilized during the evaluation.

With regard to following the actors, several participatory tools were developed and implemented in order to ascertain the roles of key actors within the destocking process. Key informant interviews were conducted with key individuals involved in the identification of key problems, and their causes, and with those who deliberated potential solutions to the problems identified and that eventually chose the course of action which they believed would achieve their objectives and contribute to their overall goal (see Appendices 1and 2). In addition, key informant interviews were also conducted with representatives from schools and health centres that benefited from receiving consignments of free goats (see Appendix 3). Furthermore, Focus Group Discussions (FGDs) were held with key groups involved in the destocking intervention, namely, groups of pastoralists (see Appendix 4) and livestock traders/LMA members (see Appendix 5) in order to ascertain their actual role, compared to the role assigned to them by the architects of the destocking intervention. Key responses from key informants and FGDs were triangulated in order to validate the accuracy of the data generated.

With respect to the examining of inscriptions, a review of relevant literature was undertaken to ascertain the strengths and weaknesses of previous destocking activities in Turkana in order to contextualize the destocking intervention under evaluation. In addition, a significant volume of secondary data was analysed in the form of VSF-Belgium's records of buyers, sellers and recipients of goats, prices paid, amounts purchased, delivery dates and the condition of goats delivered etc. This data was used to either corroborate or invalidate the findings of the key informant interviews and FGDs. VSF-Belgium's destocking proposal and implementation protocols were used as the key texts to evaluate whether or not the proposal contained valid assumptions and that these texts, in conjunction with VSF-Belgium staff were able to ensure that the destocking intervention unfurled as planned. The economic rationality of principal actors was also evaluated at each key juncture as a complementary measure of both the efficiency of the destocking design and the decisions made by key actors.

In order to assess the quantitative aspects of the destocking intervention, all relevant data from the 'Turkana Emergency Livestock Off-take Monitoring forms' and from (nameless) goat purchasing forms were processed into a database. This was done in a meticulous manner by two data enterers at ILRI and the data was checked and cleaned by a scientist/author. A total of 379 deliveries to schools and 2638 transactions between traders and goat owners were documented. The resulting total numbers of goats, institutions and beneficiaries may differ slightly from the TELO Final Report. However, this exercise was not intended as an audit, and it is also possible that some mistakes may have occurred in the interpretation of field records. Ultimately, information extracted from the data in this exercises should be regarded as complementary to the information already available in the TELO Final Report.

3 Findings/results

3.1 Participation in the 2004–05 destocking intervention

3.1.1 Number and timing of goat deliveries and slaughter

Most goats were purchased by traders from owners at the adakar level. These purchases were documented with forms (hereafter referred to as 'goat purchasing forms') provided to the traders by the implementing agency. The forms captured: trader's name, goat owners' names, their ID, sex, number of goats purchased; price received/paid, their adakar (village) name and finally their signature (or finger print).

Goat handling by traders

After purchase, traders delivered their goats to predetermined schools or health centres. From the onset of the intervention, it was decided to also deliver goats to some schools in areas that were not targeted by the destocking (e.g. Kakuma, Lobei and Kalokol). For the benefiting schools in those areas, goats were sourced from other targeted areas. In the FGDs with traders, many individuals complained that goats were often in their care for many days before being delivered to the schools. This was also the case in areas were the goats were bought locally, as some schools preferred to receive the goats in small batches. Unfortunately, we were not able to quantify the number of days that goats were in the care of traders, as the format provided to the traders to document their sourcing of goats from adakar goat owners did not require the dates of purchase. Moreover the name of the goat owners and their adakar was recorded but not the current locations of these respective adakars, making it difficult to trace the goat movements between areas.

Goat deliveries to the schools

A full list of goat deliveries to the schools is provided in Appendix 6, which includes the reported dates of deliveries. The data suggests that goat deliveries to the institutions in central and south Turkana were synchronized events as the vast majority of deliveries were recorded on the 31st January and the 14th February. In Lake Zone and Northwest Turkana, the deliveries seemed much more dispersed. After detailed examination, the evaluation team concluded that the delivery dates were not always accurate but, nonetheless, were able to summarize the total number of goats delivered per zone, the number of institutions that benefited and the average number of goats delivered to each institution (see Table 1).

The total number of goats destocked during the TELO intervention was less than 1% of the total population of goats in Turkana District. In addition to 1,956,200 goats, Turkana District also has 975,600 sheep, 193,600 cattle, 140,800 camels and 32,600 donkeys (MLFD 2003).

Table 1. *Summary of goat deliveries documented in TELO field data*

Zone	Total goats delivered	Number of institutions	Average number of goats/institution
Central	1637	20	82
Lake Zone	1188	18	66
Northwest	1082	26	42
South	2431	41	59
	6338	105	

Making sense of goat 'delivery' dates

The off-take monitoring forms (used at the institutions level) seemed well designed with signatures and dates filled by various stakeholders along the process: the trader, an LMA official, two or more LOCC members, the head of receiving institution, the TELO field monitor, and finally the VSF-B supervisor. Unfortunately, as with the goat purchasing forms, more often than not, the date of purchase was not recorded. In cases were an LMA official was available, and was supposed to record the date of purchase, more often than not, it seems that he copied the delivery date that was used by the LOCC officials and the head of institutions. It seems that in most cases, the 'delivery date', entered by the LOCCs, was in fact the date that the school master closed his records on the goat slaughtering. In other cases it corresponded with the first day of slaughter, presumably the same day the goats were delivered. Some slaughter dates even predate the date of deliveries and sometimes even the date of purchase. This could usually be understood by the fact that most schools received several deliveries of goats, so the slaughter dates could relate to goats from previous deliveries.

Goat slaughter documentation

Under the section to be completed by the head of an institution (usually a school head master or head nurse) there was a space in which the slaughter dates were supposed to be recorded, including the meat inspection details. Unfortunately, these records were not kept beyond the 3-week period of goat deliveries. While most schools wanted to keep some goats to slaughter in the following weeks, head masters and LOCCs must have been under pressure from the traders, and perhaps the monitors were under pressure from the project management, to quickly process paperwork in order for the traders to get refunded as soon as possible. As a result, slaughtering of goats at the schools after the initial 3-week period has not been properly documented, or was not incorporated in the otherwise well-kept TELO field records.

A summary of the goats delivered compared to the goat slaughter records is presented in Appendix 7. In 11 institutes, the records even suggest that more goats were slaughtered

than received. After neglecting the 'over-slaughtered' number of goats (712 out of 3847), according to the TELO field data, the remaining 3135 slaughtered goats comprise only 49% of the total goats delivered. From 18 institutes no records of slaughtering were kept at all. These were mostly in south and northwest Turkana and are listed in the 2nd table in Appendix 7.

The records clearly show a pattern whereby goats were mostly slaughtered on Mondays, Wednesdays and Fridays—which concurs with the days that the boarding schools usually have meat on the menu for their evening meals. Slaughter records were only kept during the 3 weeks of the intervention, starting on Monday 31st January 2005 with slaughters in Central and south Turkana, while Lake Zone and Northwest Turkana followed on Wednesday 2nd February. In Central Turkana most slaughter records ended as early as 14th February, while for the other zones the records continue until Monday 21st or Friday 25th February.

Through key informant interviews with school head masters, the evaluation team learned that many schools had incurred cost of hiring herdsmen to keep the goats until they were slaughtered. It was assumed that goats were kept at schools for a period of several weeks, but this could not be substantiated due to the incompleteness of the slaughter records described above. When regarding only those goats that were not slaughtered on the same day as delivery (601 out of 787 records), it was determined that they were only kept for an average of 5 days (5.08 n=601 St.Dv 3.56) and this hardly varied between zones. However, the caveats of the slaughter data should be taken into account. The evaluation team noted that, the recorded slaughter dates could not always be trusted. Some schools in Central (Kerio, Namorupouth, Naremit and Turkana Girls Primary) and in south Turkana (Kapese, Lochwa, Lokichar) had records of slaughtering 35 or even 65 goats on the same day as the delivery. This is hardly credible considering the size of those schools and the fact that they could never preserve such quantities without a cold room. Moreover, the maximum number of days that goats were kept—respectively 18 and 24 days—is also the exact duration of the slaughter records. This may point to the fact that some slaughter dates may have been 'invented' in order to close the books. And it is likely that those goats (51%) that were not accounted for in the slaughter records have been kept for several weeks after the intervention period.

3.1.2 Types and number of beneficiaries of destocking

Adakars and households reached

Based on TELO field data, the emergency livestock off-take managed to have a reasonable spread throughout the areas targeted. It is noteworthy that (probably) over 1000 adakars and about 2.5 households per adakar were reached (see Table 2). However, it should be noted that although the data set was well cleaned for names of schools and traders, there

was no time to compare all names of the adakars and goat owners. It is therefore very likely that some names of adakars have been double-counted (in our pivot tables) as they were spelt differently by different individuals. An enumeration of the adakars reached per zone is presented in Appendix 8. In some cases no adakar name was listed on the purchasing forms. In such cases, these could be those previously mentioned or new adakars. Table 2 shows a range of adakars per zone to acknowledge this factor.

Table 2. *Spread of the intervention: Number of adakars and goat owners reached*

Zone	No. of benefiting adakars	No. of goats sold	No. of owners/ sellers	Average goat sold per owner
Central	543–547	1626	1044	1.56
Lake Zone	137–144	1140	355	3.22
Northwest	92–96	1058	310	3.44
South	231–240	2513	856	2.95
Overall total	1003–1027	6337	2565	2.48

Notwithstanding the fact that the names of goat owners have not been 'cleaned', which would have led to less names of owners in the database, the data 'as is' proved that goat owners at the adakar level were able to sell not less than 1.5 goats each, and in the areas further away from Lodwar (and project management) the average was even 3 goats or more, (see Table 2). Although the guidelines of the intervention stipulated that traders should only buy 1 goat from each individual household, the resulting averages still suggest a reasonable spread.

The livestock off-take intervention used the 'services' of 336 traders. A summary of the traders by zones of Turkana and the number of their transactions is presented in Table 3. In the Central Zone, the task seemed to have been divided among more traders than in the other zones. This may be due to the strength of the LMAs in this zone that VSF-B helped develop and with whom they continue to have a good relationship. In the other zones, those further away from Lodwar, there seems to have been more room for chairmen, or other strong individual traders, to monopolize a large chunk of the purchases for the intervention. While the average number of goats purchased per trader in Central Turkana was only 10 goats, in the other zones over 70% of the traders bought more than 10 goats, with Northwest Turkana traders buying as many as 42 and Southern Turkana traders buying 30 goats on average.

Prior to the emergency livestock off-take project in Turkana, the purchase price for one drought affected, mature, healthy goat was established at KES 1000. This price was discussed and agreed by the Livestock Service Providers and approved by the District Steering Group (DSG) and was uniform throughout the district. Out of KES 1000, KES 800 was to be paid to the livestock owners/producers and the balance of KES 200 was the margin that would remain with the traders to compensate them for the transaction costs of buying the animals

and delivering them to the schools/health centres. From discussions with key stakeholders, it transpired that the price was set at this relatively high level because of the high market prices in December, when the LSP did assessments throughout the district. Many traders wanted the price to be KES 900–950 for the livestock producers but many stakeholders even felt the reduced price of KES 800 was too high. Ultimately, the price of KES 800 was seen as a good way to introduce pastoralists to the market. In the same spirit, it was argued by various stakeholders that the price offered to the goat producers during the destocking should be higher than the market prices in order to motivate them to sell. In the following paragraphs, the price offered for goats during the off-take (and perception of the real prices received) are compared with the market prices (of shoats) that were gathered from various sources.

Table 3. *Goat purchasing transactions and traders involved in TELO by zones*

Zone	Sum of goats purchased	Count of transactions	Count of traders	Average goats/ transaction	Average transaction/ trader	Average goats/ trader	Count of traders that traded >10 goats	
Central	1625	1048	161	1.6	7	10	31	19%
Lake Zone	1140	356	65	3.2	5	18	46	71%
Northwest	1058	313	25	3.4	13	42	22	88%
South	2513	894	85	2.8	11	30	61	72%
Overall	6336	2611	336	2.4	8	19		

3.1.3 Comparison of prices paid during intervention to average market prices

Market prices for goats in Turkana

In order to calculate the price of goats in Turkana around the time of the destocking intervention, three data sources were utilized: ALRMP household surveys data, VSF-B market monitoring data, and qualitative data from the FGDs conducted as part of this evaluation. Findings from this data are presented hereafter. ALRMP, directed from the Office of the President of Kenya, has been surveying 30 households per month in Turkana for many consecutive years. Over the years, this has cumulated into an impressive database, which includes animal sales and the prices received at household level from these actual sales. From this database, average prices received for actual transactions in the months before, during, and after the destocking interventions were extracted and are presented in Table 4.

It is noteworthy that the prices presented above are probably farm-gate prices (adakar level) as they were gathered from households that occasionally sell an animal. In some parts of the district, there are middlemen operating at the adakar level who will pay a lower price than they expect to receive at secondary markets, where they subsequently sell them on. In

other instances, particularly in those areas were there are no local markets, the pastoralists trek their animals to the nearest market. As most transactions in these local markets involve one-on-one negotiations between the pastoralists and the traders, the pastoralist often remain unaware of the prevailing market prices, hence receive a rather low price—similar to the farm-gate price.

Table 4. *Average prices (KES) of goats in actual transactions in Turkana District*

Month/year	Mean	N	Std. dev.
Sep-04	577	217	231
Oct-04	543	195	192
Nov-04	607	220	272
Dec-04	598	145	240
Jan-05	585	190	249
Feb-05	651	202	244
Mar-05	672	217	476
Apr-05	566	236	205
May-05	578	213	224

Source: ALRMP database (2006).

In an attempt to promote the collection of market information, VSF-Belgium has been working with voluntary market monitors at the local sell-yards they helped institutionalize. Unfortunately, due to logistical constraints, and working with volunteers, this data had periodic 'gaps', but it was very interesting and useful all the same. Table 5 presents some data on market attendance and prices gathered for Kalemunyang and Kerio, which are typically secondary markets away from the main transport axes through the district. Unfortunately, the records from Kerio were only retrieved for the month of September 2004, where the average price was comparable to that of Kalemunyang. The highest prices at the markets occur in the holiday season of December, when Borana traders come to Turkana to buy goats.

Lastly, in the FGDs held with LMA traders and livestock owners, perceptions were sought for the price of goats at different markets, namely, from purchases at the farm gate (adakar village level), and through the market chain via secondary and main markets to terminal markets such as Nairobi. The information gathered through these exercises is captured in Table 6.

It can be seen from Table 6 that farm gate (adakar level) prices for goats ranged from KES 300 to KES 1000 (disregarding the information gathered from traders in Kalemnarok, which the evaluation team believed was exaggerated), assuming that KES 300 is the lowest paid for a grade 3 goat and KES 1000 is the highest price paid for a grade 1 goat. At secondary markets, traders try to buy goats at prices comparable to farm-gate prices—i.e. up to KES 1000—and sell them on for up to KES 1500. At main markets, goats are bought for between KES 650–1800 and are sold for between KES 1000–2500. A little mark-up can be earned by

livestock owners when selling directly at the local market, but only by those who know how to negotiate a better deal based on their awareness of market prices. At the adakar level, there is very little knowledge of the prices at both main and terminal markets. Ironically, the pastoralists who seemed best informed about prices at the main markets were those that, due to the virtual absence of a local market or even middlemen, have to trek their animals to Lodwar or Kakuma (main markets) in order to sell them.

Table 5. *VSF-B market monitors' data on goat market sizes and prices (KES)*

Kalemunyang	No. of daily records (sample)	Averages from the daily records kept by market monitors				
		No. of traders	No. of goats sold	Price of goats		
				Lowest	Average	Highest
Sept-04	n=30 days	15	23	612	1086	1560
Oct-04	n=31 days	27	52	532	1039	1545
Nov-04	n=30 days	32	55	530	1053	1576
Dec-04	n=31 days	18	51	498	1081	1663
Jan-05	n=30 days	19	58	470	985	1500
Feb-05	n=18 days	20	42	775	911	1046
March-05	n=31days	21	46	832	1076	1320
April-05	n=30 days	24	30	842	1105	1368
May-05	n=31 days	24	53	900	1119	1339
June-05	n=30 days	31	50	1276	1482	1688
July-05	n=31 days	32	39	764	1013	1262
Kerio						
Sept-04	n=30 days	–	22	541	1090	2021

Note: The average prices for Kalemunyang (presented in small italics) are not based on the data but are the simple average of the average lowest plus average highest prices. They were added as an indicator.

With regard to the main markets in Turkana (Lokichoggio, Kakuma, Lodwar, Lokichar), there seemed to be little variations in prices. Presumably most goats traded are for local consumption so the distance to 'terminal' markets (Eldoret, Nakuru and Nairobi) is not really reflected in the prices.

Synthesis of information on prices

When comparing the 3 sources of information on goat prices in Turkana, it can be assumed that ALRMP prices (average KES 600) appear to be farm gate prices for average goats, i.e. grade 2 goats. The lowest, average and highest prices collected by VSF-B market monitors at secondary markets (year averages: KES 675/1085/1440) can be interpreted as the prices for grade 3, grade 2 and grade 1 goats, respectively. From the qualitative information gathered, the evaluation team understands that the farm gate (or household level) price for goats can be as low as KES 300.

Table 6. *Turkana producers' and traders' perceptions of shoat prices (KES)*

Location or adakar	Seasons		Adakar level	Secondary markets*		Main markets**		Terminal Markets
			Selling	Buying	Selling	Buying	Selling	
Traders' perceptions								
Kerio	Dry			Kerio sell yard		Lodwar		
(Market monitor)	Wet				300/550/1100	../650/..		
Lodwar	Dry				600/800/1400	850/../..		
(LMA)	Wet			800	1300		1000–1800	
Lorogum	Dry	Jan–July		Lorogum sell yard			2000–2500	Nairobi
					700–800			2800–3500
(LMA)	Wet	Aug–Dec			1300–1500	1200	1700	
Kalemnarok (LMA)			1500–1600	1800				2800–3500
								Eldore/Nakuru
Producers' perceptions								2400–2500
Kerio	Dry		400/600/1000	Kerio sell yard		Lodwar		
(reps from various adakars)	Wet			450–1000		500+		
Lougogo	Dry	July–March	300–800			1200–1500		
(Adakar near Lorogum)	Wet			Lorogum sell yard				
Kanakurido	Low			300–1000		1000		
(reps from 2 adakars	High			No local sell yard available				
			300–600	Animals trekked to Lodwar or Kakuma		1800	for big he-goat	
						2600		
Lokichar			500/../1000					
(East of..)								

Where brakets are used, the prices of diffeent grades of goats are presented as follows: grade3/grade2/grade1.
* Selling yards away from central transport route through the district.
**Main markets in the district are on the central transport route (tarred road): lodwar; Lokichar, Kalemnarok.

Since traders are not interested in buying weak or thin goats, it can be concluded that KES 300 is the lowest price paid for grade 3 goats. This conclusion was generally supported by the FGDs undertaken. In two LMA FGDs, traders indicated that the lowest price paid for weak and thin goats was as low as KES 200, but more often it was stressed that nobody was interested in buying such weak goats.

Prices received by goat owners and margin received by traders

In the initiation phase of the project, traders and communities were sensitized to the kind of animals that were to be purchased and the price that should be paid, namely: drought effected (weak), mature, healthy goats for which the goat owners (at adakar level) would receive KES 800 from the traders. After delivery to the schools, and completion of all relevant documentation (including slaughter date), traders received KES 1000, paid by cheque, for each goat. Hence the margin for the traders was KES 200 per goat.

However, in 2 out of 3 adakar FGDs with pastoralists that benefited from the project, it was pointed out that the goat owners had received less than KES 800 for their goats sold as part of the destocking intervention. This is confirmed by the TELO field data in Table 7. Remarkably, the Southern Zone witnessed more cases where goat owners received less than they were supposed to according to the strict guidelines laid down by VSF-Belgium. Remarkably, the traders purchasing goats in this zone did not even try to mask this in the documentation of their transactions. It is possible that pastoralists in the Southern Region were less sensitized to the guidelines laid down by VSF-Belgium, or perhaps traders in other regions were just better at manipulating their records.

Table 7. *Cases of over- and under-payments for goats recorded in TELO field data*

Zone	No. of owners sellers	Underpaid cases*		Overpaid cases**	
Central	1044	41	4%	4	0%
Lake Zone	355	31	9%	25	7%
Northwest	310	30	10%	57	18
South	856	333	39%	44	5%

* Cases where a price less than KES 800 was paid.

** Cases where a price more than KES 800 was paid.

According to VSF-Belgium's guidelines, traders were to receive a margin of KES 200 for every goat delivered to a predetermined school or health centre. Apparently, LMA traders had tried to negotiate better deals for themselves. Indeed, during a FGD, one LMA group admitted having varied the prices depending on negotiations: 'some goats bought at KES 700'. They argued that this was to cater for the fact that some goats died before delivering them to

the schools. The occurrence of traders paying prices higher prices (> KES 800) was also documented in the forms traders had to fill in during the destocking exercise. This was the case in nearly one fifth (18%) of the goat purchases in the Northwest Zone.

In all LMA FGDs, traders indicated wanting a higher margin if they were to be involved in future destocking exercises. A recurring problem mentioned in every interview was that they had working capital invested in this activity for quite some time (varying from 1 week to 1 month) until they were refunded by banking their cheques. Hence, they incurred travel costs to Lodwar and the bank charge for cashing the cheque (KES 300 for a cheque of < KES 10 thousand or less than 10 goats sold). Therefore, they suggested the price should be KES 1500 to the traders, of which KES 1000 would be for the adakar producers.

Remarkably, in the 3rd FGD with an adakar that benefited from the destocking intervention, pastoralist producers received the full KES 1000. This was because there are no middlemen or traders in their area, so the pastoralists sold their goats straight to the local schools.

Comparison of destocking and 'market' price for weak and thin goat

A price of KES 800 paid to the livestock owners for weak and thin goats may well be four times their true 'market' value (suggested to be KES 200). Such a high price endowed traders with significant bargaining power, and many livestock owners—destitute or at least vulnerable by the time this intervention came along—were willing to accept a lower price.

3.2 Understanding the destocking process

Identification of external drivers

With regard to the destocking intervention in January/February 2005, the lack of water and pasture in the district resulted from an ensuing drought. In addition, growing herd sizes (partly due to improved animal health care) and increased competition for water and good pastoral land, from agro-pastoralists, also contributed to restricting the amount of water and pasture/browse available per goat, camel and donkey. The problem was particularly acute for goats, camels and donkeys, as cattle had migrated to areas with available grazing and water resources. The problem was identified by a range of key actors closely involved with pastoralist livelihood systems in Turkana, namely, the pastoralist communities themselves, Arid Lands via its 'Early Warning System' (ALRMP Bulletins), Oxfam-GB via its Nutritional Survey Report, the British NGO Merlin via its health survey, the World Food Programme via an emergency report, and Turkana's District Steering Group (DSG) via its 'Report of the Assessment of Livestock Body Conditions at Northwestern, Lake and Central regions for off-take targeting'.

Compiled for the DSG, the Report was based on an extensive field assessment conducted by four key officials representing Arid Lands Resource Management Project (ALRMP), VSF-Belgium, the District Livestock Marketing Council (DLMC), and the District Livestock Production Office (DLPO). All officials were members of the DSG's technical support group called the 'Livestock Service Providers' (LSP) forum comprising VSF-Belgium, the District Veterinary Officer (DVO), the District Livestock Production Officer (DLPO), the District Commissioner, AMREF, Oxfam-GB, private vets, Arid Lands, Intermediate Technology Development Group (ITDG), and the Indigenous Vegetation Programme (IVP). The report was based on a rapid, yet relatively comprehensive, qualitative assessment undertaken, between 7th and 12th January 2005, to evaluate the growing severity of the drought situation on the ground and to update the previous situation report. Key parameters were assessed to estimate the severity of the drought across the areas outlined above. These parameters were:

- browse and pasture situation;
- body condition of livestock;
- approximate percentage of weak animals;
- expected price for weak goats;
- current price for strong goats;
- concentration of livestock;
- water availability and;
- schools in the area that could benefit from livestock off-take.

In addition, the team compiled a list of schools deemed eligible for free goat meat, agreed the start date and duration of destocking and developed key recommendations. The LSP also set the price to be paid for weak but healthy goats. Many traders consulted during the process demanded KES 900–950, but the price was deemed too high and so the LSP reduced it to KES 800—a figure that many also felt was still too high but it was seen as a good way to introduce pastoralists to the market. In contrast, when ITDG undertook its destocking activity, between March and August 2005, they agreed to use the same rate of KES 800. However, ITDG believed that KES 800 was a deterrent to market integration. After consultation with pastoralists, ITDG determined that pastoralists required KES 1000–1200 as an incentive to sell their goats. In addition, the LSP also determined that, in order to have the desired impact, 10% of the goat population in the worst hit areas would need to be destocked; this was twice the amount of goats that it was possible to destock given the intervention's limited budget. The LSP assessment targeted 20 centres for destocking, expanded to 29 centres, close to the selected schools and health centres. At that time, most of the key actors involved in pastoralist systems in Turkana believed, in the words of VSF-Belgium, that 'the need was dictated by the weather and that the timing seemed right for now'. This expression of need was directly corroborated by the WFP report, produced at the same time.

Internal drivers and key actors

By this time, internal drivers emerged, namely, in the form of Arid Land's Support to Local Development Coordinator, who was also part of the DSG. Supported by the World Bank, Arid Lands secured financial resources for a livestock intervention in the worst hit areas of Turkana—those that were identified in the LSP report. However, even though key arid land's personnel were able to secure some financial support for an intervention, funds were extremely limited. The total budget allocated for an intervention was KES 9 million. Twice as much money would have been required to meet the 10% off-take target set by the LSP for the worst hit areas.

Selection of intervention

Several possible interventions were discussed by the DSG, including the provision of water, and the subsidized transportation of goats from Turkana to Nairobi. According to both Arid Lands and VSF-Belgium, after a cost-effectiveness evaluation of potential options, and the problems of the previous subsidized transportation intervention still fresh in LSP members' minds, a limited destocking program, operationalized only in the worst hit areas, was seen as the only feasible and most straight forward option. Once destocking had been chosen as the most appropriate intervention, discussions began regarding the design of the intervention. Arid Lands did suggest that the intervention might seek to destock weak but healthy goats and fatten them up until they were in reasonable condition to eat and then give them away to schools and health centres. Unfortunately, funds were not available to buy animal feed. In addition, this option would also have needed to address serious logistical problems/constraints, namely, where to keep the goats, and how to transport them etc. Ultimately, Arid Lands and the DSG decided that the most efficient use of resources would be achieved by destocking weak but healthy goats and trekking them to schools and health centres for immediate slaughter and consumption.

Mobilization of destocking intervention in Turkana District

Once the DSG had taken the decision to destock, Arid Lands were asked to seek proposals from institutions to organize and supervise the intervention. Ultimately, the money secured for destocking in 2004–2005 was put out for competitive tender. Four organizations tendered for the destocking project, including the DLMC, ITDG and VSF-Belgium. Whilst VSF-Belgium was not initially keen to undertake destocking, possibly due to VSF-Belgium's mixed experiences with its 2001 destocking intervention or the fact that part of the destocking was scheduled to take place in areas not usually part of their operational area, Arid Lands persuaded VSF-Belgium that it was the most suitable institution for the intervention.

Enrolment

Enrolment is the term used to encapsulate the collective deliberation of the most appropriate form of action to take. As it can be seen from the section above, most of the key actors involved in characterizing the drought and the severity and geography of ensuing shortage of water and pasture, as well as the knock-on effects of this in relation to the deterioration of livestock condition and potential pastoralist food security concerns, were key development and emergency intervention actors. By defining the problem collaboratively, and having experience of successfully working together in the past, these key development actors were able to derive a durable consensus on how and where to secure financial resources for an intervention; the most appropriate way forward, and; on the most sensible divisions of labour.

At the strategic level, there is a substantial amount of evidence that supports the highly inclusive and collaborative role of the DSG and LSP as a proactive umbrella group for development actors in Turkana. Most of the principal development actors in the district were extremely supportive of its role and were satisfied that the group provided a forum for them to air their own concerns, and that their concerns would be taken into full consideration. On so many occasions, the ultimate goal of a lead institution is thwarted by the actions or inactions of institutions, which are more peripheral actors, yet are crucial to the successful implementation of a particular intervention. It was refreshing to hear that, while still at a strategic level, more peripheral actors, such as the District Public Health Officer, 30 meat inspectors, and the District Education Officer (responsible for writing letters to head masters), cooperated fully and worked together towards the project's aims. Only the District Public Health Official failed to visit the field, although there was money for him to do so.

However, whilst there is much supportive evidence of the committed enrolment of strategic actors in the destocking project, the process of enrolling key actors at the ground level met with mixed results. Key actors on the ground include:

- Livestock Market Associations (LMAs);
- Livestock traders;
- Livestock Off-take Community Committees;
- Market Monitors;
- Pastoralists;
- Head teachers and;
- Health centre managers.

Conversely, with the odd exception, the enrolment of key actants including goats, water, pasture and goat diseases, was highly successful.

3.2.1 Role of pastoralists

Mobilization of the destocking intervention refers to operationalizing the destocking program designed by DSG and VSF-Belgium. While there is evidence that key elders, particularly chiefs, of pastoralist communities provided the LSP assessment team with key information used to formulate the destocking intervention, there is no evidence that they consulted with the members of their respective adakars or had any real formative role in the participatory design of the intervention. Much of the evidence outlined below pays testament to the fact that not only were pastoralists simply assigned roles within the destocking project, but many pastoralists also remained totally oblivious to the destocking intervention, or at least were unaware of the role that they, and other key actors, were expected to play.

Ultimately, 3212 pastoralists were suggested to have benefited from the destocking intervention. However, detailed analysis of the TELO field data suggests that total number of pastoralists involved in the intervention was only 2565. A stratified sampling frame was developed to generate qualitative field-level data from three of the four areas in which VSF-Belgium operated. Within each area, adakars located within 20 km of major arterial roads were selected on a pseudo-random basis, i.e. VSF-Belgium assisted in the identification and organization of pastoralists for FGDs in order to determine their experiences during the destocking intervention. The purpose of FGDs was to validate key claims made by the TELO Report, namely: 1) Appropriate awareness raising was accomplished, particularly amongst the most vulnerable pastoralists and livestock owners, and; 2) All pastoralists received the agreed KES 800 per goat. In addition, pastoralists were asked whether or not they thought that the destocking intervention was a good idea and, if they saw the need, how a future destocking activity could be improved. Focus Group Discussions were conducted in five adakars in five areas of Turkana (Kalemngorok, Kaleng, Lokichar, Kerio and Lorugum).

Kalemnarok

In the Kalemnarok area, 25 pastoralists represented four separate adakars: Kakongu (comprising 500 households, a distance of 18 km from Kainuk); Lochoresekon (comprising 250 households, a distance of 25 km from Kainuk); Kangirega and; Nawoyaregae. Traditionally, pastoralists in Kakongu kept cows, the most important animal, then goats, camels and donkeys. In Lochoresekon, goats were the most important livestock as they were quick to reproduce and easy to sell. In Kangirega, camels were the most important livestock as they can be milked five times per day from four teats, giving two families two teats each. Lastly, pastoralists in Nawoyaregae concentrated on the production of big male goats and cattle. Not surprisingly, drought was identified as the key livestock related problem faced by the pastoralists.

Kaleng

In the Kaleng area, 15 pastoralists represented the Kanukurdio adakar, comprising 400 households. Goats were the principal livestock produced in this adakar, with a few donkeys and camels. When probed about cattle, the group members responded that they used to keep cattle until 1980, when they lost all of them during a severe drought. Again, drought was identified as the key livestock related problem faced by the pastoralists, specifically the associated lack of pasture and livestock pests and diseases.

Lokichar

Pastoralists represented an adakar to the east of Lokichar. Again, goats were their principal livestock species, with camels second and donkeys third most important. Drought was also identified as the key livestock related problem faced by the pastoralist, followed by insecurity and livestock diseases.

Kerio

In the Kerio area, 6 pastoralists represented four adakars: Achamee (3 pastoralists representing 13 households), Namide (1 pastoralist representing 150 households), Nagololkatwon (1 pastoralist representing 200 households) and Emong (1 pastoralist representing 120 households). Many households, particularly those from the smallest adakars (Achamee and Emong) only kept goats. One of the elders suggested that this was the result of 'not having received a dowry for such a long time'. Other much bigger adakars kept camels and donkeys as well as goats. Drought was also identified as the key livestock related problem, specifically a lack of pasture and an increase in livestock pests and diseases.

Lorugum

Seven pastoralists represented the Lougogo adakar in the Lorugum area. Pastoralists kept mostly goats with a few camels and donkeys. They stated that there was not sufficient grass in the area for cattle. Again, drought, specifically lack of pasture and associated diseases, was identified as the key livestock related problem.

3.2.1.1 Awareness raising and the role in adakars in destocking intervention

According to VSF-Belgium's records, community dialogue meetings were held in all 29 buying centres. Community dialogue meetings were the central mechanism by which target communities were sensitized to the destocking intervention and a forum through which target communities could actively participate. It was at these meetings that 108 LOCC officials

were elected. Their role was to ensure that pastoralists and their children benefited from the project. One interesting point to note is that, in the awareness raising meetings, the objectives of the intervention and the allotted role of pastoralists was only explained to a small number of pastoralists. According to the FGDs undertaken with pastoralists, it is not clear whether or not all adakars in the area were represented at the awareness raising meetings and whether attendees actually relayed information to all the members of their respective adakars.

Pastoralists and the sale of goats

In all, nine out of a total of eleven adakars represented in the FGDs, indicated that they had sold goats as part of the 2005 destocking intervention. In Kerio, representatives from all four adakars had been sensitized to the destocking intervention, and the stringent operational guidelines of the implementing agency, through a local barasa. Indeed, one man claimed that after trekking to the market with a large herd of goats he was only allowed to sell 1 goat and was obliged to return with the rest.

However, whilst it later transpired that a barasa had been held in Kalemngorok, representatives from the four adakars indicated that they were unaware of the local barasa and had been informed by local traders about the demand for weak goats. Traders informed them to return with weak goats after two days, and that each goat would be purchased for KES 1000. However, according to the pastoralists interviewed, many traders only offered prices ranging from KES 300 to 700.

While pastoralists from the Kanukurdio adakar (Kaleng) were actively involved in the 2005 destocking intervention, they informed the evaluation team that they were only one of two local adakars, out of a total of 100 adakars, which actually sold goats. However, TELO field data does not corroborate this as 5 names of adakars were listed. Pastoralists, who were sensitized to the destocking intervention by the local market monitor, suggested that only adakars close to the two local boreholes had been targeted by the destocking intervention. According to the pastoralists present, each household from Kanukurdio adakar sold one goat. However, they later stated that adakar members sold only 60 goats (confirmed by TELO field data) in total as part of the destocking intervention, and not the 400 goats at the rate of one per household.

Conversely, while pastoralists from the Lokichar adakar acknowledged that they were cognizant that VSF-Belgium was active in the area during the destocking intervention, they were not sensitized to the fact that could have sold their weak goats at the time, even though they had plenty of weak goats and would have been more than willing to participate. Indeed, FGD respondents first heard of weak animals being consumed by local schools. When asked if they had gone to inquire about the program, pastoralists replied they had not. While

pastoralists from this adakar were unaware of any of their households selling goats as part of the destocking intervention, they acknowledged that they may have inadvertently sold goats at the market without being aware of the intervention. Several respondents stated that they had happily received KES 600 during the destocking intervention period but had not realized why.

Lastly, pastoralists representing the Lougogo adakar (Lorugum) were totally unaware of VSF-Belgium's destocking activities in their area during January and February 2005.

3.2.1.2 Number of goats sold and prices received

According to the TELO Report, of the KES 1000 paid for each goat slaughtered, KES 800 was paid to the livestock owner and KES 200 was paid to the livestock trader to cover the cost of moving the goats to a pre-arranged slaughter site. According to the TELO Report, this price breakdown was explained during the awareness creation community meetings and accepted by all stakeholders. In order to ensure that the benefits of destocking were spread throughout a large number of vulnerable livestock owners within the target areas, the number of goats purchased from any single person was limited to just one.

However, according to the data generated during FGDs, the prices paid for goats and the process of buying and selling goats varied considerably between locations. For example, adakar members from Kalemnarok suggested that they had received payments ranging from KES 300 and KES 700. According to Table 7, pastoralists from Kalemnarok were not the only ones to be underpaid for their goats. Indeed, detailed analysis of the TELO field data suggests that 333 individuals representing 39% of pastoralists in the 'South Region' of Turkana were underpaid. Whilst unsure about the numbers of goats sold by their fellow adakar members, of those who attended the FGD, one sold 2 goats, another sold 6 goats, and a third one sold 10 goats. Whilst these numbers can in no way be seen as representative of all pastoralists in the South Region, it is interesting to compare the numbers above against the statistical average of 2.95 goats sold per person in Table 2.

In Kaleng, due to the lack of a local market and livestock traders, adakar members were paid the full KES 1000 for each of the 60 goats sold—a good price according to adakar members. Adakar members also trekked the goats to the local schools where they were later slaughtered and consumed.

In Kerio, adakar members were also told that they would receive KES 800 per goat. In reality, FGD members stated that they only received between KES 350 and KES 500 for the 100 or more goats sold. This was not consistent with VSF-Belgium's field data summarized in Table 7, which suggests that only 4% or 41 pastoralists were underpaid in the whole of the Central

Zone. Indeed, this figure is even more surprising when one considers that pastoralists in the Kerio FGD represented four adakars and, allegedly, a total of 483 households. Even so, there was such interest in the destocking intervention that goats were over supplied and had to be trekked back to their respective adakars. All adakar members present stated that they would have been happy with the KES 800 as it was a high price for such weak goats, which, under usual circumstances, would almost have been impossible to sell due to their poor condition. Indeed, elders from the four Kerio adakars complained to the chairman of the local LMA. When they failed to reach a satisfactory agreement, adakar members suspended their supply of goats destined for consumption as part of the destocking intervention at the end of the second week of the three week off-take period. When questioned, 'Where did the LMA members buy their final consignment of goats?', FGD members replied 'perhaps from their own herds'.

3.2.1.3 Benefits of the destocking intervention

Only half of the adakar representatives provided an answer to this question. In Kaleng Division, the respondents stated that destocking during drought conditions was a good idea. This sentiment was also echoed in Kerio. Respondents suggested that, before the emergence of the cash-economy, they kept weak animals until they died and then eat the meat. Now, when they are paid a good price to destock weak animals, they have the financial resources to restock at a later date. According to the TELO Report (2005), a principal output of destocking was to 'increase income at the household level among pastoralists'. This was based on the key assumption that the 'livestock that would have died are sold and money used for basic needs by pastoralists' (TELO Report 2005). Again, only two of the four adakars benefiting from the destocking intervention were willing to share information regarding how they used their additional income. Pastoralists from Kaleng informed the FGD that the money generated through the destocking intervention had been used to buy food (maize flour), while pastoralists from Kerio insisted that they had used the money to restock when the long rains arrived.

3.2.1.4 Lessons learned and improvements

Whilst, in many respects, pastoralists felt that the destocking exercise had been a success, particularly its timing, members of the five FGDs suggested several improvements that should be made in order to improve the effectiveness of future destocking interventions. First, FGD pastoralists felt strongly about the need for a fair price per goat in future destocking activities. Respondents from the Kalemnarok and Kerio Divisions believed that KES 1000 was a fair price. Pastoralists from Kerio justified their claim by stating that 'KES 1000 is enough to buy 2 goats for restocking'. Pastoralists from Lokichar were slightly less ambitious suggesting that

they required KES 900 as an incentive to destock. Pastoralists from the Lokichar Division went a little further by justifying their claim for KES 900. They suggested that, under normal circumstances, they kept weak animals until they died. Goats would be kept until they were very weak in the hope that rains would arrive and the goats would regain condition. If the rains failed to arrive, the goats would have lost so much condition they would be unmarketable. However, if an external institution arrives in the area and wants to buy their goats, pastoralists register this as demand for their goats and insist on a fair price. Pastoralists stated that 'when you want to buy them, KES 900 is the price you'll have to bring'. They reiterated that 'we love our goats until they die'. After prompting about the pastoralists' admissions of accepting lower prices (KES 600) for their stock, the pastoralists replied that 'they accepted KES 600 only because of the need at that time'. Goats are perceived as the pastoralists' mobile banks. If there is a drought, and they're desperate, they'll consider selling but they still want a proper price. Second, FGD members from Kalemnarok suggested that the destocking intervention would have been better for them if off-take had been a one-off event (one day). Third, FGD members from Kalemnarok and Kerio suggested that the intervention would have been more equitable for them if goats had been sold directly to VSF-Belgium. Members from Kerio stated that 'the LMA traders were themselves hungry for money'. Fourth, members from Kalemnarok suggested that the intervention should have destocked 75% of their weak animals. Fifth, members from both the Kalemnarok and Kerio FGDs suggested that other animals, particularly cattle and camels, should also be considered for future off-take interventions.

3.2.2 Role of livestock traders

During the enrolment process, VSF-Belgium Market Monitors were sent out to the 29 off-take centres. Their principal purpose was to enrol LMAs into the destocking intervention and, in turn, for them to enrol their livestock trader members. From the evidence reviewed, it is apparent that, whilst many of the key LMA actors and local traders were aware of VSF-Belgium and its activities, and that many had good working and personal relationships with VSF-Belgium staff, it appears as though LMAs and their members were simply assigned roles within the project rather than successfully enrolled. In most instances, it appears that LMAs, and their trader members, were assigned a set number of goats to purchase at a predetermined price, and were informed that they should only buy one weak healthy goat from each pastoralist to deliver them to predetermined centres (schools and health centres) where they would be slaughtered and consumed. Their principal incentives to play a part assigned to them by the DSG and VSF-Belgium, was, a KES 200 commission on every goat bought and supplied to their respective goat receiving institutions; maintenance of good relations with VSF-Belgium (a NGO whose past and present activities were benefiting them), and; to a greater or lesser extent, civic pride.

In all, 523 livestock traders were suggested to have benefited from the 2005 destocking intervention. Detailed analysis of the TELO field data suggests that this figure is not accurate. According to the evaluation team's analysis of VSF-Belgium's field data (Table 3), a total of 336 traders, buying an average of 19 goats, were involved in the 2005 destocking intervention. Again, a stratified sampling frame was developed to generate market level data from 5 of the 29 off-take centres in three of the four zones in which VSF-Belgium operated. Within each zone, members of Livestock Market Associations (LMAs) were selected on a pseudo-random basis for FGDs and VSF-Belgium assisted in the identification and organization of traders in order to determine their experiences during the destocking intervention. The purpose of FGDs was to validate key claims made by the TELO Report, namely: 1) the number of goats bought per trader; 2) impacts on market prices and volumes, both before, during and after the destocking intervention and; 3) impact on livestock trading businesses. In addition, livestock traders were asked whether or not they thought that the destocking intervention was a good idea and, if they saw the need, how a future destocking activity could be improved. Focus Group Discussions were conducted in five market centres in five Divisions of Turkana (Kalemngorok, Lokichar, Kerio, Lorugum and Lodwar).

In Kalemnarok, 5 members of the local LMA took part in the FGD. In Lokichar, a total of 40 LMA members took part in the FGD. In Kerio, 7 LMA members took part in the FGD. In Lorugum, 7 men and 4 women took part in the FGD. Lastly, 7 LMA members took part in the Lodwar FGD (including the Chairperson, Vice-Chairperson and Treasurer). In addition, the Chairman of the Lodwar LMA was also the Treasurer of the District Livestock Market Association (DLMC). All five of the LMAs were involved in the January/February 2005 destocking intervention.

3.2.2.1 Number of goats bought per trader and prices paid

According to the TELO Report, traders purchased goats at the predetermined price of KES 800. In Kalemnarok, traders stated that the amount of goats purchased by each trader varied depending on the schools that they supplied. They suggested that some traders bought and sold 10 goats, while others bought and sold 12, 13, 14 goats. These figures are consistent with the summarized statistics presented in Table 3, which suggests that 72% of traders in the South Zone, or a total of 61 traders, purchased more than ten goats. With regard to the purchase price, Kalemnarok traders stated that it depended on individual negotiations with sellers; some traders openly admitted that they paid as little as KES 700, while other suggested that they had even paid up to KES 850 or KES 900. This evidence corroborates that generated through the FGD with pastoralists from Kalemnarok.

In Lokichar, only one trader out of the 40 traders present had actually purchased goats during the destocking intervention. Coincidentally, the individual involved also happened to be the LMA Chairperson. The Chairperson, however, informed the FGD that a total of 20 LMA members had purchased 300 goats, averaging 15 goats per trader. This assertion is supported by TELO field data, which states that 21 traders purchased 321 goats. Traders in Lokichar suggested that they bought goats every day for 4 weeks. However, traders were not forthcoming about whether or not they had paid the set price of KES 800 per goat.

In Kerio, the FGD determined that 15 traders bought between 9 and 11 goats each over a period of three weeks—a total of 141–161 goats. This assertion is broadly supported by TELO field data, which states that 11 traders purchased 186 goats. The intervention's market monitor insisted that sellers were paid the set KES 800, as they were aware of the agreed price. In addition, the market monitor also stated that the local LMA traders were not pleased with the price.

In Lorugum, the local LMA decided to 'share the workload'. According to responses obtained during the FGD, each trader bought 5 goats at KES 800 giving an individual total profit of KES 1000. This assertion is not supported by TELO field data, which states that 25 traders purchased 280 goats—11.2 per trader. Interestingly, one LMA member insisted that traders were instructed to buy 'female thin goats' that were weak but healthy that usually fetched KES 200.

In Lodwar, it was difficult to reach a consensus of how many goats each trader was allotted to buy and sell. In total, 500 goats were bought and sold; working on current LMA membership, each trader would be allotted less than two goats on average. When re-probed, LMA members responded by saying that they 'grouped members'. For example, 5 traders would be asked to purchase 50 goats for one school averaging 10 goats per trader. This assertion is not supported by TELO field data, which states that only 30 traders, out of a total of 300 LMA members, purchased a total of 269 goats averaging 8.9 per trader. However, the group did state that many of their members had very little money and therefore did not have the capacity to purchase many goats.

3.2.2.2 Effect of destocking on market prices, volumes and attendance

Market prices

Only Lodwar LMA members commented on the impact of the destocking intervention on prices. They explained that, while the KES 800 offered as part of the off-take process was a good price in November, by January/February 2005, after the short rains and concomitant re-growth of grass pastures, the market price for healthy goats was actually higher than the price

offered by VSF-Belgium. This explanation is corroborated by market price data presented in Tables 4, 5 and 6. However, aside from periods of prolonged drought, weak goats are not usually offered for sale. This meant that the sale of weak goats, to all intent and purposes, was a parallel market relatively unaffected by the growing buoyancy in the market for higher grade goats. Indeed, one FGD member indicated that, at the time of off-take, weak goats brought to the market were only fetching KES 200. Ultimately, the group consensus was that the destocking activity had not impacted, either negatively or positively, on Lodwar market prices.

Market volumes

According to LMAs members, the effect of the destocking intervention on market volumes was generally positive. As expected, all LMAs reported that market volumes increased during the off-take intervention even as the market monitor from Kerio stated, 'the volumes of the destocking activity were negligible'. In concert with comments of Lodwar LMA members' (above), he stated that the off-take intervention 'only assisted to take away the weak animals that otherwise would have been left at home'. However, LMA members from Kalemnarok, Lodwar and Lorugum acknowledged that the off-take intervention not only increased market volumes during the destocking period, but that market volumes remained high throughout March and April.

Market attendance

According to LMA FGDs, the effect of the destocking intervention on market attendance was also positive. LMA members from Kalemnarok, Lodwar and Lorugum acknowledged that market attendance improved as a direct result of the intervention. As one LMA member from Kalemnarok stated, 'it really motivated sellers from adakars to come to the market'. This holds true at least for a period of two months after the intervention ended and the high price offered for weak goats (KES 800) reverted back to the usual price of KES 200. Another LMA member from Lorugum stated that the off-take intervention was a 'positive spin-off' and that 'many sellers were now bringing goats to the market'. A Lodwar LMA member went further by suggesting that 'everybody was trying to destock, even those that were not used to the market, and some are still coming'. This member went on to say that the additional livestock volumes, and increased attendance of sellers, encouraged new traders to 'come and do business and become members of the LMA'.

3.2.2.3 Impact on livestock trading businesses

LMA members from Kerio, Lokichar and Lodwar stated that, as the volumes of stock involved in the destocking intervention were so small, traders were able to continue with business as

usual. Although Lodwar LMA members admitted that, for at least one week, they dedicated most of their time to buying weak animals for this off-take activity. Whilst there was no record of a response to this question in the FGD transcripts, given the response below, it is likely that LMA members from Kalemnarok were also able to continue with their usual livestock trading business. However, this was explicitly not the case in Lorugum where traders suggested that the off-take intervention tied up their working capital and reduced their ability to buy and sell goats.

Aside from Lorugum, where traders suggested that the intervention comprised 25 to 50% of their usual trade volumes, most traders across the market centres studied, suggested that livestock volumes involved in the off-take intervention were very low and, therefore, comprised a very small percentage of their usual trade. It must be noted, however, that, whilst the volume of trade associated with the off-take intervention was low, it had the propensity to tie up a much larger proportion of working capital. Indeed, while admitting that the numbers of goats involved in the off-take intervention comprised only a small percentage of their trading activities, Lokichar LMA members stated that it 'tied up 25% of their working capital'.

Number of adakars and households reached

In an attempt to verify the TELO Report's claim that the most vulnerable pastoralists and livestock owners benefited, traders were probed as to where, when and from whom they bought goats during the off-take. Results from the FGDs that were held in five market centres yielded disappointing results. In Kerio market, traders informed the FGD that they had been instructed to buy one or two weak goats from each adakar. However, during the off-take period, traders bought their goats on a first-come, first-served basis over a period of just two weeks. Many adakar members brought goats to the market but traders were unable to buy them all. In Lokichar, adakars were informed of the destocking activity through a barasa, but, as in Kerio, goats were purchased on a first-come, first-served basis. In Kalemnarok, LMA members openly admitted that they had bought goats from adakars close to the market centre and pastoralists who lived further away brought their goats when it was too late. In the Kaleng area, the situation was even worse. In total there are 100 adakars in the area but only 2 adakars benefited from the destocking activity. Pastoralists from the local FGD suggested that both adakars involved in the destocking sold approximately 30 goats, which were divided among the households, some sold 2, 3 or 4 goats. Whilst TELO field data supports the statement that only 60 goats were purchased from the area, it states that a total of 5 local adakars, and not 2, were involved in the destocking intervention. Pastoralists from the Kaleng FGD suggested that pastoralists from more peripheral adakars came and complained. They criticized the LOCC and wanted to sell goats, but they had to be turned down because the

60 goats allocated for off-take had already been purchased. When probed about why the two adakars were singled out, the adakar members replied 'because they have water as they're close to the well', and the main arterial road.

3.2.2.4 Problems with destocking

Whilst most LMA members across the different market centres studied suggested that the destocking intervention was a good idea, many traders harboured a raft of reservations and complaints. These ranged from low profit margins, high bank charges, and long delays in receiving cash payments, liability concerns associated with goat mortalities and feeding costs, and unscrupulous LMA officials.

Low profit margins

Most traders across the five market centres suggested, either explicitly or implicitly, that profit margins associated with the destocking intervention were too low. Indeed, some traders in the Lokichar FGD insisted that they had even lost money during the intervention (see below). In order to make the destocking activity worthwhile, traders from Lodwar went as far as insisting on a profit of KES 300 to KES 400 per goat.

High bank charges

In many respects, high bank charges, and the costs associated with getting to Lodwar to cash their cheques, were the principal complaints of livestock traders associated with the destocking activity of 2005, and, indeed, the major factor in determining traders' profit margins. In Kerio, traders complained that the bank, at which they cashed their cheques, charged a commission of KES 300 for a cheque worth less than KES15 thousand, and KES 200 commission for cheques valued at more than KES 15 thousand. Traders from Lokichar and Lorugum echoed these concerns stating that 'every trader involved in the destocking activity was charged KES 300 to cash his/her cheque'. Lokichar and Lorugum traders also complained about the high costs associated with travelling to Lodwar to cash their cheques. Lorugum traders complained that each trader was expected to travel to Lodwar in order to cash cheque. They suggested that, in addition to the cost of transport to and from Lodwar at KES 400 per person, board and lodgings costs also amounted to KES 400/day. All in all, LMA members from Lorugum implied that they failed to clear a profit during the destocking activity. In Kalemnarok, LMA members explained that the bank charged them KES 30 per KES 1000 cheque, and that transport to and from Lodwar cost an additional KES 400. Even the LMA in Lodwar complained about high bank charges associated with cashing their cheques; however, they suggested that the bank took a flat rate of KES 100 per cheque.

Delays in receiving cash payments

Three of the five FGD groups of market traders complained about long delays between buying their goats for the destocking intervention and cashing their cheques in Lodwar. In Kerio, traders complained about having to wait 20 days before they could cash their cheques. This sentiment was reiterated by the market monitor in Kerio. He suggested that it was the usual practice for traders to make a return of KES 20–40 per day on every KES 200 invested. He stressed that many traders temporarily lost KES 3000–4000 of their working capital for up to 1 month, and, ultimately, it was the sellers that gained rather than the traders. LMA members in Lokichar went further by implying that each trader involved in the destocking intervention had lost KES 1200 because their money was tied up for such a long time. Traders from Lorugum also complained of capital been tied up for a long time, suggesting that the opportunity cost of their tied capital was equivalent to the profit made on one goat.

Feeding costs and goat mortalities

Hidden costs associated with feeding goats and goat mortalities were mentioned by LMA traders from Lokichar and Kalemnarok. Traders from Lokichar were unhappy about having to absorb the costs of keeping/feeding the goats they had bought as part of the destocking intervention. In some cases, they had to bear the costs of keeping/feeding the goats for up to two weeks. In addition, Lokichar LMA members stressed that some goats were so weak that they died while in their hands and that they (the traders) were expected to absorb the losses. These sentiments were also echoed by LMA members from Kalemnarok, stating that 'some goats died while they took care of them for 1 week—before taking them to their respective schools'. In concert with Lokichar, LMA members were not compensated for their dead goats.

3.2.2.5 Willingness to be part of a destocking activity in the future

Whilst all the LMAs interviewed suggested that they would be willing to be part of future destocking interventions, most of the traders interviewed had a range of suggestions as to how the destocking process could be improved. All LMAs insisted that institutions planning future destocking interventions should increase the amount of commission per goat. Kerio traders insisted that pastoralists should receive KES 1000 and traders should receive KES 1500. Interestingly, traders from Kalemnarok initially suggested that goat prices should be between KES 1000–1200 in order to make it worthwhile for them to take part in a future destocking intervention. However, when the group continued discussing the topic, they raised hidden costs such as paying a herdsman and the costs incurred through goat mortalities and they concluded that the price per goat in future destocking interventions should be KES 1500. LMA members from Lorugum were even more ambitious, demanding

that the price paid per goat in a future destocking intervention should be KES 2000 per goat. After further probing, traders from Lorugum admitted that they would accept KES 1500 if each trader was allocated larger volumes of goats. They also stipulated that a future destocking process would function more effectively if traders were allowed to negotiate the price they pay per goat directly with the pastoralists without having a price imposed by the destocking institution.

Traders from Kerio, Lokichar and Kalemnarok suggested that they would be interested in being involved in future destocking activities if the intervention took place over a longer period of time and if more animals were involved. LMA members from Lokichar suggested that the destocking period should parallel the length of the drought (6 months or so). Traders from Kerio also were keen to stress that future destocking intervention institutions should ensure that there were no delays in receiving their payments for goats purchased, and it should be cash and not cheque. In concert with LMA members from Lokichar, LMA members from Kerio also insisted that any future destocking activity should involve more traders. Kerio traders insisted that tenders for destocking should come directly to the traders and not be influenced by key individuals in the area. Interestingly, traders from Kalemnarok suggested that in a future destocking intervention, traders should be allowed to purchase healthy goats. They appeared to be under the misapprehension that only unhealthy goats were to be purchased as part of the 2004/2005 destocking intervention. The purchase, and delivery, of unhealthy goats was confirmed through an interview with the local school (see below), where many goats were declared ill and the intestines had to be discarded.

3.2.3 Role of head masters and health centre managers

During the enrolment process, VSF-Belgium selected boarding schools from a list provided to them by the DEO. Likewise, health centres were selected on the basis of having in-patients. From the evidence reviewed, it is apparent that, many of the key school and health centre actors were simply assigned roles within the project rather than successfully enrolled. It appears that schools and health centres were assigned a set number of goats to be delivered on a pre-arranged date, where they would be slaughtered and consumed. Their principal incentive to play the part assigned to them by the DSG and VSF-Belgium was their assumed willingness to accept and consume free goats and to use the savings, associated with not having to purchase their usual quantities of goat meat, on supporting the most vulnerable pupils/in-patients in their schools/health centres.

According to the TELO Report (2005), boarding schools and health centres were the principal recipients of free goats as part of the 2005 destocking intervention. The TELO Report states that 35,197 very poor and poor students in 84 secondary and primary schools were targeted

to receive fresh meat. The Report goes on to state that over 327 in-patients in the six health facilities also benefited from an increase of protein in their diet. Indeed, the Report suggests that some patients who had left the hospital before concluding treatment in Kakuma Mission Hospital returned after they learnt of the meat distribution.

As part of the field-level research conducted by the evaluation team, one health centre (Katilu Health Centre) and four schools (Nadapal Mixed Primary School, Turkana Integrated School-Katilu, Lorugum Primary (boarding) School, and Kaputir Primary (boarding and day) School—Near Kalemnarok) were visited to validate claims made by the TELO Report.

3.2.3.1 Number, and timing, of goats received and their physical condition

All the benefiting institutions visited confirmed that they had received goats as part of the 2005 destocking intervention. Katilu Health Centre confirmed that 14 young and tender goats were received thrice weekly over a period of two weeks. Whilst TELO field data broadly corroborates the number of goats received by the health centre (18), it does not corroborate the claim that the goats were received thrice weekly. Indeed, only two deliveries of 9 goats, one on the 31st of January and another on the 17th of February were recorded. In addition, there is only slaughter records for 4 of the 18 goats received.

Nadapal Mixed Primary School informed the evaluation team that they received approximately 97 to 98 goats in medium condition in either two or three instalments. TELO field data broadly corroborates the number of goats received by the school (93) as well as the number of deliveries (2); the first batch on the 31st of January and the second batch on the 17th of February. However, there are slaughter records for only 47 of the 93 goats received. Staff from the school informed the evaluation team that seven (8 kg) goats were slaughtered three days a week (Monday, Wednesday, Friday).

Lorugum Primary Boarding School's head teacher informed the evaluation team that they had received 64 big goats in good condition; 28 goats were received in one delivery in February, followed by 7 goats, five days per week, over the subsequent two weeks. Unfortunately, this data is not corroborated in the TELO field data, which suggests that a total of 88 goats were delivered in two consignments on the 1st of February (46) and the 17th of February (42). Furthermore, there is only slaughter records for 42 of the 88 goats delivered. According to the head teacher at the school, the goats were slaughtered the same day that they were delivered. Given the lack of refrigerated storage available in the area, the logistics of slaughtering and preserving more than 40 goats at a time, render the head teacher's comments unbelievable. The head teacher also suggested that 2 out of the 7 goats received every day were donated by the Lorugum Health Centre. The TELO Report stated that 450 pupils received supplementary goat meat but did not state how many goats were delivered.

Unfortunately, Turkana Integrated School-Katilu received approximately 80 unhealthy goats in two instalments instead of the regular supply of goats, over a period of one month, originally agreed upon. The head master informed the evaluation team that, after much persuasion, LMA members eventually exchanged the weakest and unhealthiest animals for goats in better condition. However, according to TELO field data, a total of 93 goats were delivered in one instalment on the 31st of January. There were no slaughter records for any of the goats received by the school. Whilst this may have been related to the problems of ill health alluded to above, it also raises concerns regarding the potential for fraudulent behaviour.

A similar situation arose in Kaputir Primary (boarding and day) School, near Kalemnarok, which received 91 goats (the same number as TELO Report) but approximately 75% of them were very weak. After inspection by the Public Health Department, it transpired that most of the goats' intestines were bad and had to be discarded. The goats were delivered at a rate of 25 per week, for 3 weeks, and the rest in the 4th week. These were slaughtered at a rate of five per day, five days per week. School staff suggested that, starting with the weakest, they slaughtered the goats as soon as possible because they didn't have much land on which the goats could browse. Unfortunately, the TELO field data does not corroborate this information. Field data suggests that goats were delivered to the school in two instalments, the first on the 31st of January (45 goats) and the second on the 17th of February (46 goats). Again, as with Turkana Integrated School, there were no slaughter records for the school. In a surprising twist, two adakar pastoralists came to the school and took their goats away, saying the goats were sold/bought during their absence by other members from their adakar. Interestingly, the TELO Report stated that 45 goats were delivered by one trader. Lastly, it transpires that, although the guidelines laid down by VSF-Belgium stressed that local traders should only purchase weak animals fit for human consumption, several traders purchased goats, either knowingly or unknowingly, that were not suitable for human consumption.

3.2.3.2 Costs incurred for keeping or processing goats

Determination of hidden costs associated with the keeping, or processing, of goats was a key concern of the evaluation team. Transcripts from key informant interviews with the individuals from schools and health centres confirmed that several recipients of free goat meat incurred a range of additional costs. The principal costs involved in the receipt of free goats were associated with the need for the recipient institution to hire someone to look after the goats until they were slaughtered and consumed. Katilu Health Centre hired a shepherd to look after their goats at a rate of KES 50/day. There was no mention of slaughter fees but the head nurse did mention that a Community Animal Health Worker (CAHW) inspected the meat and that all the goats were able to be eaten. Similarly, Kaputir Primary School hired

someone to slaughter the goats who also served as a herdsman for the two and a half months that they looked after the goats. The individual concerned was paid at the rate of 1 goat per month. Whilst school workers and cooks volunteered to look after the goats received by Turkana Integrated School until their slaughter, some of the food (maize and acacia pods), which the goats consumed, needed to be purchased. Volunteers also looked after the goats delivered to Nadapal Mixed Primary School until they were slaughtered. There was no mention of slaughter fees.

3.2.3.3 Number of pupils or in-patients fed

According to the key informant from Katilu Health Centre, approximately 3 to 5 in-patients were fed with goat meat as a direct result of the destocking intervention. This is significantly less than the 13 patients stated in the TELO Report. Nadapal Mixed Primary School stated that approximately 410 children were fed with the free goat meat, 50 pupils less than the 460 stated by the TELO Report. Staff at Turkana Integrated School suggested that approximately 250 were fed with the free goat meat. In Lorugum Primary School, staff suggested that 510 children benefited from free goat meat, and in Kaputir Primary School, approximately 385 children were reported as benefiting.

3.2.3.4 Role of goat meat in supplementing in-patient's diet

One of the key claims of the TELO Report was that school children would benefit from an increase in the animal protein content in their diets, which predominantly consist of cereals provided by the School Feeding Program. The evaluation team set out to establish both the average diet of school children and health centre in-patients and whether or not this had indeed been supplemented by the provision of free goat meat.

All institutions visited that benefited from free goat meat stated that the destocking intervention had increased the amount of animal protein in the diet of their pupils/in-patients. The head nurse from Katilu Health Centre informed the evaluation team that the standard daily diet for in-patients consisted of 2.5 kg of meat per day (spread between the numbers of in-patients) in conjunction with ugali, beans and maize. She stated that, as a result of the free goat meat, the nutritional status of patients had improved; in-patients received bigger chunks of meat in their daily rations. However, she could not quantify exactly how much extra they received.

In Nadapal Mixed Primary School, children were used to eating two goats per week, supplemented by beans. The head teacher informed the evaluation team that, as a result of the free goat meat, there was a significant increase in the children's consumption of animal protein at least throughout the duration of the destocking intervention.

With regard to Lorugum Primary School, the head teacher informed the evaluation team that pupils usually received meat in their diet twice weekly. During the destocking intervention, the provision of free goats resulted in each pupil receiving two extra meat meals a week—an additional 30–35 kg spread between 510 pupils (i.e. 64 grams/child).

In Kaputir Primary School, which is both a boarding and day school, the head teacher informed the evaluation team that the standard lunch time meal for pupils consisted of yellow peas (from WFP), maize and salt. On the other hand, the evening meal (only consumed by boarding pupils) was comprised of ugali, green vegetables and meat (at least on Mondays, Wednesdays and Saturdays). The evaluation team was informed that the school buys 500 grams of meat/child per month (depending on the number of boarders) and that each child received at least 42 grams of meat per meal. The head teacher suggested that, as a direct result of the destocking program, meat was included in the evening menu 5 days a week. In addition, meat continued to be consumed on Saturdays, as it was a tradition of the school. The head teacher informed the evaluation team that, in his view, the provision of free goat meat had improved the health of his boarding pupils, at least for the 4 week duration of the destocking intervention. Unfortunately, however, day students did not benefit from the provision of free goats.

Lastly, the head teacher at Turkana Integrated School-Katilu informed the evaluation team that his pupils' usual diet consisted of green gram, maize and peas. During the destocking exercise, the diet changed to ugali (maize flour) and goat meat. In the words of the head teacher 'the little bit of meat that the children usually received came from their parents'. He stressed that the provision of 'free goat meat substantially increased the children's consumption of animal protein'. However, the head teacher was keen to point out that, as Turkana Integrated School was a day school, they should not have been eligible to receive free goat. He stressed that this situation was a significant oversight as boarding students in other schools usually received meat as part of their weekly diet, whereas day school students did not. He also exclaimed that it was rare for day students to receive meat at home as part of their evening meal.

3.2.3.5 Savings made as a result of free goat meat

Aside from the potential for free goat meat to supplement the diets of pupils and in-patients, the evaluation team also wanted to determine whether or not the institutions receiving free goats had been able to make cash savings. According to the TELO Report, schools were expected to use the savings as food for fees and uniforms for the needy pupils. Key informant interviews with the respective head teachers and nurse generated interesting insights into how the destocking activity had worked on the ground. All institutions receiving free goats

admitted that they had saved money through not having to purchase their usual quantities of goat meat. With regard to Turkana Integrated School, this was a bit of an anomaly as they had previously stated that the children generally did not consume meat as part of their usual school diet. In the case of Katilu Health Centre, the head nurse stressed that 'the destocking activity was timely because the Health Centre's usual supplier of goat meat was having difficulties and that goat meat supplies had been curtailed'. Indeed, the head nurse went on to say that the free goat meat 'saved the institution'. Cash savings were used to pay the Health Centre's night guard. Nadapal Mixed Primary School was also able to make savings by not having to purchase their usual two goats per week. Savings were used to purchase paraffin. In the case of Turkana Integrated School, savings were also made by not having to purchase the usual one goat per week. These savings were used to purchase salt and essential items for the children such as paraffin for lamps so that children could study in the evenings. In Lorugum Primary School, the local butcher, who normally supplied the weekly 28 kg of goat meat to the school, was part of the group of traders who supplied the school with high quantities (30–35 kg) of free goat meat. However, the interviewee could not remember exactly what the savings were used for. Lastly, the head teacher from Kaputir Primary School informed the evaluation team that the money saved was used to buy uniforms and bags for the special needs children and some new window 'doors'. The school council decided how the money was spent.

3.2.3.6 Fate of goat skins

According to the TELO Report (2005), the LOCC collected and sold all the goat skins and used the proceeds to 'fund community activities'. In an attempt to trace the benefits of the destocking intervention, key informants were asked about the fate of their goat skins. In the case of Katilu Health Centre, the head nurse informed the evaluation team that the goat skins had been sold at KES 20 each and that the proceeds had been used to pay the shepherd who watched over the goats until they were slaughtered. The head teacher from Nadapal Mixed Primary School also stated that their goat skins had also been sold and the proceeds used to buy salt. He was unsure about the price paid for goat skins. The head teacher from Turkana Integrated School informed the evaluation team that their goat skins had been sold at KES 30 each and that the proceeds had been used to buy essential items for the school. No details were provided as to what the essential items were. In the case of Lorugum Primary School, the head teacher informed the evaluation team that their goat skins had been sold and proceeds had been used to buy the examination papers. Lastly, the head teacher from Kaputir Primary School informed the evaluation team that their goat skins had been dried and sold to the local community. The proceeds from the skin sales had been used to buy essential items for the school kitchen.

3.2.3.7 Fate of goat offal

According to the TELO Report (2005), offal was supposedly 'given as labour charge to the people who slaughter the goats after delivering the meat to the respective schools/ institutions'. In reality, this was difficult to confirm in most cases. In the case of Katilu Health Centre, it was the shepherd who received hooves, heads and offal from the goats. It was difficult to ascertain whether or not the shepherd also acted as the slaughterer. In the case of Nadapal Mixed Primary School, it was the goat skinners who received the goat offal. Again, it was difficult to ascertain whether or not the skinners were also the slaughterers. The other benefiting institutions were prompted as to the fate of offal but the head teachers could not remember exactly what they had done with them.

3.2.3.8 Impact on School and Health Centre attendance

According to the TELO Report (2005), all schools had benefited from increased pupil enrolment. Indeed, the Report went on to say that 'there was a marked increase in enrolment in all schools visited which was attributed to availability of additional pastoralist friendly food—goat meat. Their previous meals, mainly cereals, were not as appealing to the children as the meat enriched diet. Unfortunately, on the ground, this was a little difficult to substantiate. For example, according to the head teacher at Lorugum Primary School, enrolment figures increased as children from local day schools enrolled because of the free goat meat on offer. Kaputir Primary School was a similar case. The head teacher suggested that more children had attended his school during the destocking activity, including some children from other day schools. However, by the end of the destocking intervention, enrolment figures had not changed because the pupils returned to their respective schools. In the case of Nadapal Mixed Primary School, whilst refraining from claiming that enrolment had improved during the destocking period, the head teacher did suggest that, if the destocking intervention had been conducted over a much longer period (a school term), he would have expected enrolment to have increased substantially.

However, aside from Katilu Health Centre, all schools visited during the evaluation suggested that school attendance was very high during the destocking period. Indeed, the head teacher from Turkana Integrated School went further by claiming that attendance during the destocking month was almost 100%, and that this was as a direct result of offering a goat meat rich diet.

3.2.3.9 Suggestions for improvements in destocking activities

In line with the questions posed to the adakar pastoralist and livestock traders FGDs, the recipients of free goat meat were also asked whether or not future destocking activities could

be improved. While the head nurse in Katilu Health Centre was keen to point out that the 'extra meat supply to the Health Centre was very good', she suggested future destocking interventions would be even more beneficial for the health centre if the activity was spread over a longer time frame. This sentiment was echoed by Nadapal Mixed Primary School, Turkana Integrated School, and Kaputir Primary School. The head teacher from Kaputir Primary School went further by adding that he would have preferred fewer goats per week but over a longer period. The head teacher from Kaputir Primary School also suggested that institutions responsible for future destocking interventions should ensure that the people who are given the tenders to buy goats should only supply healthy animals.

Head teachers from both Nadapal Mixed Primary School and Turkana Integrated School also suggested that, in the future, it would be more beneficial if goats could be held in a central holding area until the school was ready to slaughter and eat them (probably twice or thrice weekly). The head teacher from Turkana Integrated School also insisted that it was important to include day schools as key beneficiaries, insisting that the children in these schools do not generally eat meat, and that destocking could be a way to ensure that non-boarding children have at least a little animal protein in their diet. The head teacher from Turkana Integrated School suggested that future destocking activities could be improved if they could be strategically timed to overtly encourage pupil enrolment. He also suggested that there should be a greater involvement of the local community in future destocking activities, that goat meat could be used in food for work programs, and that payment for the goats should be in cash and paid in the local area.

4 Discussion

4.1 Identification of external drivers, ensuing problems and potential solutions

In many ways, the destocking intervention in January and February 2005 can be seen as a success story. However, as with most complex processes, it is difficult for executing agencies to envisage all eventualities. From the off-set, all key actors agreed that drought was the principal external driver and that drought was the major contributor to growing problems of water and pasture/browse scarcity. Likewise, key actors agreed that lack of water and pasture/browse was the principal reason for the concomitant deterioration in livestock condition. There is also substantial evidence to support the supposition that there was a growing consensus, between all major actors in pastoralist systems, of the key external driver, key drought-related problems, and the concomitant impact on pastoralists' livelihoods. However, it was unclear from the evidence reviewed, what part, if any, pastoralists played in setting the parameters for the LSP assessment. In addition, it was difficult to assess the inclusivity and transparency of the LSP assessment process.

If pastoralists were involved, was this simply confined to chiefs and other key members of the pastoral communities? What kind of information flows ensued? Did chiefs hold community meetings in each adakar to gather information?

4.2 Internal drivers and key actors and actants

Based on the literature reviewed, and empirical research undertaken as part of this evaluation, it is evident that the DSG, LSP, and its component development actors, provided the internal momentum required to devise and implement this drought ameliorating intervention. The DSG and LSP were active in assimilating significant written and verbal evidence of the impending problems and were able to muster the political will to act and to secure crucial financial support. From the information utilized in compiling this report, it is evident that the DSG, LSP, and their concomitant members, functioned efficiently and effectively in the process of identifying key external drivers, major problems and key actors and actants.

4.3 Enrolment of actors and actants

However, the process of enrolling actors and actants in a coherent response to the lack of water and pasture met with mixed results. From the literature reviewed, and the detailed empirical research undertaken in the field, it was difficult to find any evidence of pastoralists,

community leaders, livestock traders, and the eventual recipients of free meat being part of the process of deliberating and defining a solution to the problems identified. Indeed, it was DSG and LSP members who selected destocking as the most appropriate intervention and who devised and managed the implementation mechanism. While it is true to say that substantial evidence exists to support the supposition that members of the DSG and LSP have a very good understanding of conditions on the ground, there is no substitute for the central involvement of ultimate beneficiaries in the process of identifying both problems and solutions. From an actor network perspective, the key actors involved in planning the destocking intervention were mostly international NGOs, and regional and district level institutions. Other groups and individuals involved in the destocking activity were passive actors and actants that were simply assigned their roles by the DSG, LSP and VSF-Belgium.

The following sections discuss whether or not key actors, namely, pastoralists, LMAs and livestock traders, recipients of free goat meat, and key actants (water, browse and goats) were successfully enrolled in the destocking process and whether or not they executed their roles in the manner intended by VSF-Belgium.

4.4 Role of pastoralists

From the literature reviewed and detailed field work undertaken as part of this evaluation, concerns were raised that pastoralists were assigned a rather passive role in the destocking intervention. In addition, because of apparent irregularities associated with information flows, many pastoralists were not even properly enrolled in the process as passive actors. While it appears that many of the pastoralists enrolled in the destocking intervention were aware of their own roles, and the roles of the livestock traders and goat meat beneficiaries, there is also evidence that many were not clear about either their own roles or the roles of other key actors.

4.4.1 Sensitization to destocking intervention

It is clear that, while many pastoralists were indeed reached through the dialogue meetings held in the 29 buying centres, many pastoralists, possibly those furthest away from market centres, were not reached. While it is true that, of the eleven adakars represented in the FGDs, a total of nine adakars had sold, or believed that they had sold, goats as part of the destocking intervention, only representatives from five adakars (Kerio and Kaleng) had been sensitized to the forthcoming destocking intervention through a community barasa. In Kalemnarok, the four adakars represented were totally unaware of a community barasa sensitizing them to the off-take activity. Indeed, they suggested that the reason they had supplied goats for off-take was because they had been informed of the off-take activity by

local traders in search of weak goats. In Kanukurdio adakar (Kaleng) only 2 adakars out of a 100 local adakars took part in, and were sensitized to, the destocking intervention. The five adakars that did take part were adjacent to bore holes. In Lokichar, the pastoralists interviewed had not been sensitized to the destocking activity. Instead, they only heard about the destocking activity when weak animals were being consumed by local school children. Later in the interview, they did admit that they may have inadvertently sold goats to traders buying weak goats at the time. Lastly, pastoralists from the Lougogo adakar (Lorugum) were totally unaware of destocking activity.

4.4.2 Targeting of the most vulnerable pastoralists

Overall, it is likely that many of the most vulnerable pastoralists may have been excluded from the benefits of the destocking intervention, either because of their geography or their lack of local social and political capital (social connections). Whilst there is general agreement that most households will only sell livestock, especially small stock such as goats and sheep, when faced with immediate cash/food security needs, it is likely that a structural bias existed predisposing the intervention to purchase more goats from pastoralists with larger herds, rather the most vulnerable pastoralists in the intervention area. This premise is based on two assumptions. First, those pastoralists with larger herds are generally more market-oriented, than those owning fewer livestock, and are more predisposed to take advantage of the off-take intervention. Many households, owning less than 10 Tropical Livestock Units (TLUs) do not usually sell animals (Barrett et al. 2004). The poorest and most vulnerable households are often those with smaller livestock holdings and less extensive social support networks (Swift et al. 2002). Second, if the protocol of limiting goat purchases to one per household was not upheld, pastoralists owning large goat herds are likely, in absolute terms, to sell a greater number of goats.

The evaluation team also was concerned that the majority of beneficiaries of the destocking intervention were probably located close to major livestock market centres and/or benefiting schools and hospitals or were selected due to their proximity to boreholes etc., where goats could be watered before being trekked to their respective schools and hospitals. Even in the adakars that were represented in the community barasas, where sensitization took place, it appears as though information flows may have been restricted, and that many of the poorest and most vulnerable individuals may have been excluded from key information with regard to the destocking activity. Whilst acknowledging that most of the pastoralists in the areas selected for intervention were indeed vulnerable, it is difficult to support claims from VSF-Belgium that the intervention involved the most vulnerable pastoralists due to the apparent spatial bias in the selection of benefiting adakars.

4.4.3 Pastoralists' participation in the intervention

For those pastoralists who did take part in the destocking intervention, knowingly or otherwise, did they execute their roles as expected? With regard to the number of goats sold during the off-take period, pastoralists, representing the nine adakars that sold goats, suggested that the number of goats sold as part of destocking varied between one and ten. However, the TELO monitoring data suggested that the average number of goats sold per household/goat owner was between 1.5 and 3 depending on the area. Although the guidelines of the intervention stipulated that traders should only buy 1 goat from each individual household, the evaluation team would argue that the resulting averages are not a bad accomplishment, as they still cater for a reasonable spread. Although the intervention seemed to achieve a reasonable spread of the benefits, the scale of the project did not reach many vulnerable households. Indeed, many pastoralists complained that goats were bought on a first-come, first-served basis. This meant that those adakars closest to main arterial roads and markets, and those lucky enough to have been sensitized to the off-take, were those that benefited most from the destocking activity. Indeed, many pastoralists from peripheral adakars complained, particularly when they had trekked goats to market, only to find that the local destocking quota had been met.

One of the most important objectives of a destocking project is usually to save livestock assets, as it is anticipated that the income from animal sales may be used to restock after the drought. But since buying one female (breeding) goat is usually more expensive than the price received for 1 (weak male) goat, the rule of destocking 1 goat per household might have to be reviewed. One could argue that the individual households' share of the intervention (i.e. the number of weak goats they are allowed to sell) should be proportionate to the size of their herds. But this would not take into account the compassionate feeling that those that have few animals have more to lose. When instead one chooses to allocate an equal number of goat sales to as many households as possible, this is motivated by a rather relief-oriented imperative. But others could argue that when relief to (selected) vulnerable households is included as an objective, then the individual households' share of the intervention should be based on the family sizes, which relates to the food need and translates into the number of goats sales needed to raise enough money to purchase that food.

4.4.4 Variability of prices paid for goats

With regard to the price received for weak healthy goats, pastoralists interviewed suggested that, while they were aware of the price that they were supposed to have received, many sold their animals at a much lower price because traders were not willing to pay the agreed KES 800. Some pastoralists claimed that traders had purchased goats for as little as KES 300.

Significantly, pastoralists in Kerio suspended goat sales at the end of the second week of the off-take activity in protest to the low prices paid for their goats by local traders. Although TELO field records on prices paid corroborates the occurrence of underpayments, these cases mostly occurred in Southern Turkana. Conversely, traders also accused pastoralists of abusing the system by exhorting up to KES 850–900 per goat, as they were aware of the amount of commission made by the traders when they sold their goats. It must be noted that this claim was not widely supported amongst the traders interviewed. However, TELO data presented in this Report suggest that, while there were hardly any cases of overpayment in the Central Zone, 18% of goat transactions in the Northwest Zone involved over-payment.

Lastly, with regard to the quality of goats supplied, some pastoralists, that were either unaware of the stipulation for weak but healthy goats, were unaware of the condition of their goats, or were intent to abuse the system, supplied goats that were so weak that they died before reaching the schools/health centres or goats that were diseased and unfit for human consumption. From an actor network perspective, if the pastoralists were unaware of the condition (health) of their goats, it was the goats (actants) that did not execute the passive role assigned them by VSF-Belgium. Ultimately, their principal roles were to trek from the adakar to the market and then the school/health centre and be fit for human consumption.

4.4.5 Pastoralists' impression of the destocking intervention

Pastoralists were asked whether or not they thought that the destocking intervention was a good idea and, if they saw the need, how a future destocking activity could be improved. Not surprisingly, the most frequent response related to the price offered per goat. Across the areas visited, most respondents suggested that, in order to encourage pastoralists to destock at the onset of drought, institutions undertaking goat off-take needed to offer between KES 900 and KES 1000 per goat even though many pastoralists admitted that in times of need they often sold goats at KES 600. Other suggestions for improvements put forward by a minority of respondents included the need for a one-off destocking event, rather than destocking over a period of three to four weeks; a suggestion that it would be more equitable for the pastoralists to sell directly to the destocking agency, rather through livestock traders; more goats should be destocked, up to 75% and; cattle and camels should also be considered in a future destocking activity.

4.5 Role of LMAs, livestock traders and local markets

From the literature reviewed and detailed field work undertaken as part of this evaluation, three principal concerns were raised. First, traders were assigned a rather passive role in the destocking intervention. Second, key LMA actors were in a position to capture the lion's

share of benefits ensuing from the destocking activity. One of the key recommendations for future destocking activities, emerging from traders, was the need for the involvement of more traders and less undue influence by powerful individuals in the area. Third, due to their significant room to manoeuvre, the role of traders in the destocking intervention was open to abuse. As a result of the incomplete nature of the pastoralist sensitization process and consequent knowledge gaps, in concert with the significant price differential between the destocking price and the background price for weak goats, traders were in a position to exploit the pastoralists. In addition, the fact that the new arrangements for the purchase of weak goats were contradictory to those introduced by VSF-Belgium in its activities aimed at promoting market-orientation of pastoralists in Turkana, namely, VSF-Belgium's attempt to create markets in which buyers and sellers come together and negotiate the price, are also likely to have enhanced the traders' room to manoeuvre. According to ANT, the processes of negotiation, representation and displacement which establish relations between actors, entities and places (termed translation) involves the re-definition of previous relationships between actors so that traders are persuaded to behave in accordance with new network requirements, which were inscribed in the destocking proposal and implementation guidelines and that attempt to align heterogeneous elements and consolidate the destocking network. However, ANT suggests that networks are often characterized by links between actors and intermediaries that are provisional and divergent, where norms are hard to establish and standards are frequently compromised. Ultimately, in the case of the destocking intervention, the heterogeneous components of the network, namely the traders and pastoralist, re-negotiated with one another, which resulted in the formation of variable and revisable coalitions, and ever changing shapes (i.e., a significant range of prices paid for the goats bought as part of the destocking intervention).

With regard to the impact of the destocking intervention on local markets, there seems to have been little impact on both market prices and volumes. Traders suggested that, as the buying and selling of weak goats was not a common occurrence, the destocking activity almost paralleled normal market activities, which consisted of buying and selling strong healthy goats, and that when weak goats are sold they can fetch as little as KES 200 and are only sold when a family is almost destitute. With regard to market volumes, the total amount of animals offered for sale increased during the destocking activity. However, there was some anecdotal evidence that volumes also increased in the market for healthy goats during the period of destocking. Lastly, there was a consensus of opinion across the market traders interviewed that the destocking activity had increased market attendance, at least for the duration of the intervention and throughout March and April 2005. Traders also suggested that pastoralists, not known for offering animals for sale, attended the market for the first time during and after the destocking activity. Traders believed that this was a result of the high prices being offered for weak goats.

As far as the impact on livestock trading businesses is concerned, as the volumes of goats associated with destocking were small, the average number of goats per trader ranges from 10 in Central Zone to 42 Northwest Turkana, most traders carried on with their usual business. However, many traders insisted that their role in the destocking process had not been a profitable one. Most traders complained about low profit margins associated with high bank charges, long delays in receiving cash, liability concerns associated with goat mortalities, feeding costs and exclusion from the full benefits of destocking by unscrupulous LMA officials. The majority of traders agreed that any future destocking activity should offer KES 1000 to sellers and KES 1500 to traders—a commission of KES 500. They also stated that they would prefer cash instead of cheques, and that there should not be delays in payment. Many traders complained that the destocking activity tied up a proportion of their working capital for a long period. They also wanted to extend the destocking period and cull more animals.

4.6 Goat intervention price and market development

Although pastoralists would desire high prices to motivate them to sell, some pastoralists that had not been aware of the intervention reported being pleasantly surprised when they received KES 600 for the weak goats they brought to the market. Moreover, from the qualitative information gathered, the evaluation team understands that the farm gate (or household level) price for goats can be as low as KES 300. In two LMA FGDs, traders indicated that the lowest price paid for weak and thin goats was as low as KES 200, but more often it was stressed that nobody is interested in buying such weak goats.

A price of KES 800 paid to livestock owners for weak and thin goats may well be four times their true 'market' value (suggested to be KES 200). Apparently, such a high price has left the traders with a lot of bargaining power, and many livestock owners—destitute or at least vulnerable by the time this intervention came—were willing to accept a lower price. Some stakeholders have argued that an intervention price should be (20–30%) higher than the market price in order to motivate the pastoralists to sell. In light of the above, this argument does not seem to hold water. From discussions with key players in the destocking intervention, it transpired that the price (of KES 800) was set at this relatively high level because of the high market prices in December, when the LSP did assessments throughout the district. Many traders wanted the price to be KES 900–950 for the livestock producers but many stakeholders even felt the reduced price of KES 800 was too high.

We would argue however that offering a higher-than-market price undermines each attempt to institutionalize 'timely sales to the market' as a coping strategy by pastoralists. To promote timely livestock sales to the markets, the market prices need to be more rewarding than the

intervention price for weak goats that have suffered the drought for several weeks. Otherwise, after gaining the experience in several recurring droughts, goat owners faced with a possible drought will speculate by awaiting a possible intervention—rather than timely selling their goats to the market. After all, the same institutions that strive to create awareness for an imminent drought are the ones that would several months later come with a destocking intervention. Consequently, it would undermine VSF-Belgium efforts to develop livestock markets and promote the market-orientation of pastoralists in Turkana.

The other argument used for giving a higher price was to motivate pastoralists to come to the markets. In the focus group discussions with LMA traders, there were several reports that market attendance—by livestock owners wanting to sell—had increased during and immediately after the destocking project. The Lodwar traders said it had introduced some pastoralists that had never been to their market before, and they were still coming. However, it is debatable whether this increased attendance would not have occurred anyway due to the distress situation in which most pastoralists found themselves. And we would argue that raising market attendance could be achieved by raising awareness of livestock markets and the need to timely sell their animals. Awareness campaigns would certainly be more cost-effective than destocking interventions, when the aim is raising market attendance.

4.7 Role of head teachers and health centre managers

From the literature reviewed and detailed field work undertaken as part of this evaluation, it was evident that the recipients of free goat meat (schools and health centres) were also assigned, and played out a rather passive role in the destocking intervention. Their role was simply to accept an agreed number of free, but edible, goats over a pre-determined period, use the goat meat to supplement either pupils' or in-patients' animal protein intake, and use the savings, arising from not having to purchase goat meat during the duration of the destocking activity and money received from selling goat skins, to act as school fees and/or buy essential school items for pupils from the most disadvantaged households.

4.7.1. Accepting free goats

While all of the schools and health centres visited received roughly the same number of free goats specified by the TELO Report, TELO field data failed to corroborate the timing of deliveries, condition of the goats, and numbers slaughtered. This was particularly the case in Turkana Integrated School and Kaputir Primary Boarding School, which comprised 50%, or two out of four, of the schools visited as part of the field level evaluation. Indeed, the TELO field data suggests that the deliveries of goats to the institutions in Central and Southern Zones were rather synchronized events as the vast majority of deliveries were recorded on 31

January and 14 February. In Lake Zone and Northwest Turkana, the deliveries seemed much more dispersed. The evaluation team suspects that this was merely a difference in record keeping, may be caused by a difference of approach between the zone's off-take monitors in how they explained/introduced monitoring forms to the stakeholders.

According to the TELO Report, recipient institutions were expected to receive, slaughter and consume their free goats in almost a simultaneous process. However, it was apparent from the evaluation team's research that the schools and health centres incurred unforeseen costs associated with herding their goats and supplying animal feed throughout the period between accepting delivery of the goats and their ultimate slaughter and consumption. In some cases, goats that were scheduled to be slaughtered and consumed on a Friday or Saturday would be delivered, along with goats scheduled to be consumed on a Monday and Wednesday, at the beginning of the week. This seems to be supported by the TELO field data, as schools kept goats an average of 5 days before slaughtering them. This was considered as an important, and negative, feature of the destocking by all recipient institutions. Indeed, both the health centre and schools visited had used either some, or all, of the value of their goat skins and offal in order to pay for the services of a herdsman or to pay for animal feed. Ironically, it was the intention of VSF-Belgium that goat skins should have been collected by the LOCCs and used in one way or another to benefit their local communities.

With regard to the impact of free goat meat on animal protein intake, the findings of the evaluation team corroborate VSF-Belgium's claims that the emergency off-take project had a positive impact on the animal protein intake of school pupils and health centre in-patients, at least to a certain extent as for a large part the meat actually substituted normal meat deliveries. Moreover, it would be incorrect to suggest that the provision of free goat meat supplemented the usual consumption of goat meat, except in the instances where the benefiting school was a day-school, as these schools do not usually have meat in their diet. At boarding schools and health centres, the provision of free goat meat tended to replace normal supplies of goat meat in the diet of pupils and in-patients. However, there was both a positive and negative twist to the process. The positive twist was that the free goat meat not only replaced but increased the supply of goat meat. The negative twist was that, in many cases, the supply of free goats almost exceeded the capacity of recipient schools to consume them. Indeed, in one instance, Lorugum Primary School actually donated 2 out of every 7 goats supplied through the destocking activity.

Field work undertaken by the evaluation team could not corroborate the TELO Report's claim that school enrolment had benefited significantly from the provision of free goat meat. Presumably, the duration of the intervention was too short to achieve this. However, many head teachers supported the premise that, if a future destocking activity was strategically

timed to coincide with a full school term, it would be likely to have a significantly positive impact on school enrolment. However, while it was difficult to find evidence to support claims that the destocking activity had a positive impact on school enrolment, there was a significant amount of evidence that the provision of free goat meat had had a positive impact on school attendance.

Lastly, there were three recommendations suggested by a majority of recipients of free goat meat (schools and health centres) on how to improve future destocking activities. Firstly, pupils' nutritional status and enrolment figures could have been greatly improved if the same, or even greater, number of goats had been supplied over a longer period of time. Second, it should be ensured that traders supply only healthy goats. Third, future agencies involved in the provision of free goats should provide a central area where goats can be held until the schools or health centres are ready to accept delivery, slaughter and consume. Other suggestions, made by a minority of recipients include the need for a greater involvement of local communities and the payment for goats in cash and in the local area.

5 Conclusion

In conclusion, the implementing agency had mixed results with respect to meeting its key outputs/objectives and in contributing, in a meaningful way, to achieving its overall goal. With respect to Output/Objective 4.3.1 in the TELO Report, we conclude that the intervention did 'increase household income among pastoralists'. Indeed, evidence corroborates that a total of between KES 6,264,000 and KES 6,338,000 was injected into the pastoralist economy. In all, an estimated 2,565 goat owners from over 1000 adakars benefited from the intervention, compared to the 3212 pastoralists indicated by the TELO Report (2005). However, whilst this is a significant number of adakars, it is unclear whether or not these were the most destitute adakars and whether or not the most destitute households and household members were able to benefit from the intervention. In addition, it is difficult to determine the exact distribution of benefits due to the variation in prices paid by livestock traders for the goats purchased as part of the intervention. Indeed, TELO field data highlighted problems associated with under payments, especially in South Zone and over payments in Northwest Zone. However, it is likely that most of the cash injected through the intervention remained in the divisions in which destocking took place. Whilst this report acknowledges that, in collaboration with other LSP members, the implementing agency targeted the destocking intervention in areas containing pastoralists most vulnerable to the devastating impacts of the drought, it does not suggest in an way that the intervention was able to disproportionately benefit the most vulnerable pastoralists.

With respect to Output/Objective 4.3.2 in the TELO Report, we conclude that the intervention did 'reduce pressure on water and pasture resources'. This conclusion is based on the fact that the intervention managed to remove a total of between 6264 and 6338 goats in the divisions in which destocking took place. However, this Report suggests that the positive impact of removing just over 6000 goats from such a large area, less than 1% of the district goat herd, is likely to have been negligible.

With respect to Output/Objective 4.3.3 in the TELO Report, we conclude that the intervention did 'increase food security for vulnerable school children'. Again, this conclusion is based on the premise that all school children in the intervention area were vulnerable and that many schools in the areas affected by the destocking intervention were able to increase the supply of animal protein to their pupils. All in all, 6, 338 goats were delivered to 105 institutions. However, whilst the intervention was appreciated by staff and pupils/in-patients at the schools and health centres, key informants in these institutions offered a range of key improvements for future destocking interventions including the provision of fewer, healthy, goats over a longer time frame, and delivered and slaughtered in a timely manner. If managed strategically, head teachers believed that a future destocking

intervention could have a positive impact on both pupil attendance and enrolment. Unfortunately, it is likely that many children, most vulnerable to food insecurity, did not attend school during the time of the intervention.

With respect to Output/Objective 4.3.4 in the TELO Report, the conclusion depends on the interpretation of the wording: 'improve utilization of assets, with livestock owners gaining benefit from vulnerable livestock before the condition of the livestock deteriorates beyond the point of selling'. The destocked goats had already lost most of their value. Assuming for instance they were grade 3 goats worth KES 600 before the drought, their true worth had now decreased to KES 200; so two-thirds of their value had been lost, and therefore they could not sell these goats on the real market. In conclusion, the intervention certainly did not come 'before' the deterioration of the livestock condition beyond the point of selling. On the other hand, the intervention eventually came and provided restitution to pastoralists at 4 times the salvage value of their weak goats. In doing so it improved the utilization of the one-third of the original assets remaining (in each goat). Evidence generated by the evaluation team suggests that several livestock owners sold goats that had deteriorated beyond the point of selling. However, it must be noted that the market for weak goats, created by the intervention, was an artificial market that ran parallel to the existing market for grade 1, 2 and 3 goats.

Furthermore, it is likely that, on a per capita basis, livestock traders will have benefited to a greater extent than livestock producers. This would certainly be the case if goat purchases were spread between only 336 traders (stated in the TELO field data) and not the 523 traders stated in the Final TELO Report. On average, livestock traders bought and sold 19 goats during the intervention, generating probably more than KES 4000 per trader, due to their bargaining power. However, many traders interviewed as part of the evaluation stressed that their profit margins had been eroded due to high bank charges associated with cashing their cheques, delays in payments associated with supplying goats to the recipient schools and health centres, and losses incurred due to the need to purchase feed for their goats while waiting to deliver them to the benefiting institutions and the death of weak and sick goats in their care. It must be noted, however, that as livestock markets are a relatively recent phenomenon in Turkana, many livestock traders are also livestock producers and as such may have also benefited from the sell of their own goats.

With respect to Output/Objective 4.3.5 in the TELO Report, we conclude that the intervention did 'increase access to funds made available to livestock owners for future restocking'. However, it is important to note that, while much of the cash injected into the pastoralist economy could have been put aside for future restocking, there was little evidence to support the assumption that pastoralists were planning to save remittances from the sale of

their goats for such a purpose. On the contrary, pastoralists in the FGDs have suggested they used this income to cover other expenses. Ultimately, without further research, there is no way of determining how pastoralists spent the revenue raised through selling goats as part of this intervention.

With respect to Output/Objective 4.3.6 in the TELO Report, we conclude that, according to our key informant interviews with head masters and health centre managers, the 'money saved from the school feeding program was used for school fees and/or other relevant projects for the pastoralists' school children'. However, physical verification of the use of saving accrued from the receipt of free goat meat was not undertaken.

With respect to the overall goal of the project, we conclude that the intervention did contribute to 'improving the socio-economic status of pastoral communities living in arid areas of Kenya by creating markets for their livestock and improving the nutritional status of identified target populations'. However, it would have been difficult not to achieve this wide spectrum, non-quantifiable goal.

With regard to the efficiency and effectiveness of the destocking process, the intervention on the whole appears to have been very successful. It is evident that there is a robust network of strategic actors operating at both division and district levels able to identify key drivers, assess resulting problems, and deliberate and determine potential solutions and mobilize enough political will and financial resources needed to act, if, as in this case, financial support was not as much as required and not as timely as desired. From an operational perspective, the guidelines and data sheets developed and deployed by the implementing agency are generally sound, but could still be improved. Aside from the dire need to capture the timing of goat purchases, sales, slaughter etc, problems encountered by the evaluation team have arisen due to individuals failing to properly fill in, or even fill in at all, the forms they were using, or misplacing forms altogether. It is likely that many of the operational anomalies/ discontinuities identified in this report have arisen due to the limited role of ultimate beneficiaries in the intervention's design.

6 Recommendations

6.1 General recommendations

Greater community-level involvement in the design of pastoralist interventions

In drought prone pastoralist systems, the success of both emergency and development-focused interventions depends on whether or not the intervention is part of an integrated multi-agency system-based approach. Whilst evidence reviewed as part of this destocking evaluation supports the existence of an impressive network of strategic actors devoted to timely and appropriate interventions into pastoralists systems, grass-roots involvement in the process of identifying local problems and the deliberation of potential solutions and causes of action is limited. In future, it is imperative that local communities are fully involved in both the design and implementation of interventions which directly involve them. There should be greater involvement of local communities, representative of the broad spectrum of local society, in the design and implementation of future destocking interventions. In the future, pastoralists, livestock traders, school heads and health centre managers should contribute to the design of interventions of which they are a key component as inclusivity encourages ownership of a process and increases appropriateness of the outputs and outcomes.
Future destocking interventions should also aim to enhance human capital (technical and management skills of individuals, groups and associations). It is generally understood that balanced gender/community participation in planning and implementing mitigation improves effectiveness and efficiency and responds to household priorities (Swift et al. 2002).

Creation of new community-based institutions

Contingent on local political support and the availability of adequate financial resources, it is recommended that LOCCs could be transformed into permanent, or semi-permanent local crisis committees. Comprising trustworthy and respected individuals, elected to represent diversity at the community level, these crisis committees could take a central role in determining the type, and timing of future interventions as well as the identification of the most vulnerable pastoralists and the most efficient and effective mechanisms to monitor their livelihood and food security status, work with multiple agencies at a local level, and provide a crucial social support network. It is envisaged that these networks would primarily act as conduits for the bi-directional flow of information, including comprehensive sensitization of the most vulnerable and marginalized households to forthcoming interventions. It is likely that the integration of the most vulnerable pastoralists into crisis committee support networks would increase the relevance, timeliness, targeting and equity of future interventions as well as reducing the tendency to purchase goats on a first-come, first-served basis.

Bolstering existing drought mitigation strategies

It is equally imperative that future interventions in Turkana should assist in the development of new broad-based community-wide drought mitigation/coping strategies and the bolstering of existing drought coping mechanisms, and, where appropriate, endeavour to enhance them. Pastoralists in Turkana possess a broad menu of drought mitigation options, including:

- migration to areas with adequate pasture and water resources;
- preservation of grazing areas;
- division of large herds into smaller units and species;
- keeping of multiple species;
- stock loaning between relatives and friends;
- collection of wild fruits and bartered cereals and;
- begging for food.

Emergency and development-focused institutions should continue to support pastoralists in their quest to access key pasture and water resources, particularly when raids and insecurity concerns are a feature of almost every drought. According to ILRI (2006), pastoralists from Turkana also place a significant emphasis on both the market (instigating markets where none exist and ensuring the proper functioning of markets where they do exist) and strategic water-based interventions (i.e., the conservation of water resources through the strategic construction of boreholes and dams and the strategic provision of community water storage). Ultimately, when existing livelihood coping strategies fail in the face of drought, the continued provision of food relief and livestock-based assistance (health care, destocking, and restocking interventions) will remain essential elements of emergency interventions. In addition, these interventions would be more effective if their concepts could be institutionalized in the communities. For instance, structures and revolving funds could be established to facilitate the purchase of animals, access key markets, and assist in restocking.

Promotion of the market economy

It is clear that, from the work undertaken to compile this report, future interventions in the district should continue to promote the strategic development and institutionalization of the market economy, particularly livestock marketing. Properly functioning livestock markets and the emergence of a more market-oriented culture among pastoralist communities could serve to secure the livelihoods of many currently vulnerable pastoralists. In many respects, destocking as a potential intervention should only be considered when system failure occurs in pastoralist production systems.

Bolstering of local livestock marketing and market institutions

It is hoped that, in the long term, pastoralists in Turkana will increasingly become 'switched on' to the market or cash economy. By selling their goats to local markets, as both a livelihood and drought coping strategy, they would convert, permanently or temporarily, their livestock assets into financial assets. If pastoralists eventually become accustomed to this strategy, it should become increasing difficult to find producers wanting to sell their goats below market prices. It is therefore recommended that concerted support for the institutionalization of livestock marketing continues in Turkana. This includes support for the establishment of new markets, new LMAs, and promotion of the benefits of livestock marketing with pastoralists through awareness campaigns and through inclusion in the curriculum of pastoralist Farmer Field Schools in the district. It is therefore recommended that future destocking interventions should continue to strive to support the development of livestock markets at the same time as providing crucial emergency relief to the most vulnerable pastoralists in the worst drought affected areas.

Enhancing and broadening general livelihood strategies

Attention should also be turned to enhancing and broadening the general livelihood strategies of pastoralists, particularly those with few livestock assets, whose livestock-based livelihoods are often on the edge of total collapse, especially during severe droughts.

Incorporation of a research component

Whether or not interventions into pastoralists' systems are emergency or development-based, it is imperative that future interventions are guided by high quality systems-based research. One of the key recommendations of the ILRI Report (2006) was further investigation into the possibilities for livelihoods diversification in Turkana District.

6.2 Proposed intervention strategy

In proposing an intervention strategy, we assume that the ultimate objective is to save assets. As livestock assets are not yielding interest but instead are using scares resources, it would make sense to encourage pastoralists to (at least temporarily) convert some of their livestock into financial assets, which could eventually be used for restocking.

Timing of destocking intervention

It is recognized that NGOs, in seeking to propose emergency interventions, work under the constraint that emergency funds are usually not released by donors until an emergency

is well under way. However, it would be recommendable to advocate early release of emergency (or other) funds when a drought is eminent (and predicted by early warning systems). In the case of livestock interventions, we would define 'early' as: Before the animals become weak and their price is affected, or at least before the animals becoming too weak to sell them on the regular market (as a grade 3 goat), predisposing the community to a major potential loss of livestock assets.

In proposing possible interventions (below) we will refer to the case where a donor is found in this early stage as the first scenario. The second scenario—alas the most common and realistic one—is when a timely intervention is not possible because funds are released late. Programmers thinking about the first scenario need to have a contingency plan for the second scenario, while donors need to be flexible and allow for budget reallocations/realignment to fit the second scenario. This principle could be previously agreed upon in the project proposal. The proposed interventions under the second scenario could also be regarded as complementary to the interventions under the first scenario, if those are not regarded efficacious by themselves.

Early interventions—First scenario

In case a donor could be motivated to release funds in such an 'early' stage, some early mitigation activities could be proposed. Two complementary approaches could be worked out for situations with and without local livestock markets.

Where there are markets already in place, off-take could be temporarily increased/stimulated by tackling some constraints to rapid market expansion:

Demand side:

- By providing enough working capital for traders (i.e. credits or revolving funds);
- Promote the transportation of larger numbers of goats to terminal markets, by providing transport or subsidies (we realize VSF-B has bad experiences with this, but would encourage you to refine the methods used based on the lessons learned)

Supply side:

- Run an awareness campaign[1] among pastoralists to motivate them to sell

Where there are no markets:

1. As pastoralists are usually only selling their animals when they are really destitute, there is need to create awareness of the optional coping strategy of timely selling their animals to the markets, i.e. temporarily converting livestock assets into financial assets.

Demand side:

- Establish/promote short-term markets;[2]
- Possibly provide means of transport for traders (from elsewhere) to venture into the interior, by providing or subsidizing transport;
- Maybe other incentives are needed as a catalyst that motivates traders to venture into the interior, where there are no markets.

Supply side:

- More than elsewhere, this will need to be accompanied by a thorough awareness-raising campaign (see footnote 1 overleaf).

Late intervention—Second scenario

Such intervention should be regarded as a safety net, and should try by all means not to create 'beneficiary dependency' (in recurring drought) or interfere with the markets:

- Initiate a destocking intervention, buying weak or thin animals at a price below the lowest 'market price' (e.g. for grade 3 goats: the data in this report would suggest 300 KES for Turkana District).
- Consider supplementing this (low) intervention price with non-financial support: e.g. providing a bag of supplementary livestock feed concentrates with each transaction (or for a number of goats sold); or instead of offering a price at all: exchanging a number of goats for one bag of feed concentrates.
- Use the meat (process and consumption) as locally as possible in a way that does not substitute local demand for goat meat; for instance, have it consumed by the local vulnerable community, which does not usually buy goat (meat) from the market.
- Instead of using local market traders, consider establishing/promoting short-term markets with consumption on the spot (Oxfam model);
- If schools are chosen as the beneficiaries, then try to target day-schools with priority, as they don't have meat in their usual menu.

Targeting and households' share of intervention

Targeting between areas could be done based on assessments of descriptive factors of drought affectedness (as done under TELO 2005) complemented with market access specifics. As the proposed approach under the first scenario is more a 'laissez faire' strategy, the traders should be left doing what they do best, but may be morally encouraged to buy from different adakars and goat owners.

---

2. Probably the best way to establish a *temporary market* is to have the community identify the lack of a market as a constraint and then propose its establishment. Without community by-in, there will be no supply (no timely sales) and traders will lose interest after their first disappointing experiences.

In the second scenario, more thought needs to be given to targeting. Based on the objective of saving assets, one could argue that the individual households' share of the intervention (i.e. the number of weak goats they are allowed to sell) should be proportionate to the size of their herds. But this would not take into account the compassionate feeling that those that have few animals have more to lose. However, as these would qualify as the most vulnerable households, they would qualify with priority for destocking. Assuming they all had small herd sizes, the number of goats destocked per household should be very small.

If the intervention complemented the goat purchase with in-kind donation of livestock feed, then the impact of the intervention would not be determined by the number of goats, but rather the number of transactions (i.e. households reached). In such a case, one could suffice with destocking one goat per vulnerable household. The scale of the intervention would be mostly determined by the budget, and logistics, for feed concentrates.

If the intervention only entails buying goats, and our advice is followed to pay a lower than market price (i.e. KES 300), then the down-side of the coin would be that more goats need to be purchased per household in order for them to acquire enough funds to use in restocking (assuming they do not use the money to buy food).

In any case, for logistic purposes and to avoid people corrupting the records, it is probably advisable to stipulate an equal number of goats to be destocked from each household, and enforce this rule.

6.3 Recommendations for destocking interventions

Beneficiaries of free goat meat

It is recommended that, in conjunction with executive implementing agencies, local crisis committees should play a proactive role in the identification of free goat meat beneficiaries. Whilst it is recommended that schools and health centres should remain key beneficiaries of future destocking interventions, it is also recommended that local crisis committees and the executive implementing agencies should also consider providing free goat meat, and/or other key necessities, to the most vulnerable households identified by the local crisis committees. On the spot slaughtering of goats at the adakar level and the distribution of free goat carcases to the most vulnerable households in the area circumvents the constraints of caring for goats and transporting/trekking them to recipient institutions.

If schools were to be targeted, it is suggested that a higher nutritional impact could be achieved by targeting the day schools first, as they usually do not have meat in their diets. Only after all day schools have been reached should boarding schools be considered. In conjunction with school heads and health centre managers, the crisis committees should

also play an active, transparent, and participatory role in devising the logistics of free goat meat deliveries in a transparent, verifiable and participatory manner. For example, it is essential that, in future destocking interventions, systems should be developed, and strictly applied, to: better match free goat supply to consumption demand; ensure that free goat meat supplements and not only substitutes usual animal protein intake (particularly if the supply of goat meat mirrors the institute's usual goat meat consumption) and; adequately account for the need for a holding area for goats (including costs associated with feeding and caring for the goats). It is also suggested that goat skins could be sold by recipient institutions.

In addition, it is important that verification protocols in future destocking interventions are both comprehensive and are rigorously adhered to. It is important that recipient institutions should provide detailed and verifiable accounts of what savings from suspended goat meat purchases, and goat skins were used for. It is also imperative that clear and accurate records are kept for the number, condition, timing, slaughter of goats received, as well as verifiable details of their consumption. A system should also be devised for verifying school children's additional consumption of goat meat.

With regard to including the most vulnerable pastoralist households as beneficiaries in future destocking interventions, it is recommended that executive implementing agencies consider adopting a two-tier system. In this system, relatively less vulnerable households, with larger livestock holdings, would be encouraged to actively destock and receive salvage payments for their goats. Conversely, the most vulnerable households would become net recipients of free goat meat or key necessities. However, it is important to couch this kind of intervention in efforts to promote, where possible, livelihood diversification for the most vulnerable households. In some cases, where better livelihood options are present, destocking could be used as part of a strategy for pastoralists to transit from pastoralism to other, more rewarding, livelihood activities.

Goat intervention price

In view of VSF-Belgium efforts to develop livestock markets and promote the market-orientation of pastoralists in Turkana, the pricing of goats during a destocking intervention deserves considered thought. We have explained in the discussion why it is not advisable to pay a higher than market price (i.e. salvage value) for weak goats, as this would undermine the institutionalization of 'timely sales of livestock to the market' as a drought coping strategy for pastoralists.

Instead, we would suggest paying a reasonable salvage value (e.g. KES 300) or anything below the lowest market price for grade 3 goats—the lowest quality traded at conventional livestock markets. This would still serve as a safety net for those that did not sell in time,

while not rewarding them for not having sold to local markets. Conversely, once pastoralists become accustomed to selling their goats, they will be rewarded for doing so in a timely manner at the local markets.

Scale and duration of destocking intervention

If goats were to be destocked at a lower price (KES 300) this would drastically affect the scale of the project. More goats would be destocked and more meat would become available as relief food. This drastically improves the utilization of these livestock assets, as alternatively these weak goats might have died.

However, if complementing each transaction with an in-kind donation of livestock feeds, the scale of the intervention would be mostly determined by the budget for feed concentrates. It is debatable whether in this case one or more goats per household should be destocked. It depends on many factors. If the destocking intervention comes before any rains have fallen, and it is likely that many animals will still die, then this decision does not have a big impact on water and pasture resources. One could argue that the vulnerable pastoralist should get the chance to save as many goats from their herd as possible. But the number of livestock remaining in the herd will however affect the utilization of the supplementary livestock feeds. If, however, the intervention comes after some rains have fallen, it is possible that more animals will survive, and hence destocking more than one goats seems unreasonable. The pressure on water and pasture would have been seriously reduced by the mortality of livestock.

Another scale consideration is on the demand side. The more goats are being destocked the more vulnerable households would need to be identified. This, however, should not be the largest constraint as from TELO 2005 there is experience in working with schools and health institutions, these could always serve as a back-up plan. However, using those institutions will need some more thought in terms of the timing of deliveries and keeping of large numbers of goats. Also schools expressed the wish to receive goats over a longer period of time. But postponing the purchase of goats would affect their quality and disadvantage their owners, while temporarily keeping goats involves extra costs and does not reduce the pressure on water and pastures. Slaughtering goats on the spot—at adakar level—and redistributing them to the vulnerable households circumvents the whole transport constraints of providing goats to institutions.

Suggested improvements to monitoring forms

These recommendations are based on the monitoring forms used in TELO 2005 and assuming that the very same intervention was to be conducted, i.e. buying goats from adakar producers by traders, and delivering them to institutes where they would eventually be slaughtered.

We would recommend that the 'Turkana Emergency Livestock Off-take Monitoring forms' be split into two different tools:

- To monitor the deliveries of goats to the institutes; once the LMA-representative and LOCC officials and institute's representative have signed, the trader could proceed to receive his/her refund;
- To document the slaughtering of goats; this could be recorded far after the delivery date (not under time pressure to close the books, as trader would receive his money based on delivery); this would enhance the accountability on the utilization of the goats by the institutes.

The slaughtering form could be complemented with a section in which the institute has to account for the use of the income from the goat skins, and/or other save funds on meals.

The 'goat purchasing forms' could be improved by:

- adding the dates of purchase for each transaction and the overall date of delivery to the schools;
- adding the location of the adakar (at the time of intervention).

References

Ajele C. 2005. *Status of livestock marketing in Turkana District*. Workshop in Turkana, Department of Livestock Production, Turkana, Kenya.

Aklilu Y and Wekesa M. 2002. *Drought, livestock and livelihoods: Lessons from the 1999–2001 emergency response in the pastoral sector in Kenya*. Network HPN Paper. ODI (Overseas Development Institute), UK.

ALRMP database. 2006.

Barrett CB, Osterloh S, Little PD and McPeak JG. 2004. *Constraints limiting marketed livestock off-take rates among pastoralists*. Research Brief 04-06-PARIMA, Global Livestock Collaborative Research Support Program, Davis, California, USA.

Bush J. 1997. Destocking, restocking and tree planting: A review of select activities in WFP Project 2669/Ext1 in Turkana District, Kenya. In: Hogg R (ed), *Drought contingency planning to support pastoralist livelihoods in Ethiopia*. UNDP (United Nations Development Programme), Nairobi, Kenya.

Callon M. 1991. Techno-economic networks and irreversibility. In: Law J (ed), *Sociology of monsters: Essays on power, technology and domination*. Routledge, London, UK. pp. 132–164.

Gray I, Dunn T and Philips E. 1997. Power, interests and the extension of sustainable agriculture. *Sociologia Ruralis* 37(1):97–112.

ILRI (International Livestock Research Institute). 2006. *Assessment of the impacts of the drought response project in the provision of emergency livestock and water interventions in preserving pastoral livelihoods in Northern Kenya*. ILRI, Nairobi, Kenya.

ITDG 2005. Pastoralists special initiative research report. In: *Status of livestock marketing in Turkana District*. Workshop in Turkana, Department of Livestock Production, Turkana, Kenya.

Latour B. 1991. Technology is society made durable. In: Law J (ed), *Sociology of monsters: Essays on power, technology and domination*. Routledge, London, UK. pp. 103–130.

McPeak JG. 2000. Analysing and addressing localized degradation in the commons. Mimeo. In: McPeak JG and Barrett CB (eds), Differential risk exposure and stochastic poverty traps among east African pastoralists. *American Journal of Agricultural Economics* 83(**3**):674–679.

Swift J, Barton D and Morton J. 2002. *Drought management for pastoral livelihoods: Policy guidelines for Kenya*.

VSF-Belgium. 2005. Turkana Emergency Livestock Off-take Project (Final Report).

VSF-Belgium. 2006. Turkana Livestock Development Programme (TLDP)-Kenya, 1999-2005.

Wekesa F. 1997. Emergency livestock purchase, Turkana District, Northern Kenya. Paper presented to conference on the future of food security, held at IDS, Sussex. In: Hogg R (ed), *Drought contingency planning to support pastoralist livelihoods in Ethiopia*. UNDP (United Nations Development Programme), Nairobi, Kenya.

Appendices

Appendix 1 Review of destocking and TKDP marketing activities—March 2006 issues to address with VSF-B offices: Destocking

1. For our literature study:

- Which organizations (Gov or NGOs) have done destocking?
- In this district?
- Elsewhere in the region?
- Do you know of any reports about this?

2a. We would like to see the field data on animals destocked/culled: number; timing; condition and species depending on volume and quality of the data:

- Can we borrow the original data or get a copy?

2b. What prices did the beneficiaries receive? How was this price set? By whom?

- Are these answers in the destocking report?
- We needed average prices (here for goats) in the specific locations where destocking took place.

Review/study the dataset from monitoring of traders (is the complete data here at VSF-B? (we will also study the ALRMP data by these specific locations)

- Later (for marketing opportunities) we will also need average prices of other livestock for the whole district and/or per division.
- Is the ALRMP data the only source for data on these average prices?

2c. (Average payment is captured in 2b.) But additionally:

- What is the number of pastoralists that benefited from the destocking? Preferably by location/local market level?

3. and 4. To compute the scale of the intervention (We got the numbers of animals destocked in 2a. and now) we need the district herd estimates:

- Which different bodies collect this kind of data?
- What different estimates exist?
- Which one does VSF-B trust most/use?

Or: hint us in the direction where we can find such data (preferably by division)

- Concentration/spread of intervention:
- If not already captured under 2a. or 2c.:
- location of destocking;
- numbers of animals destocked by locations

- numbers of beneficiaries (including receipiants of meat etc.) by location
- Environment: water and pasture pressures in areas where destocking occurred:
- Can you tell us something about this?
- Was it the criteria for choosing the destocking locations?
- Any reports from water and pasture technical projects on this?
- Impact? on markets (prices and LMAs)
- Were volumes of sales affected?
- Were prices affected?
- Was market attendance affected?
- Any of these reflected in the market monitoring data for that particular 4 weeks?
- (ALRMP data probably not focused enough)

5. Evaluate the actual process

- Problem identification (Quantifying and Qualifying)
- Who identified the problem? (Who were the drivers?)
- Why did they think it was a problem?
- What evidence was used to substantiate the need for such a project?
- Timing: Why now? (why last year and not now?)
- Who initiated the destocking project? (C/N Proposal or Donor led?)

Decision making (actors and their considerations)

- Who were the actors that had a say in this?
- What different role did they play?
- How did they influence how the project was designed?
- Alternative intervention mechanisms
- Where any alternatives to this project considered?
- Can you think of any now?
- Why was this particular approach chosen over others?

VSF-B (and donors) consideration on:

- Type (why goats? not cattle?)
- Scale of intervention (Why 6000? budget constraint? Proposal for how much?);
- geographic location (targeting)
- on timing
- choice of partners (imposed or voluntary; reliable?)
- Effectiveness in achieving set objectives
- Was there a Logframe for the project?
- Let's us run through it and check:
- To what extent the outputs and deliverables were met?
- Evaluate the actual logistics arrangements used
- Respective criteria for how traders, beneficiaries (or markets), institutions, 'inspectors'/ signatories were selected;

What criteria were used to select:

- Traders?
- Beneficiaries (or markets)?
- Institutions receiving the goats/meat/etc.?
- Inspectors/signatories of forms used?
- Budget/financial implications for VSF-B and sustainability of this structure when up-scaling?

How the budget was managed:

- Can you share with us a breakdown of budget allocations?
- Were you satisfied with how the budget was spent?
- Would you do anything different the next time? (lessons learned)
- What if this project was to be carried out at a (much) larger scale: What budget lines/ expenditures would require a larger/smaller portion of the overall available funds?

Reviewing forms that were used:

- Please share with us the forms that were used in the administration of this destocking activity

Having used these in practice:

- Is there anything you would suggest changing for future use?

Efficiency of destocking in terms of:

- Effective use of financial resources already captured above
- Effective use of human resources
- In your view, were human resource used efficiently?
- If you had to do it again (at same scale) would you do anything different?
- If you had to do it at a larger scale: would you do anything different?
- Effective use of networks (including information flows)
- In your view, were networks used efficiently?
- If you had to do it again (at same scale) would you do anything different?
- If you had to do it at a larger scale: would you do anything different?

Appendix 2 Issues to address with key informants of other organizations: (District Livestock Production Officer; SNV; ALRMP; World Vision; ITDC) Destocking

1. For our Literature study:

- Which organizations (Gov or NGO's) have done destocking?
- In this district?
- Elsewhere in the region?
- Do you know of any reports about this?

2. 3. and 4. Ask other local organization about their view on appropriateness of the project and the choice of destocking areas In general:

- Do you feel such destocking projects are appropriate?
- Would you suggest something different/alternative approach?
- Would there be potential synergies/areas of cooperation with your organization?

Concentration/spread of intervention:

- (Targeting)
- What do you think of VSF-B's choice of area's/locations for destocking?
- (Scale)
- What about the numbers of animals destocked by locations?
- And the numbers of beneficiaries reached?
- (both goat sellers; traders and recipients of meat etc.)
- Environment: water and pasture pressures in areas where destocking occurred:
- What is your impression of the land pressure in the areas chosen?
- Would you have evidence (reports) to substantiate that?
- Would you have targeted other locations?

5. What impression did you have about the efficiency of the destocking project in terms of:

- Use of financial resources?
- In your view, were financial resources used appropriately?
- If you had to do it again would you do anything different?
- If you had to do it at a larger scale, would you do anything different?

Use of human resources:

- In your view, were human resources used efficiently?
- If you had to do it again would you do anything different?
- If you had to do it at a larger scale, would you do anything different?

Use of networks/information flows:

- In your view, were networks used efficiently?
- Was there wide consultation?

- Were you consulted? (if appropriate)
- Did you hear of any complaints in the civil society?

Appendix 3 Key informant interview crib sheet for head teachers and health centre managers

1. How many goats did you receive?
2. Over how many weeks?
3. What was the condition of the goats?
4. When were they slaughtered?
5. Were there any costs incurred keeping or processing the goats?
6. How many children/patients were fed? Do you have records of that?
7. What was the additional feeding/nutritional value?
8. Do the pupils or in-patients usually eat meat?
9. What is the usual animal protein content of menu in grams/individual?
10. Did the local butcher lose business?
11. Institutions' budget for meals:
12. Did the institution make net savings on its meal budget?
13. What was done with income from the goat hides?
14. Did the intervention affect school enrolment figures?
15. How could this intervention have been improved?

Appendix 4 Adakar Focus Group Discussion crib sheet

1. Location of adakar(s) represented
2. Name of adakar(s) represented
3. Number of individuals present
4. Number of households per adakar
5. Distance from local market
6. Did the adakar benefit from VSF-Belgium's destocking activity that took place in January and February 2005?
7. How many goats were bought as part of the destocking intervention?
8. How many households sold goats as part of the intervention?
9. What was the income received from the sale of goats used for?
10. How were you sensitized to the destocking?
11. Was destocking a good idea?
12. If required, how could the destocking intervention have been improved?—Group was prompted on scale and timing.

Appendix 5 LMA and Livestock Traders Focus Group Discussion crib sheet

1. Was the group involved in the VSF-B destocking activity in 2005?
2. How many goats were bought by your members/came through the market and at what price?
3. What effect did the activity have on: market prices (before and after?); market volumes, and; market attendance?
4. Was destocking good for traders and LMA? If so, why?
5. How busy were you during destocking?
6. Were there too many goats to cope with?
7. Could you continue with your normal trading as well?
8. What percentage of trade was taken by destocking activity?
9. Were there any problems?
10. Would you do it again?
11. How would you feel if the destocking was conducted on a larger scale?

Appendix 6 Delivery of goats to individual institutions under TELO 2005

Zone	SchoHosp	13 Jan	30 Jan	31 Jan	1 Feb	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	9 Feb	10 Feb	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	19 Feb	21 Feb	23 Feb	25 Feb	20 Feb	Total
Central Turkana	Ille Primary			46														47										93
	Kalemunyang Primary			9		64	9											49										131
	Kanamkener Mixed Primary					46												15										61
	Kangatotha Primary			10		9	19											37										75
	Kangatotha Primary			18																								18
	Kawalase Primary																	15										15
	Kerio (Boarding) Primary			46														52										98
	Lodwar District Hospital																	17										17
	Lodwar Girls Primary			46														47										93
	Lodwar Mixed Primary	40		6														47										93
	Lorengippi Primary					46												49										95
	Lorugumu Primary				46													42										88
	Nadapal Primary			46														47										93
	Nakurio Primary			46														42										88
	Namoruputh Primary		5	5			36											49										95
	Napuu Primary			46														47										93
	Naremit Primary			46														49										95
	Trans Africa High			46														47										93
	Turkana Girls Primary			46															35									81
	Turkana Girls Secondary		58															52	12									122
Central Turkana Total		40	63	462	46	165	64											750	47									1637
Lake Zone	Kachoda Primary						29															6						35
	Kaeris Primary							10												49								59
	Kalimapus Primary				26															27								53
	Kaling Primary							13					26			10							26					75
	Kalokol Girls Primary				50															47								97
	Kalokol Mixed Primary				66															43								109

Zone	SchoHosp	13 Jan	30 Jan	31 Jan	1 Feb	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	9 Feb	10 Feb	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	19 Feb	21 Feb	23 Feb	25 Feb	20 Feb	Total
	Kanakurudio Primary								20				10															30
	Kanukurudio Primary							20		10																		30
	Kataboi Primary					60														33								93
	Loarengak Boys Primary					35	10		10												35							90
	Loarengak Girls Primary							23	5							10					32	10	16					96
	Loitanit Primary							37	18									9	15		7						3	89
	Lokitaung Mixed Primary						20												13			20						53
	Lokitaung Primary							20																				20
	Lokitaung Secondary						20		15				10									20						65
	Lokitaung Sub-District Hospital						10															13						23
	Nachukui Primary					52														41								93
	Natukobenyo Girls Primary						10		38													30						78
Lake Zone Total					142	147	99	123	106	10			46			20		9	28	240	74	99	42				3	1188
Northwest	AIC Lokichogio Girls Pry										10													35				45
	AIC Lokichogio Mixed Pry								26									44										70
	AIC Lopiding Primary										18							17										35
	AIC Lopur Primary								30												30							60
	AIC Nanam Primary										18																	18
	Kakuma Arid Zone Boarding Pry											42													42			84
	Kakuma Girls Primary							31																		30		61
	Kakuma Mission Hospital																		25									25
	Kakuma Mixed Primary										46								47									93
	Kakuma Secondary										42													42				84
	Kalobeyei Primary							30																				30
	Letea Primary						12																	12				24
	Lokangae Girls Primary					12														12								24
	Lokichokio AIC Health Centre									12				12														24
	Makutano Primary					27												27										54

Zone	SchoHosp	13 Jan	30 Jan	31 Jan	1 Feb	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	9 Feb	10 Feb	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	19 Feb	21 Feb	23 Feb	25 Feb	20 Feb	Total
	Nakalale Primary														16													16
	Napeililim Mixed Boarding Pry					30											42											72
	Nasiger Primary School							18														18						36
	Oropoi Primary School									12																		12
	Our Lady's Girls Secondary										42								42									84
	St. Clare of Assis's Homecraft Ctr.																									27		27
	St. Comas Napopongoit Primary																	17										17
	St. John Primary										30							33										63
	St. Luke Nakururum Primary																	8										8
	St. Mark Songot																	8										8
	St. Mathew Nadome																	8										8
Northwest Total						69	12	79	56	24	206	42		12	16		42	162	114	12	30	18		89	42	57		1082
South Turkana	Arumrum Primary			6																								6
	Elelea Primary			36														36										72
	Juluk Primary			36														36										72
	Kaaruko Primary			24																								24
	Kainuk Girls Primary			36														36										72
	Kainuk Mixed Primary			47														48										95
	Kalapata Primary			40																								40
	Kalemungorok Primary			60																								60
	Kang'akipur Primary			12														12										24
	Kangirisae Primary					12												12										24
	Kangitit Girls High			45														48										93
	Kapelibok Primary			18														18										36
	Kapese Primary			50														45										95
	Kaputir Mixed Boarding Pry			45																	46							91
	Katilia Primary			50														45										95

Zone	SchoHosp	13 Jan	30 Jan	31 Jan	1 Feb	2 Feb	3 Feb	4 Feb	5 Feb	6 Feb	7 Feb	8 Feb	9 Feb	10 Feb	11 Feb	12 Feb	13 Feb	14 Feb	15 Feb	16 Feb	17 Feb	18 Feb	19 Feb	21 Feb	23 Feb	25 Feb	20 Feb	Total
	Katilu Boys			20														19										39
	Katilu Health Center			9														9										18
	Katilu Mixed Boarding Pry			47														46										93
	Katilu Secondary			30														26										56
	Kekorisogol Primary			24																								24
	Kopotiro Mixed Primary			18																								18
	Koputiro Mixed Primary																	18										18
	Korinyang Primary			46														47										93
	Lochwangikamatak Primary			40														25										65
	Lokapel Primary			30														30										60
	Lokapel/Kanaodon Primary			6														6										12
	Lokichar Girls Primary			44														40										84
	Lokichar Mixed Primary			54														52										106
	Lokori Girls Primary			30														30										60
	Lokori Mixed Primary			45														48										93
	Lokwii Primary			54														30										84
	Lotubae Primary			30														30										60
	Loyapat Mixed Boarding Pry			47														46										93
	Morulem Primary			46														47										93
	Nabeiye Primary			12														12										24
	Nakaalei Primary					18												18										36
	Nakwamoru Primary			36														36										72
	Nalemsekon Primary			18														18										36
	Napusimoru Primary			36																								36
	RCEA Lokori Seonndary			30				3										33										66
	Turkana Integrated Primary			93																								93
South Turkana Total				1350		30		3										1002			46							2431
Total		40	63	1812	188	411	175	205	162	34	206	42	46	12	16	20	42	1923	189	252	150	117	42	89	42	57	3	6338

Appendix 7 Comparing goat delivery with goat slaughtering records

Zone	Institution (school or clinic)	Total goats received*	Slaughtered goats (record)	% of goats with slaughter records
Central Turkana	Ille Primary	93	70	75
	Kalemunyang Primary	131	23	18
	Kanamkener Mixed Primary	61	16	26
	Kangatotha Primary	93	63	68
	Kawalase Primary	15	4	27
	Kerio (Boarding) Primary	98	175	179
	Lodwar Girls Primary	93	31	33
	Lodwar Mixed Primary	93	46	49
	Lorengippi Primary	95	61	64
	Lorugumu Primary	88	42	48
	Nadapal Primary	93	47	51
	Nakurio Primary	88	35	40
	Namoruputh Primary	95	390	411
	Napuu Primary	93	46	49
	Naremit Primary	95	195	205
	Trans Africa High	93	37	40
	Turkana Girls Primary	81	156	193
	Turkana Girls Secondary	122	92	75
Central Turkana Total			1529	
Lake Zone Turkana	Kachoda Primary	35	37	106
	Kaeris Primary	59	23	39
	Kalimapus Primary	53	66	125
	Kaling Primary	75	22	29
	Kalokol Girls Primary	97	107	110
	Kalokol Mixed Primary	109	63	58
	Kataboi Primary	93	30	32
	Loarengak Boys Primary	90	64	71
	Loarengak Girls Primary	96	23	24
	Loitanit Primary	89	32	36
	Lokitaung Mixed Primary	53	20	38
	Lokitaung Primary	20	10	50
	Lokitaung Secondary	65	34	52
	Lokitaung SubDistrict Hospital	23	12	52
	Nachukui Primary	93	108	116
	Natukobenyo Girls Primary	78	35	45

	Kanakurdio Primary	60	17	28
Lake Zone Turkana Total			703	
Northwest Turkana	AIC Lokichogio Girls Pry	45	10	22
	AIC Lokichogio Mixed Pry	70	26	37
	AIC Lopiding Primary	35	10	29
	AIC Lopur Primary	60	56	93
	AIC Nanam Primary	18	18	100
	Kakuma Arid Zone Boarding Pry	84	21	25
	Kakuma Girls Primary	61	21	34
	Kakuma Mixed Primary	93	22	24
	Kakuma Secondary	84	49	58
	Kalobeyei Primary	30	10	33
	Letea Primary	24	18	75
	Lokangae Girls Primary	24	24	100
	Lokichokio AIC Health Centre	24	24	100
	Makutano Primary	54	23	43
	Nakalale Primary	16	16	100
	Napeililim Mixed Boarding Pry	72	72	100
	Nasiger Primary School	36	19	53
	Oropoi Primary School	12	10	83
	St Comas Napopongoit Primary	17	17	100
	St John Primary	63	63	100
Northwest Turkana Total			529	
South Turkana	Arumrum Primary	6	4	67
	Elelea Primary	72	30	42
	Kaaruko Primary	24	24	100
	Kainuk Girls Primary	72	4	6
	Kalapata Primary	40	60	150
	Kalemungorok Primary	60	17	28
	Kapelibok Primary	36	12	33
	Kapese Primary	95	105	111
	Katilia Primary	95	59	62
	Katilu Boys	39	39	100
	Katilu Health Center	18	4	22
	Katilu Mixed Boarding Pry	93	60	65
	Katilu Secondary	56	30	54
	Kekorisogol Primary	24	6	25
	Kopotiro Mixed Primary	18	9	50
	Koputiro Mixed Primary	18		0
	Korinyang Primary	93	59	63

	Lochwangikamatak Primary	65	160	246
	Lokapel Primary	60	50	83
	Lokapel/Kanaodon Primary	12	10	83
	Lokichar Girls Primary	84	58	69
	Lokichar Mixed Primary	106	72	68
	Lokori Girls Primary	60	20	33
	Lokwii Primary	84	57	68
	Lotubae Primary	60	25	42
	Morulem Primary	93	42	45
	Nabeiye Primary	24	10	42
	Nakaalei Primary	36	18	50
	Nakwamoru Primary	72	18	25
	Nalemsekon Primary	36	24	67
South Turkana Total			1086	
Totals		5381	3847	53
'Over-slaugthered'			712	
Total goats delivered overall to all schools		6338	3135	49

* Only for those schools with slaughter records in TELO field data

No slaughter records were kept for the following institutes

	Number of goats delivered*
Central Turkana:	
Lodwar District Hospital	17
Northwest Turkana:	
Kakuma Mission Hospital	25
Our Lady's Girls Secondary	84
St Clare of Assis's Homecraft Centre	27
St Luke Nakururum Primary	8
St Mark Songot	8
St Mathew Nadome	8
South Turkana:	
Juluk Primary	72
Kainuk Mixed Primary	95
Kang'akipur Primary	24
Kangirisae Primary	24
Kangitit Girls High	93
Kaputir Mixed Boarding Pry	91
Lokori Mixed Primary	93
Loyapat Mixed Boarding Pry	93
Napusimoru Primary	36
RCEA Lokori Secondary	66
Turkana Intergrated Primary	93

Appendix 8 Number and location of adakars benefiting from destocking

Count of benefiting adakars per area

Zone	Area	Total
Central Turkana	Central Turkana	3
	Eliyespring	40
	Kainuk	18
	Kalemunyang	74
	Kanamkener	20
	Kangatotha	52
	Kerio	7
	Kerio/Nakurio	113
	Korio	9
	Lochwaa	3
	Lodwar	173
	Lorengippi	40
	Lorugum	175
	Nadapal	77
	Namoruputh	72
	Napusimoru	20
	Naremit	76
	Nawoitorong	59
Central Turkana Total		1031
Lake Zone Turkana	Kaaleng	14
	Kachoda	2
	Kachoda	4
	Kaeris	12
	Kaikor	15
	Kaleng	5
	Kalimapus	15
	Kalokol	13
	Kalokol	23
	Kanakurdio	7
	Kanukurdio	
	Kataboi	69
	Loarengak	9
	Lokitaung	47
	Nachukui	47
Lake Zone Turkana Total		282

Zone	Area	Total
Northwest Turkana	Kakuma	84
	Kakuma	13
	Kalobeyei	7
	Kalobeyei/Oropoi	2
	Letea	1
	Letea	3
	Lokangae	20
	Lokichogio	53
	Lokore	41
	Lolupe	17
	Lopur	8
	Makutano	16
	Nanam	5
	Napeililim	16
	Napeililim	9
	Nasiger	8
	Nasiger	10
Northwest Turkana Total		313
South Turkana	Arumrum	2
	Elelea	10
	Elelea	9
	Juluk	22
	Kainuk	72
	Kainuk/Loyapat	16
	Kalemungorok	19
	Kalemungorok	17
	Kanaodon	4
	Kangakipur	10
	Kangakipur	2
	Kangirisae/Nakaalei	14
	Kapelibok	23
	Kaputir	31
	Katilia	33
	Katilu	69
	Kekorisogol	4
	Lochwaa	29
	Lokichar	190
	Lokori	14

Zone	Area	Total
	Lokori	17
	Lokori/Kangitit	44
	Lokwi	18
	Loperot	26
	Lotubae	37
	Morulem	23
	Morulem	22
	Nabeiye	14
	Nakaalei	23
	Nakwamoru	33
	Nalemusekon	1
South Turkana Total		848
Grand Total		2474