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Pastoralist Livelihood Initiative

Guidelines for Livelihoods-based Livestock Relief Interventions in Pastoralist Areas

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1. Introduction

The Pastoralist Livelihoods Initiative (PLI) is a two-year program in pastoralist areas of Afar, Somali and Oromia regions of Ethiopia focusing on livestock-related interventions. Beginning in October 2005, the program involves partnerships with federal and regional government, and is implemented primarily by NGOs working with government partners. In addition to the practical implementation of activities, PLI has scope to identify, document and promote best-practice.

Aid programs in pastoralist areas can be broadly categorized as relief and development interventions. Often designed and implemented as separate entities, relief and development programs reflect the structures and objectives of most international donors and governments, and some major NGOs. Relief is based on the principles of short-term humanitarian action, the priority of saving human lives and frequently, the rapid delivery of basic inputs (usually free of charge) by aid agencies. In contrast, development programs are relatively long-term, encompass diverse soft and hard inputs, and usually aim to contribute towards sustainable systems and enabling policies for poverty reduction. Therefore, development programs emphasize capacity-building, good governance, strong civil society and participation. Efficient and adaptable markets for international and domestic trade, privatized services and investments in infrastructure, communication and education are recurrent priorities.

During the last 25 years or so, pastoralist areas of Ethiopia have experienced repeated cycles of livestock relief and development programs. Nearly always, these programs have been disconnected and often, they've been contradictory. While development seeks to build local capacity for decision making and management, relief agencies often override local organizations claiming that decisions have to be made quickly and impartially by technical experts. Development supports privatization and the creation of services which are financially sustainable within an enabling regulatory framework. Relief repeatedly undermines this process by delivering free or subsidized inputs in isolation of local, private service providers. One of the main outcomes of this relief-development incoherence is confusion and resignation at community-level, and suboptimal investment in private services and livestock marketing.

When the dichotomy between relief and development is viewed from a livelihoods perspective, it's evident that badly designed relief programs may save lives in the short term but in the long-term, make people more vulnerable. In relation to these guidelines, livelihoods analysis increasingly points to the need to harmonize livestock relief and development programs in pastoralist areas, and use relief to complement development processes. In practice, this means that access to livestock markets and the utilization of local livestock resources in relief interventions can help to stabilize livelihoods, and enhance the sustainability of other productive interventions (such as community-based animal health care) by increasing purchasing power.

The need for more "developmental relief" thinking and practice is also arises from important trends in pastoralist areas of Ethiopia and beyond. These trends include growing interest and investment in livestock export markets, gradual acceptance of privatized veterinary services at a policy level, climate change and environmental trends such as bush encroachment.

Box 1

Livelihoods analysis and pastoralism (adapted from RWA International/Vetwork UK, 2000)

Livelihoods analysis aims to understand how people source, develop and use assets within a complex set of trends, shocks, and formal and informal policies and institutional arrangements. Such analysis is commonly based on a livelihoods framework which categorizes assets in terms of five main types of capital:

Human capital represents the skills, knowledge, ability to labor and good health that together, enable people to pursue different ways of making a living. In pastoralist areas, formal education and health services are often poorly developed and levels of literacy and health are low. However, pastoralists possess rich indigenous knowledge on livestock health and production, and some communities have traditional healers and traditional schools.

Social capital is the social resources which people use to pursue different ways of making a living. Social capital includes networks, group membership, relationships of trust, and access to the wider institutions of society, including political institutions. The concept of reciprocity is important, as are the exchanges which facilitate co-operation, reduce transaction costs and safeguard the poor. Pastoralists often have strong social capital at community level, with complex systems of indigenous social support (safety nets) based on the exchange of livestock. In contrast, they often have weak political voice or representation.

Financial capital is the financial resources which people use to achieve livelihood objectives. It relates to both production and consumption, and the availability of cash (or equivalent) which enables conversion to other types of capital. In pastoralist communities, financial capital is based on the ownership of livestock or access to livestock resources. People consume directly from livestock (e.g. milk) and sell livestock and livestock products – markets are a crucial factor in the attainment of financial capital.

Natural capital is the natural environmental resources which people use to make a living. It includes soil, water, vegetation and wildlife resources, and encompasses access rights and land ownership. In general, pastoralist areas are characterized by low rainfall with high spatial variability. It is this rainfall pattern which largely determines the seasonal movement of pastoral herds, and the seasonal variations in production and markets.

Physical capital is the basic infrastructure and producer goods needed to support livelihoods. In pastoralist areas, the physical capital required to support livestock production is often poorly developed. This includes roads, communication infrastructure and livestock markets.

Access to and use of these different types of capital is determined by various factors:

Seasonality, particularly seasonal variations in rainfall, livestock production and the terms of trade for livestock and cereals.

Trends such global climatic trends, the increasing occurrence and severity of drought, the growth of export markets for livestock, environmental change associated with bush encroachment, private enclosure of rangeland, and human population growth.

Shocks such as drought, livestock disease epidemics and conflict; as drought becomes more regular and predictable it might be categorized as a seasonal factor rather than a shock.

In addition, pastoralist livelihoods are affected by various formal and informal norms, policies and institutions such as:

- Professional or cultural norms which perceive pastoralists as uneducated and irrational, and which overlook the efficiency of pastoral production systems
- Inappropriate pastoral development policies which fail to recognize the benefits of mobility and attempt to deliver basic services through fixed-point delivery systems
- Disabling international standards governing the formal export trade of livestock
- Inflexible financial services which overlook the potential to use livestock assets as insurable collateral

Therefore, pastoral livelihoods result from a complex interplay between access to different types of capital, the affects of seasonality, trends and shocks, and the influence of policies and institutions. If there is key lesson arising from livelihoods analysis, it is that a single technical intervention is unlikely to improve livelihoods. Furthermore, short-term interventions have to have a long-term perspective. Maintaining human capital while undermining other forms of capital make people more vulnerable – relief and development thinking have to merge.

2. About the guidelines

These guidelines form part of the technical coordination of livestock-related interventions in PLI. The guidelines are needed for three main reasons.

- The implementation of PLI involves numerous agencies with diverse experience in pastoralist areas of Ethiopia and therefore, there is a need to agree common modes of implementation between agencies and program areas. There is an opportunity to draw on considerable practitioner experience which has yet to be written up or formalized.
- One of the four intermediate results of PLI is “Harmonization and enabling policy processes to support the preparedness, livelihoods and incomes of pastoralists strengthened”. This involves support to federal and regional government to develop policies for livestock interventions in pastoralist areas of Ethiopia which recognize the need to harmonize relief and development efforts. The PLI guidelines are part of this process.
- The guidelines are an initial point of reference and an example of how experiences can be documented. As the guidelines are implemented, further documentation by field practitioners can be used to further develop and improve the guidelines.

The guidelines have been produced according to the following principles and approaches:

- The principle of livelihoods-based interventions and the opportunity for PLI to use short-term relief inputs to not only save lives, but also strengthen livelihoods. An underlying theme is that drought in pastoralist areas should be regarded as normal and expected, rather than abnormal and random.
- Rather than presenting a rigid set of procedures, the guidelines summarize best-practice experiences from Ethiopia and elsewhere. There is recognition that within a general set of best-practice experiences, there is often need for local adaptation and refinement according to conditions on the ground and joint analysis with communities.
- In addition to ensuring that livestock-related interventions are designed according to best-practice experiences, PLI also provides scope for innovation and trying out new approaches and ways of working. Therefore, the guidelines include not only best-practice for existing interventions but also ideas for alternative interventions. Often, these alternatives require problem and feasibility analysis, and the guidelines suggest some key questions which need to be answered.
- Despite the need for local adaptation of interventions and the option of using alternative approaches, PLI implementing agencies will be expected to follow the guidelines. The process of regularly updating the guideline will enable NGOs and other partners to contribute new experiences as they emerge. Deviation from the guidelines should be justified and supported by appropriate analysis with relevant stakeholders.
- The guidelines are a working document which can be updated as PLI progresses. The recently proposed PLI relief interventions for the Somali region, plus PLI program-wide and regional technical coordination meetings are an opportunity to refine the guidelines over time.

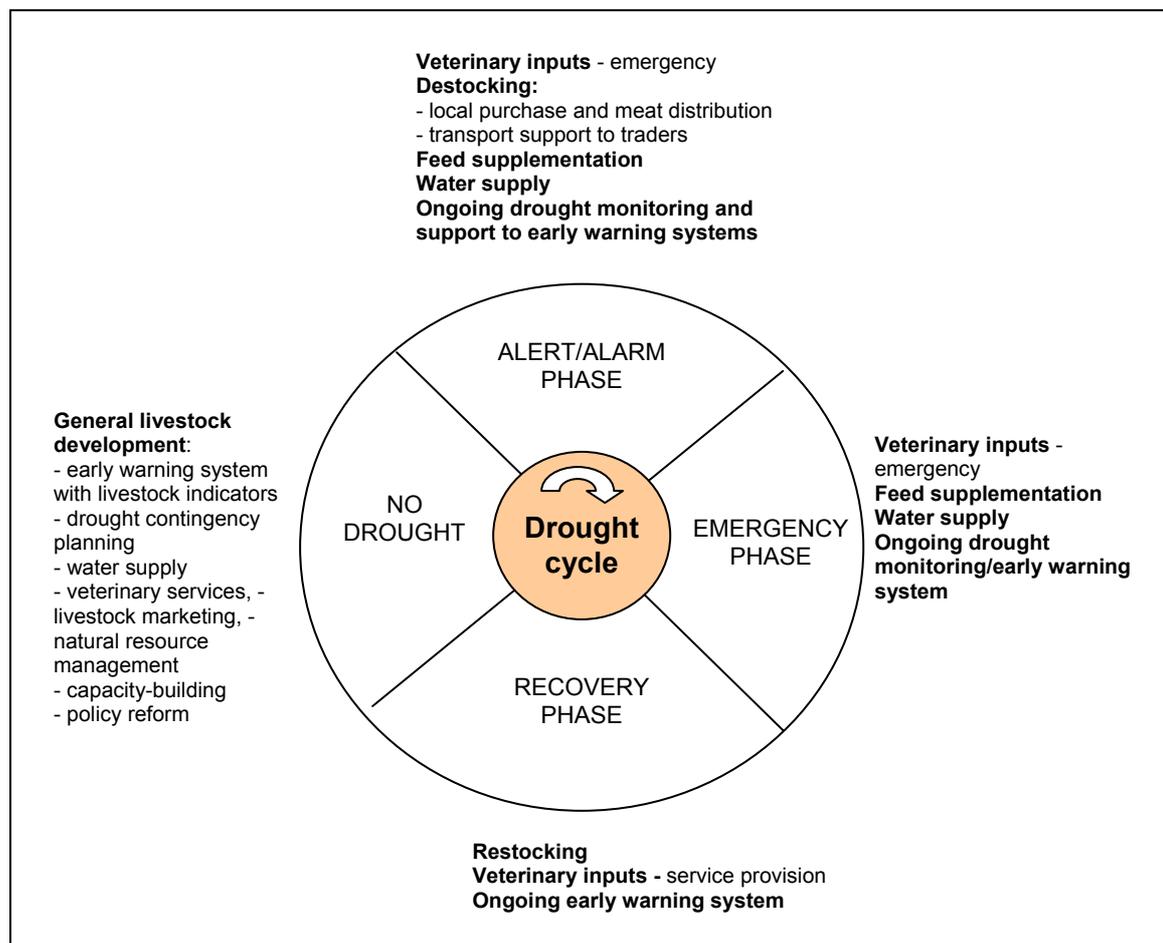
3. Livelihoods-based livestock relief interventions and the drought cycle

In the event of a “shock” such as drought, livelihoods analysis highlights the need to protect assets *and* support the services and systems which in the long-term, are required for recovery and development. Increasingly, it is becoming questionable whether drought really is a shock, but more a regular and predictable event which occurs seasonally.

In terms of the practicalities of designing livestock interventions, these can be categorized according to their relevance at a particular stage of a typical drought cycle. Some interventions such as water supply and veterinary care are always needed, whereas other interventions are appropriate only at certain times. For example, support to destocking should occur during the alarm/alert phases whereas restocking should take place during the recovery phase. These guidelines refer to livestock interventions during the alert/alarm phase, the emergency phase and the recovery phase. A prerequisite for an effective and timely response is a strong early warning system based on livelihoods indicators. In pastoralist areas, such systems include indicators of livestock status and market conditions.

Assigning different interventions to different stages in the drought cycle indicates that combined interventions are often needed. For example, in the alert/alarm phase destocking to remove some animals from the rangeland should be accompanied by efforts to protect the remaining livestock, such as veterinary care, feed supplementation and water provision. The need to combine different interventions simultaneously is a challenge, particularly if different interventions are assigned to different agencies, hence the need for co-ordination.

Livestock interventions in the drought cycle



Not only are different interventions appropriate at different stages of drought, the intensity and scale of the intervention often needs to change during the drought cycle. An example of activities at different stages of a drought is provided below

Example of the type and intensity of activities required at different stages of a drought cycle

Stage of drought cycle	Activities
Alert	<ul style="list-style-type: none"> • Organize meetings with government livestock departments and relief bureau • Facilitate visits to areas of concern • Conduct water point surveys and check state of repair of water facilities; check status of water management committees (if any) • If not already in place, start weekly tracking of cereal and livestock prices • Assist commercial destocking • Pre-position cereals for sale/bartering (to stabilize prices) • Check status of veterinary services, including availability of drugs and vaccines in public and private sectors, and status of CAHWs
Alarm	<p>Scale up and intensify all the above activities, plus:</p> <ul style="list-style-type: none"> • Support transport for traders e.g. cover up to 10% transport cost • Expand livestock/cereal exchange • Support vaccination of livestock and other veterinary care as needed • Rapid rehabilitation of water points; co-ordinate with human water supply agencies as necessary
Emergency	<p>Scale up all of the above activities, plus:</p> <ul style="list-style-type: none"> • Raise level of transport support to traders to around 30% • Destocking for slaughter and local meat distribution • Supplementary feeding of breeding animals
Recovery	<p>Maintain veterinary interventions, plus:</p> <ul style="list-style-type: none"> • Restocking of viable pastoralist households
No drought	<ul style="list-style-type: none"> • Drought contingency planning

4. Types of livestock intervention

4.1 Support to livestock off-take

It is widely known that during the onset of drought, the typical trend is an increasing market supply of livestock of decreasing quality. Traders respond by lowering the price of animals because supply is high and the market/value for poor quality animals is low. In turn, this situation encourages some herders to retain livestock until their market value becomes negligible or the animals die.

At present there are two main interventions which promote off-take of livestock as drought evolves:

- Local purchase of livestock with community-based meat distribution – most commonly called “destocking”
- Transport support for livestock traders, often called transport subsidies

4.1.1 Destocking

Destocking programs involve the intentional removal of animals from the range in times of drought and other calamities, before the animal die and become worthless. These interventions provide a fair price to pastoralists/agro-pastoralists for the livestock, based on animal gender and age but not on health. In most cases, the animals are then slaughtered, and the meat (usually fresh but could also be dried) is provided to feeding centers or drought-affected communities in the localities. This program can be used to supplement food aid and increase the availability of high protein foods.

The *advantages* of destocking include:

- Salvages some value from stocks that would otherwise have been lost.
- Reintroduces cash into the economy so pastoralists/agro-pastoralists can purchase other needed items, including human or veterinary drugs, food, water, school fees, etc. This can also serve to revive local businesses as cash becomes available within the community.
- Creation of markets in isolated areas that are far from established market centers.
- Allows a high-protein supplement to food aid to be provided at local feeding centers, with low costs for transportation and preparation.

The *disadvantages* of destocking include:

- If destocking is initiated early, when markets are still in good condition, the program may interfere with the local market since prices offered by NGOs may impact the local market function. If it is started too late, too many animals may already have died for the program to have any effect.
- With destocking programs, agencies are essentially buying stocks from people just to give them back the meat. Not only is this not sustainable, these activities by outside agencies may actually interfere with traditional destocking mechanisms.

Other considerations when undertaking destocking are as follows:

- Destocking is best carried out by experienced local NGOs who understand better local norms and community-based approaches.
- Meat produced from these programs should be provided to communities fresh, if at all possible. Drying the meat is not as efficient, since there is more waste, it is more labor-intensive and less hygienic, and costs around twice as much. Note that meat volume is reduced by at least 75% when dried.
- Destocking is a method of transferring income to maintain the purchasing power of the pastoralists; a transfer of grain for animals instead of cash can be provided, but this removes the power of choice from the pastoralists.

Practical steps to be undertaken are as follows:

- Destocking programs should go into effect as soon as food aid is required in a region - the need for food aid should serve as an indicator that such programs are needed. As a general rule a 25% reduction in the average price of animals, due to drought-induced increases in livestock market supplies, could also serve as an indicator. Destocking is best carried out before the livestock become emaciated and when there is still a commercial market for them.
- Destocking operations should be planned and implemented in close consultation with communities. Local Livestock Destocking Committees (LDC) can be set up through open community meetings to oversee program implementation and relieve the NGOs from unnecessary administrative duties would increase operational efficiency.
- In close consultation with the LDC, the implementing NGO should formulate criteria for selecting beneficiary families involving those (i) who would be eligible to sell animals (including number and types) to the program (ii) and those eligible to receive meat (in some cases, this may include feeding centers, schools, prisons, hospitals and orphanages). Beneficiary lists should be read in public to communities to gauge their agreement with the LDC decision. The list should be revised if the community disagrees with the LDC decision to accommodate their wish.
- Set a blanket price for each animal species (goat, sheep, cattle or camel) in consultation with the community. Set temporary weekly market days for each locality where the animals are to be purchased and communicate this in advance to communities.
- Either use a coupon system or cash on delivery when purchasing animals from the eligible sellers.
- Distribute the live animals to eligible beneficiaries for relief meat distribution. As a general rule, one sheep or goat should be divided between four families and one cow or camel between thirty families.
- Agree with communities if slaughtering takes place once or twice a week. Let beneficiary communities slaughter the animals and distribute the meat among them. NGOs need only to verify the slaughtering.
- Avoid the preparation of dry meat unless this is absolutely necessary (such as in cases of providing dried meat to feeding centers in distant areas). Otherwise, it is

time consuming, expensive and logistically difficult. Always provide fresh meat to communities - remember that fresh meat satiates hunger more than dry meat. Items required for dry meat preparation include concrete slab, axes, knives, ropes, plastic buckets, plenty of water, shades for drying meat, poles, soap, salt, plastic bags and storage space. Guards need to be hired to protect the meat from thieves. Women can be contracted to prepare the dry meat.

- Agree with communities from the outset that the hides and skins are to be handed over to women or other marginalized groups in the area. Such groups can sell the hides and skins to set up their own businesses.

Case study

Destocking with Somali communities in northeast Kenya, 2000 to 2001 (from Aklilu and Wekessa, 2002)

In response to drought in north east Kenya in 2000, a local NGO called NORDA submitted a proposal to USAID via Tufts University to destock 1,580 shoats, slaughter the shoats and then distribute the meat to needy families. The project was approved in December 2000 and ran until March 2001; the budget was \$17,300.

Implementation

- The proposal was discussed with the Mandera District Steering Committee and approved. NORDA then allocated the number of shoats to be purchased and slaughtered in Elwak sub-district and Takaba division, based on the intended number of relief beneficiaries.
- The criteria for selecting beneficiaries (those eligible to sell livestock and those who would receive meat) were discussed with local Relief Committees, who then made the selection during community meetings. Selection criteria varied from place to place. In some areas beneficiaries were selected mainly on the basis of those who couldn't pay for water fees for their animals (from the boreholes). In other places, selection was made on the basis of those with the most pressing cash problems – such as having sick family members in need of medication, families whose children were threatened with school-expulsion for non-payment of school fees, or families in desperate straits to buy the most basic commodities (such as sugar and tea). Market dates were fixed during such initial meetings in each village.
- Shoats were purchased in most of the 20 program areas and cattle in few villages. Purchase of animals was carried out in the presence of the Relief Committees and meat beneficiaries (those receiving relief food distribution) who had the final say in choosing or rejecting the animals on offer vis-à-vis the fixed price offered by NORDA.
- Livestock officers carried out pre-mortem inspections. Beneficiary families were then asked to organize themselves into groups – four families for one shoat or thirty families for one cow. Each group was then tasked to carry out the slaughtering, flaying and distributing the fresh meat amongst themselves. Meat was distributed only once in any of the operational areas. In most cases, bound by traditional norms, beneficiary families shared the meat with those not included in the list. Most families acknowledged that the meat they received lasted 2 to 3 days.

Impact

- 1,260 pastoralists benefited through a direct income of KSh 1,125,000; 13 tons of fresh meat was distributed to a total of 6,600 families. This improved the nutritional status of a drought-affected population.
- The income from the sale of animals was used for buying water for livestock, medicine and veterinary drugs, for payment of school fees and for setting up of

small businesses such as teashops. The program covered the most drought-affected areas and was much appreciated as stated by elderly community members who said 'that they have never seen anything like this before'.

Lessons learned

- The importance of local knowledge for the smooth operation of this kind of program.
- The commitment of the agency is what matters most in achieving set objectives. This local NGO demonstrated the lowest operational and overhead cost incurred in the entire multi-agency drought response in Kenya.

4.1.2 Transport support for livestock traders

One contributing factor to the inefficiencies of livestock markets in pastoralist areas is the high cost of transportation. In Kenya for example, the cost of transporting cattle between Moyale and Nairobi amounts to 30% of the total cost. In Ethiopia, transport costs contribute to between 15-21% of the total cost of trade herds. The purpose of transport support is to increase the removal of animals from the pastoral system for external markets or slaughter.

The *advantages* to transport subsidy programs include:

- Increased off-take of livestock from drought stricken areas
- Injection of cash into the local economy (through sale of animals, payment for guards, truckers and other associated uses)

The *disadvantages* to transport subsidy programs include:

- Requires a significant 'paper trail' and so is administratively demanding.

Other considerations when undertaking a transport subsidy program are as follows:

- A well-planned control program must be enforced to prevent traders from removing the animals one day, and bringing them back for resale later.
- These programs can serve to build local capacity since they involve local traders, rather than put them out of business. Subsidies, for example, can stimulate local businesses, involve women's groups, and link to existing community systems. Such programs can also serve to open up new markets for sellers, and can serve as a strong linkage to development programs in the area.

Practical steps to be undertaken include:

- Decide on the level of transport support to be provided to traders (as a general rule, it should not exceed more than 30% of the transport cost).
- Agree with traders on the minimum number of animals they have to export from the region for the subsidy to be effective.
- Animals have to be branded or painted and certificates have to be issued for the animals passing through check points en route to final destinations.
- Payments should be effected only after a trader has transported the animals to destination points and upon submitting all the required paper works.

- No payments should be effected for selling or transporting animals within the district as this would lead to pilfering of resources (from the Kenyan experience). Besides, the objective of the transport subsidy is to remove as many animals from drought affected areas to terminal market points and not to relocate animals within the drought-affected area.

Case study

Use of transport subsidies in Turkana District, Kenya 2000 to 2001 (from Aklilu and Wekessa, 2002)

During the drought in Turkana in northwest Kenya in 2000, the NGO VSF-Belgium received \$51,020 from the Community Development Trust Fund to subsidize the movement of 12, 000 shoats and 900 cattle out of the district. A further \$6000 was allocated for a subsidy on transporting livestock within the district.

Implementation

- Two kinds of subsidies were used.
 1. For itinerant livestock traders who were buying livestock from the Turkana people and re-selling, either to markets within the district or to large-scale livestock traders.
 2. For large-scale traders exporting livestock to terminal markets outside Turkana district.
- A 40% subsidy for transport was agreed on between the implementing agency and the traders.
- VSF-Belgium developed conditions and procedures for paying the transport subsidy to livestock traders. These included:
 1. Letters from the local chief and from the veterinary officer detailing origin, type, and number of the livestock, date of departure from point of purchase, and any other relevant information at the destination point certifying that the number and type of livestock detailed in the letters had arrived.
 2. A livestock movement permit from the Department of Veterinary Services.
 3. A verification form, completed and signed by the control officer at the district's terminal point in Kainuk, including photographs of the vehicles used to transport the animals.
 4. In addition, receipts to the county council or other authorities where the livestock was off-loaded had to be submitted in addition to authentic transport receipts.

Impact

- A total of 1,175 cattle and 3,584 shoats, valued at KSh. 8,025,400, were transported to terminal markets in Nairobi.
- A total of 20,688 sheep and goats were transported from one area of the district to another, to either fatten the animals or for direct slaughter.
- A total of KSh. 3,618,880 was spent on paying the subsidy (both external and internal) - this was over the budget by KSh. 228,880.

Lessons learned

The project had a good theoretical basis, and financial accounting and administration was good. But it was very difficult to control. The exercise by its nature carried a lot of risks and temptations for fraud - the project collaborated with chiefs, livestock marketing associations and councils of local government whose systems were open to corruption, yet collaboration with them was vital. These partners aided the traders to defraud the implementing agency of funds that would have otherwise been used wisely to assist deserving cases in the district. As

the internal transport subsidy was shrouded in fraudulent claims, it was difficult to determine the impact of this activity.

Strong, credible and transparent community-based institutional structures are mandatory for any transport subsidy to be successful. Community members and representatives have to manage the operation.

4.1.3 Alternative approaches to supporting livestock off-take

Both destocking and transport support interventions are associated with a body of experience to suggest best practice. However, there may be other ways of supporting livestock off-take which have yet to be tested. Given the crucial role of private livestock traders, a key stage in designing alternative approaches is for aid agencies to understand the marketing constraints during droughts, as perceived by traders. The transport support approach addresses one important constraint but as shown in the case study, this intervention requires careful design and monitoring to avoid corrupt practices and other problems.

Ultimately, off-take involving traders will depend heavily on the terminal market demand, and the capacity and willingness of traders and abattoir owners in urban centers to handle relatively large numbers of animals from pastoral areas in a short time frame. Discussions with these stakeholders should provide insights into the feasibility of different approaches bearing in mind a range of possible constraints facing traders. These include financial constraints, processing capacity or holding ground limitations, inventory costs, increased mortality and so on to purchase and hoard large number of animals at a time.

At the time of writing during the emerging drought in Somali and Oromia regions, a constraint to market off-take of livestock was weak linkages between the areas where animals were congregating and livestock buyers, particularly buyers who were not familiar with more remote pastoralist areas and livestock movements during drought. Therefore, the Livestock and Fisheries Marketing Department was organising meeting to raise awareness among traders, and facilitate links between NGOs on the ground and traders.

4.2 Support to livestock production and health

4.2.1 Nutritional supplementation (livestock feeds distribution)

Nutritional supplementation is the provision of feed or nutrient blocks for improving energy and nutrient intake of livestock, especially cattle. In some cases, livestock feed availability can be increased simply through local (regional) purchases of fodder, and transportation of this fodder to pastoral zones. In other cases, the provision of high-nitrogen cattle feed can allow animals to utilize some low-quality sources of fodder that normally wouldn't provide them with enough nutrients and energy to survive. Nutrient blocks (e.g. urea-molasses or other minerals) can also be used in emergencies to supplement fodder intake. The blocks may be specially formulated to provide energy, nitrogen, and important vitamins and minerals to enable animals to survive until pasture conditions improve.

The *advantages* to nutritional supplementation programs include:

- Introduces herders to processed feed which may prompt them to purchase feed for their livestock in the future.
- Reduces environmental degradation by allowing cattle feed to come from an area outside of the area where they normally forage.

- It has long-term benefits for the herders. In most cases, livestock feed security is more important to pastoralists than food security, since keeping animals alive ensures that their families will be able to survive beyond the drought or disaster.
- If nutrient blocks are used, they can be formulated to include anthelmintics to prevent further livestock death when rains start. The blocks themselves have a long shelf life, so they can be strategically pre-positioned, and can be linked to sanctuaries or zones of refuge by placement prior to drought. The roughage component of the animal diet can then be increased as necessary.

The *disadvantages* to nutritional supplementation programs include:

- The program may unintentionally promote large herd sizes. Importing fodder or nutrient blocks to maintain a large herd of animals may encourage a high stocking rate, which further degrades the environment and depletes natural resources.
- Cattle need more than 2kg feed per day, so it takes a great deal of input to maintain a herd of cattle. This makes feed provision programs cumbersome, expensive, and difficult to implement.
- In many cases, urea/molasses or mineral blocks are not available locally, so are quite expensive and difficult to procure. Sugar cane tops or hay could be available locally but transporting them over long distances could be expensive
- Urea/molasses and mineral blocks induce thirst in animals, so additional water would be necessary to maintain the herds.
- The program could be especially costly if the drought is prolonged.

Other considerations when undertaking a nutritional supplementation program:

- Drought often serves to get nature back in balance, reducing the number of animals competing for scarce resources in a region. Nutritional supplementation can upset this balance, leading to massive overgrazing of still-scarce recovering resources.
- In most cases therefore, destocking is essential for any animal feed intervention program, maintaining only a small reproductive core for later breeding to restock.
- Nutritional supplementation can also be used to improve the health/nutrition of animals destined for the international markets prior to export, but must always be linked to the removal of the animals from the overstocked rangeland.

Practical steps to be undertaken are as follows:

- As in destocking, some criteria should be developed with communities for selecting eligible families for a livestock nutritional supplementation program.
- Establish a livestock feeding centre that is not too far from a water point
- Only female animals of reproductive age should be included in the supplementation program. Depending on the scale of the program, determine with the communities the number and types of animals each eligible family is allowed to bring to the feeding center.
- Base the feeding formula on maintenance ration to minimize costs. As a general rule, the amount of daily ration should be around 75 grams for sheep and goats, 2kg for cattle and about 2.5kg for camels.

- Eligible families participating in the program should take the responsibilities of looking after the animals including guarding, watering and so on.
- If this program is simultaneously carried out with destocking, ways should be found for pastoralists to contribute to the cost of the feed being provided.
- Ensure that adequate water is available where distribution takes place as concentrates or urea-molasses make the animals thirsty.
- The distribution of livestock feeds to those who wish to feed non-reproductive animals should be done at full cost recovery.
- Discontinue the program after the first rains.

Case study

Livestock feed supplementation combined with destocking in Marsabit, northern Kenya, 2000 to 2001 (from Aklilu and Wekessa, 2002)

In Marsabit, northern Kenya, the Anglican Church of Kenya (Marsabit Development Office) received \$48,000 from DFID to support a destocking program in Gabbra communities with livestock feed supplementation. As food relief for people was already being distributed by the World Food Programme in this area, it was felt that some payment for livestock purchase in the de-stocking program should be in the form of livestock feed, to enable weak breeding stock to survive. Therefore, animal feed was given in part payment for every three small stock sold per household as part of destocking.

Implementation

- 180 tonnes of animal feed was purchased and transported to six communities; the feeds were purchased from a company in Nairobi which was able to mix a special high energy, high fat, high protein concentrated formulation.
- A democratic system of wealth-ranking enabled the most needy to be targeted.
- One bag of feed (value KSh. 400) was provided in part-payment for every three shoats sold under the destocking program; the balance was paid in cash.
- The feeds were stored in easily accessible and safe stores, and utilized when required.

Impact

- Those pastoralists who used the supplementary feeds obtained astounding results - from one bag of feed they were able to sustain one sheep or goat for three months, especially with ample watering and provision of veterinary inputs such as de-worming (which were not costly).
- In the Gabbra language animals left behind by their owners to die because they are too weak to go to water or to grazing are called *afto* – meaning those left behind. The project had collected and fed 107 of its own *afto* animals which it later used in restocking.
- The feeds moved more slowly than anticipated. Not more than half of the feed had been utilized by pastoralists by the time of the visit. This is because some areas received unexpected rains while some pastoralists did not know the effectiveness of the feed due to lack of experience. Concentrate feeds had a great positive impact on milk production from small stock, especially after the rains came.

- The cost-benefit analysis of providing concentrates to livestock compared to large amounts of grain-based human food relief is essential information for future consideration in drought mitigation. By comparison, the 180 tonnes of feed @ KSh. 400 per 20kg bag cost KSh 3.6 million. This feed was sufficient to feed 8000 small stock daily for 3 months. Should there be need to purchase these animals after the return to better pasture they would KSh. 1500/= each, or KSh. 12 million for the entire flock. Supplementary feeding therefore appeared to be the more economic option.

4.2.2 Emergency water provision for livestock

Almost by definition, existing water supply systems cannot support a high number of livestock and people in times of drought. New water resources are needed either through rehabilitation of existing sources or establishing new sources. Under drought conditions, tankering of watering may be essential to keep animals and humans alive, but it is expensive and not effective over the long term. Tankering may also be difficult where roads are in poor condition – a common problem in pastoralist areas. Water harvesting allows water to be retained for emergencies.

Water development (e.g. drilling new boreholes) may also provide water but this is an expensive and technically-demanding option. In general, the level of community development and local management support needed to maintain these facilities is beyond the scope of most relief projects. Pastoralist areas are littered with defunct boreholes which neither communities nor government agencies are able to maintain.

The provision of water for livestock can often overlap with the provision of water for people. Therefore, co-ordination with other agencies is particularly important for water projects.

The *advantages* to water provision programs include:

- Water provision enhances animal survival, since neither animals nor humans can survive without water.
- In many mountainous or hilly areas, water harvesting reduces erosion from highlands to lowlands, improving productivity in both areas.

The *disadvantages* to water provision programs include:

- New boreholes can be disastrous for the surrounding environment. Livestock owners try to stay close to water sources with their animals, so the area 60-80 km around the new water source often becomes severely degraded. Communities may not be also able to maintain the borehole. In some grazing areas, water pans or small dams might be useful in extending dryland grazing by 4-8 weeks. These can be linked to community development and management of local resources. However, they may not be replenished if rains are erratic.
- In some cases, the establishment of new water facilities can have severe social and political impacts on a society, depending on the culture. Conflict related to water rights may also develop at borehole sites.

Practical steps to be undertaken include:

- Consult with communities on potential alternative water sources: new hand-dug wells, pans, ponds, tankering or rehabilitating existing sources.
- Set up local water management groups who will be responsible for managing and maintaining the water source.

- Define the rules and regulations with the water management group on the utilization of the water source. This may include labor contribution for repairs, payment for gas, spare parts communities to be served and so on. Encourage the association to establish a fee per livestock species as the drought situation eases.
- Discuss with the community the future use of the water resource. Predict future environmental degradation, ethnic conflicts or other problems and agree with communities from the outset the possible to cease use of the water when the drought is over. Boreholes may need to be capped.
- Where boreholes are designed to function for a certain period of the year, make arrangements for the communities to meet the costs of operation and maintenance.
- Providing camels to communities (instead of hiring trucks) for the purpose of water tankering could bring a cheaper and lasting solution in some cases.
- Make sure that the new temporary water source is not to result in unwanted permanent settlement.

4.2.3 Emergency animal health

In common with human mortality in times of drought, livestock mortality is often associated with disease. During drought, large numbers of animals congregate around diminishing feed and water resources, and the combination of stress and close proximity encourages the spread of transmissible diseases. This situation can be further exacerbated by inflow of animals from neighboring areas or countries. It follows that basic veterinary care can treat existing diseases and prevent disease outbreaks.

Based on many years experience with community-based animal health workers (CAHWs) in Ethiopia, federal government policy now supports the use of privatized CAHWs under veterinary supervision, and federal minimum standards and guidelines are available for the use of CAHWs. The basic approach involves networks of CAHWs connected to private veterinary pharmacies which are owned or managed by veterinarians or animal health assistants. As CAHWs are selected from the communities they serve, are highly mobile and efficient, they represent a crucial resource for the delivery of animal health inputs in times of drought. However, the general trend towards privatization of clinical veterinary services presents a particular challenge with regards relief interventions. Specifically, it has taken many years to persuade government to support privatization and CAHWs, and in pastoralist areas, private practitioners cite unfair competition from government as a major constraint to their business. In the case of relief veterinary programs, when these programs provide services free-of-charge and in isolation of the private sector, the private sector suffers. In the long-term communities may be left with a weakened veterinary service after relief programs.

Given this situation, the question arises how best involve the emerging private veterinary sector in relief work. It follows that PLI has to consider various contexts and possible modes of veterinary implementation, each of which has strengths and weaknesses. Three types of interventions are outlined in overleaf.

Related to all these scenarios is the issue of the cost to the livestock keeper. Should relief animal healthcare be free of charge, subsidized or delivered at commercial rates? This question raises a number of further points:

- In general, conventional humanitarian thinking supports the notion of free delivery of services. While this helps to ensure wide coverage and therefore maximizes the

life-saving objective of relief programs, it can also damage emerging and often fragile private services and systems.

Three types of relief veterinary intervention

Context	Intervention	Advantages	Disadvantages
CAHW networks in place, linked to private AHAs or vets	NGOs sub-contract local private actors to provide treatments and vaccinations. Vaccine supply from government. NGO and government monitor the intervention. Commercial prices for treatments; free vaccination (according to government policy)	<ul style="list-style-type: none"> - Supports local private sector, both short-term and long-term. - Local private actors have good local knowledge for design and implementation - Cost efficient compared with NGO or government delivery, so more livestock can be treated or vaccinated. - Flexible and responsive to local conditions - Community can monitor the intervention 	<ul style="list-style-type: none"> - Local private vet pharmacies may lack sufficient supplies of drugs and/or capital to buy large quantities (but can be offset by NGO advances) - Difficult for NGO or government to monitor treatments - Dependant on vaccine supply from government, so risk of insufficient quantity or range of vaccines. - Herders may lack cash to pay if not combined with destocking.
CAHW networks in place but dependant on NGO drug supply; no private pharmacies	NGO supports CAHWs to provide treatments; works with government teams (with or without CAHWs) to vaccinate animals. Drugs provided on usual CAHW terms; vaccines given free of charge.	<ul style="list-style-type: none"> - CAHWs have good local knowledge to assist design and implementation - If NGOs buy drugs from private sector, it supports bigger private sector suppliers 	<ul style="list-style-type: none"> - NGO staff salaries and overheads, plus per diems for government workers increases cost and so reduces coverage and impact of intervention - Dependant on vaccine supply from government, so risk of insufficient quantity or range of vaccines. - Herders may lack cash to pay if not combined with destocking.
No CAHWs in area. NGO present and also a limited government service	NGO implementation using its own staff and temporary recruitment of new staff and/or supports government to deliver treatments and vaccines. Free delivery of treatments and vaccines.	<ul style="list-style-type: none"> - Simple to design. - If NGOs buy drugs from private sector, supports bigger private sector suppliers - If NGO delivers treatments and vaccines, easy to monitor. - Not dependant on local cash-flow limitations 	<ul style="list-style-type: none"> - Dependant on vaccine supply from government, so risk of insufficient quantity or range of vaccines. - Government delivery of free treatments very difficult to monitor; leakage of drugs into the informal sector - confuses herders on drug pricing policy

- In practice, the free or subsidized provision of veterinary care (particularly treatments) is difficult to monitor in terms of ensuring that livestock keepers actually receive a free or subsidized service. In contrast to human healthcare at fixed point clinics or hospitals, veterinary care is done 'in the bush'. When delivery is done by lowly-paid government workers who are handling high-value low-volume veterinary drugs, these drugs easily leak into the private sector.
- Even in situations of cash shortages, payment for services can be made using livestock. This is a well-tested approach which can be handled relatively easily by the private sector, but not by government.
- The treatment of debilitated animals at the height of drought has mixed results in terms of recovery from or protection against diseases, regardless of whether people pay for the service or not. The best time to use mass de-worming or vaccination programs is probably during the alert/ alarm phase, when animals are still in reasonable condition. Assuming support to livestock off-take is being initiated (e.g. through destocking or transport support) livestock keepers will be exchanging animals for cash. Consequently, they have some capacity to choose the service they want, and pay for it. In this situation, the priority is to understand the private sector response and where necessary, improve this response using aid resources (cf. transport support to livestock traders).

Regardless of which scenario PLI partners find themselves facing, practical considerations include:

- Rapid participatory assessments can be conducted to determine the type of emergency veterinary input which is required. Should it be a vaccination campaign, de-worming program or something else? Where possible, these assessments should be supported by conventional diagnosis of disease, including the use of laboratory support (depending on the diseases in question).
- In areas where private CAHWs and other veterinary workers are present, they should be involved in the participatory assessment with NGO or government staff. They can then gauge the existing or potential disease problems, and begin to assess the feasibility and cost of different interventions. It is worth noting that the private sector is usually more cost-efficient than either NGOs (especially international NGOs) or government. Therefore, for as given budget it is often possible to reach more communities and more livestock using private workers; the NGO role is to fund and monitor the process.
- As previously mentioned, veterinary interventions complement destocking by protecting the remaining livestock on the rangeland. Destocking also provides herders with cash. In these situations, and assuming that communities have been involved in prioritizing animal health needs, it is appropriate to charge for veterinary care using the usual commercial rates. An important point is that if a specific input (e.g. de-worming) is not designed with the community (i.e. no participatory assessment), we cannot we expect people to pay for it.
- A distinction between the clinical services provided by the private sector and the vaccination services provided by government has to be made:
 - Clinical, private services include services such as de-worming, tick control or the use of antibiotics or trypanocides. Clearly, these services are usually provided on a commercial basis and during non-drought periods, are affordable to livestock keepers. Simultaneous destocking assists people to pay for clinical veterinary care, if they want it, during drought.

- Government vaccination programs operate on a “cost-recovery” basis, in which a nominal fee is charged for vaccination. If vaccine is made available to private workers, the overall cost of vaccination per animal decreases due to their lower overheads and operating costs.
- Although it is beyond the scope of these guidelines to provide specific details of contracts between NGOs and private veterinary workers, short-term emergency veterinary programs can be delivered by the private sector on sub-contract basis. This requires:
 - Clear, comprehensive contracts between the NGO and private operator, with penalty clauses and conditionalities – it is unwise to pay all costs “up front”
 - require close monitoring and supervision at community-level
 - good communication/awareness-raising with communities to explain the nature of the veterinary program and the involvement of the private sector

Case study

Emergency veterinary program, Turkana District, Kenya (from Aklilu and Wekessa, 2002)

Working in Turkana District in northwest Kenya, VSF-Belgium sourced \$95,504 from the Community Development Trust Fund for an emergency veterinary program. The program aimed to treat 108,000 livestock and vaccinate 200,000 goats against contagious caprine pleuropneumonia, (CCPP).

Implementation

- The program used an existing network of 40 CAHWs.
- The program involved eight initial community dialogue meetings, with 40 follow-up meetings. The participants in these meetings included community leaders, field monitors, Public Health Technicians, the District Veterinary Office, village bank members, butchers and chiefs.
- CAHWs were supplied with drugs to treat 108,000 livestock, and cost recovery rates were set at between 5% and 50% depending on the drug.
- CAHWs were also supplied with CCPP vaccine, and supervision of vaccination was assigned to the government veterinary department. Due to the low availability of CCPP vaccine in Kenya, 30,000 doses were borrowed from UNICEF South Sudan livestock program.

Impact

A total of 73,983 animals were treated and 96,923 goats were vaccinated against CCPP.

Lessons learned

Despite the drought the cost recovery system for drugs worked and was an important aspect of ensuring sustainability of future services.

Limited transport facilities and poor geographical coverage confined the intervention to a small area. It was doubtful whether the target of 108,000 livestock to be treated and 200,000 goats to be vaccinated could be achieved - the logistics involved in livestock vaccination campaigns should never be underestimated.

The capacity for local CCPP vaccine production was low and not therefore able to meet the demand, especially during emergencies. There is need for relevant authorities to look into ways of facilitating the procurement of this vaccine from outside the country and ensure that

there are sufficient stocks all the time to supplement the low vaccine production in the country.

Alternatives approaches to emergency veterinary care and outstanding issues

Voucher schemes

In order to overcome some of the common problems associated with free distribution of veterinary drugs and also involve the private sector in emergency programs, ICRC has piloted a voucher scheme in northwest Kenya. In summary, vouchers were given to selected families who could exchange the vouchers for specific types of treatments provided by private CAHWs and veterinary assistants. The vouchers covered drugs valued at KSh 1000 (approximately \$14) and were limited to the use of four types of drug. The CAHWs and veterinary assistants then exchanged the vouchers for payment plus their service charge, which was provided by a private veterinarian. In turn, the private veterinarian was reimbursed by ICRC and added his own service charge. In total, the service charges were equivalent to the difference between the retail price and wholesale price of the veterinary drugs used. The scheme covered 500 households, equivalent to around 30,000 people.

This is a promising approach for involving the private sector in emergency veterinary programs and may be worth testing in Ethiopia. The advantages include targeting of more vulnerable households (requiring strong community-based process), plus delivery of the service by a relatively efficient and pre-existing private network of veterinary-supervised CAHWs. The CAHWs involved in the Kenya scheme had been previously trained using the guidelines of the Kenya Veterinary Board.

The disadvantages include a fairly lengthy time investment at the design stage, including a need to set up detailed procedures and formats for administering and monitoring the scheme. Given the potential need to address a range of health problems in different species of livestock, the range of drugs needs to be expanded beyond four products. In turn, this further complicates the design and administration of the scheme.

The technical basis for vaccination and de-worming: is it a proven approach?

The technical basis for mass-action veterinary campaigns (e.g. de-worming, vaccination) makes clinical sense but the impact has rarely been assessed in epidemiological terms and in the context of drought. Consequently, knowledge on the impact of animal vaccinations is very different from our understanding of say, the control of measles or cholera in people in relief situations. Also, conventional relief vaccination or de-worming programs only cover a fraction of the livestock population and only reach more accessible areas. There is very limited information to show that livestock which are de-wormed (for example) at the onset of drought are more likely to survive the drought. This situation indicates that far better assessment of relief veterinary care is needed.

4.3 Herd reconstitution: restocking

The term “restocking” covers various types of intervention, all of which aim to provide either individuals or groups of people with livestock. Restocking interventions vary from the provision of oxen-on-credit in highland areas, to the provision of large numbers of small ruminants plus pack animals to pastoralists in lowland areas. Program context can vary from long-term development projects to short-term rehabilitation, and various types of repayment and credit systems have been used. Despite all these variations, restocking when applied to pastoralists most commonly takes place as a part of a post-drought recovery effort.

For the PLI program two main forms of restocking can be considered:

- In agro-pastoral settings, the provision of around five to 20 adult female sheep and/or goats to poor households (including female-headed households) as a means to build assets. This is probably the main form of restocking within PLI, at least as reflected in current NGO proposals, and has been used fairly extensively in Ethiopia already. In this form of restocking, households are not expected to use livestock as their sole means of livelihood and therefore others forms of assistance may be needed. The extent to which this type of restocking is appropriate for pastoralists (rather than agro-pastoralists) is a possible subject of discussion within PLI.
- In pastoralist settings, the provision of a sufficient number and diversity of livestock to enable households (or some household members) to resume a pastoralist way of life and ideally, to do so within the timeframe of the project. This type of restocking is often based on the concept of a “minimum herd size” or “viable herd”, being the minimum number and type of animals required for an average household to live primarily from their livestock. In Kenya up to 50 small ruminants and a pack animal have been provided to each household. This type of restocking has not yet been widely used in Ethiopia, but it may be an option in some PLI areas. It is an approach which is sometimes justified in terms of relatively rapid independence from food aid, and environmental benefits as people move away from urban centers. Compared to “agro-pastoral” restocking, the trade-off is that fewer households can be covered within a given budget and monitoring is more difficult due to the mobility of pastoral herds.

Within these two broad types of restocking, there are various overlaps and community-specific factors. Therefore, a good understanding of the role of livestock in livelihoods in a given area is the starting point for the design of restocking projects.

Although impact assessments of well-designed and implemented restocking projects indicate good impact, the key question for future implementation relates to cost. Restocking is a relatively expensive type of recovery assistance, particularly if viewed in comparison with cash distribution programs.

Some general principles

Indigenous systems

As a general rule, agro-pastoral and pastoral communities are experienced and knowledgeable livestock keepers. This local knowledge resource is important in the design of restocking projects for two main reasons:

1. These communities do not usually require training on how to keep livestock¹. If indigenous types of livestock are provided – as is recommended – it can be safely assumed that recipients will already know how to care for the animals. It follows that training courses on animal husbandry are not usually a priority in agro-pastoral or pastoral areas. However, some training on animal health may be appropriate – see later.
2. Indigenous restocking systems are often well-developed and logical. They include provision of specific types of animals to specific types of recipient, and are based on experiences of rebuilding herds in difficult environments.

¹ Compare with settled or re-settled rural communities who are less dependant on livestock, and who may be unfamiliar with keeping animals.

It follows that a key stage in the design of a restocking project is to understand the indigenous restocking systems which are already in place and where possible, complement these systems rather than design a completely new and parallel form of restocking.

By basing a restocking project on traditional systems, the project can draw on local experience such as:

- *How to select beneficiaries of restocking and ensuring local involvement in the selection process?*
- *Should restocking be at a community, village or household level?*
- *What types and ages of animals should be provided, including pack animals if appropriate?*
- *What number of animals should be provided?*
- *What time of year should restocking take place?*
- *Should animals be given as a loan or a gift?*
- *What type of additional assistance is required, such as animal health, animal feed, or water for livestock?*

In addition, a project can use local experience to predict the benefits of restocking, herd growth patterns and environmental changes. This is useful information for project monitoring and evaluation.

The fundamental importance of indigenous knowledge and systems in the design of restocking projects points to the following best-practice principles:

- Time invested in participatory dialogue at community-level is time well spent.
- There is no blueprint for restocking in terms of the precise numbers and types of animals to be provided, and appropriate beneficiaries. These and other details will emerge from local discussions. However, the minimum survival threshold per African adult male equivalent is around 40 shoats and experience indicates that particular care is required when considering beneficiaries who have already left, or are about to leave, the pastoralist system.
- Restocked families often require other forms of assistance, particularly during the period before their new animals become productive. This assistance might include food and basic household, but may also include pack animal such as donkeys or camels as part of the restocking package. Such animals are important for the mobility of pastoralists, and are also used to transport water and goods to market.
- If a traditional forum or decision-making group already exists for restocking, work with this group. However, also understand its possible bias.
- Be aware that within a given project area, indigenous restocking systems may vary. Agro-pastoralists and pastoralists within the same ethnic group may use different systems, and all systems need to be understood.

Credit, loans and repayments - keep it simple

Diverse systems of credit, repayment and further distribution of stock have been used in restocking projects. These systems vary from cash repayments to the provision of offspring from “first-level” beneficiaries to “second-level” beneficiaries.

A general agreement is required with the restockees not to sell any of the animals they have received at least for a period of one year.

The PLI is a two-year program with a relatively short period of implementation. This time limitation indicates that any credit/repayment systems or redistribution systems will be difficult to design if the repayment/redistribution is to occur within the project period. Again, indigenous restocking system may provide pointers to the appropriateness and feasibility of repayment or further distribution of offspring.

A general rule is that any form of repayment or redistribution of animals within PLI should be kept as simple as possible. The more elaborate the system, the more administrative and monitoring support required. The best solution is often to transfer the responsibility to the community.

Use local types of animal and buy locally

As a general rule, restocking interventions should use local types of livestock because:

- these animals are well-adapted to local conditions, including both environmental conditions and diseases
- people will already know how to look after these animals
- local livestock types are usually more readily available and easier to purchase than improved or exotic types; they are less expensive

Local purchase supports local markets, and avoids logistical, health-related and financial problems associated with the movement of animals from distant areas. In particular, purchase involving cross-border movement of animals should be avoided.

The actual purchase of livestock should involve either the recipients themselves or their representatives. Local people usually know which types of animal best suit their situation. In a given community, recipients may select some local experts, traders or elders to select animals on their behalf.

Support animal healthcare

The provision of animal healthcare is an important part of a restocking intervention. Veterinary inputs can be considered in two main stages:

1. At the time of purchase, animals should be inspected by a veterinarian, animal health assistant or animal health technician. The inspector can be a local private practitioner (contracted by the project) or a government worker. Vaccination should be provided depending on the local disease situation (e.g. vaccinate for pasteurellosis, clostridial diseases) and the animals should be de-wormed. Other preventive measures may be needed depending on local conditions. Care is required in the use of some vaccines in pregnant animals. In many pastoralist communities, the sale of sick livestock at markets is discouraged as a social norm.
2. More long-term veterinary care should be provided by existing or emerging veterinary services, such as services provided by CAHWs. A key issue is likely to be the system for payment of veterinary care by recipients of restocking livestock, bearing in mind the trend towards privatized clinical services. If only small numbers of animals are being provided and recipients are still heavily relying on other assistance (e.g. food aid), it may be appropriate to contract a private veterinary worker (such as an AHT or CAHW) to provide veterinary care which is free-of-charge or subsidized, but only for restocked households. Clearly, such systems require careful community dialogue to ensure that everyone understands why free or subsidized veterinary inputs are being provided to some households in a community and not others. An alternative approach is simply to support a privatized

full-cost system and let communities/recipients work out for themselves how to pay for veterinary care.

Case study

A combined restocking and community-based animal health program in Fik Zone, Ethiopia (from Save the Children UK, 2005)

This program was a response to three consecutive years of drought in Fik Zone from 1998 to 2000, and large numbers of internally-displaced people. Fik Zone is occupied mainly by Somali pastoralist. The program aimed to restock 500 households and provide primary veterinary care in restocked communities, for both restocked and other households.

Implementation

- The restocking component was designed and implemented with restocking committees which were established in each of the 11 project sites.
- Selected beneficiaries decided the proportion of different species they would receive, and decided on 65% goats and 35% sheep. A viable minimum herd size was defined as 30 shoats according to traditional restocking systems.
- Markets were established in which people who were willing to sell shoats were informed of the type of animals required for restocking. The restocking committees and local veterinary staff were involved at this stage. Animals of sufficient maturity for breeding were selected, and the beneficiaries actually selected the animals they wanted. Animals were inspected for good health. A price of between 90 and 120 Birr was paid for each animal.
- Each animal was vaccinated and de-wormed prior to distribution to the recipient family.
- Restocked families also received cereals, plastic sheeting and blankets (provided by other agencies)
- CAHWs were selected and trained using well-established procedures. After the initial vaccination and de-worming of animals, further services were provided on a commercial basis, with CAHWs linked to private veterinary pharmacies.

Impact

- All 500 households had immediate improvement in their social and economic well-being, and herd projections indicated sustainable herd sizes in 3 to 5 years. Restocked households diversified their livelihood strategies and invested in agriculture and petty trade.
- Beneficiaries reported a positive impact on the health of their children, with milk being fed at least three times a day to children.

Lessons learned

Restocking is very well received by pastoralists, but requires very careful design and implementation, a good understanding of local customs and practices. Not all households want to be restocked, and some would prefer other types of assistance.

Increasing the restocking package to 50 to 70 shoats would enable a far more rapid return to a sustainable, livestock-based livelihood. However, this also depends on other factors such as the provision of adequate feed and water, good veterinary services, and the availability of funds.

Bibliography

- Admassu, B. (2003). Primary animal healthcare in Ethiopia: the experience so far. In: Sones, K. and Catley, A. (eds). (2003). Primary Animal Healthcare in the 21st Century: Shaping the Rules, Policies and Institutions. Proceedings on an international conference, 15-18 October 2002, Mombasa, Kenya, African Union/Interafrican Bureau for Animal Resources, Nairobi
<http://www.eldis.org/cf/search/disp/docdisplay.cfm?doc=DOC13302&resource=f1pastoralism>
- Aklilu, Y. (2003). The impact of relief aid on community-based animal health programmes: the Kenyan experience. In: Sones, K. and Catley, A. (eds). (2003). Primary Animal Healthcare in the 21st Century: Shaping the Rules, Policies and Institutions. Proceedings on an international conference, 15-18 October 2002, Mombasa, Kenya, African Union/Interafrican Bureau for Animal Resources, Nairobi
<http://www.eldis.org/cf/search/disp/docdisplay.cfm?doc=DOC13301&resource=f1pastoralism>
- Aklilu, Y. and Wekesa, M. (2002). Drought, livestock and livelihoods: Lessons from the 1999-2001 emergency response in the pastoral sector in Kenya. Humanitarian Practice Network Paper 40. Overseas Development Institute, London <http://www.odi.org.uk>
- Anon (1997). Experiences with community-based restocking: an evaluation of four programs in Baragoi and Nyiro Divisions, Samburu District. Samburu District Development Programme/GTZ, Nairobi
- AU/IBAR (2003). Private veterinary practice in pastoralist areas of eastern Africa. Report of a regional workshop held in Nakuru, Kenya, 6-9 August 2003. African Union/Interafrican Bureau for Animal Resources, Nairobi
- Catley, A. (1999). The Herd Instinct: Children and livestock in the Horn of Africa. Working Paper 21, Save the Children UK, London
- Catley, A., Blakeway, S. and Leyland, T. (2002). Community-based Animal Healthcare: A Practical Guide to Improving Primary Veterinary Services. ITDG Publishing, London
- Kelly, K. (1993). Taking Stock: OXFAM's Experience of Restocking in Kenya. Oxfam Publications, Oxford
- Lautze, S., Aklilu, Y., Raven-Roberts, A., Young, H., Kebede, G. and Leaning, J. (2003). Risk and Vulnerability in Ethiopia: Learning from the Past, Responding to the Present, Preparing for the Future. A report for the US Agency for International Development. Feinstein International Famine Centre, Tufts University, Medford
http://nutrition.tufts.edu/pdf/research/famine/risk_ethiopia.pdf
- Lotira, R. (2004). Rebuilding herds by re-enforcing *gargar/irb* among the Somali pastoralists of Kenya: evaluation of experimental restocking program in Wajir and Mandera Districts of Kenya. African Union/Interafrican Bureau for Animal Resources, Nairobi
- Ministry of Agriculture and Rural Development (2004). National Minimum Standards and Guidelines for the Design and Establishment of Community-based Animal Health Worker Systems. MoARD, Addis Ababa.
- Mutungi, P. (2005). External evaluation of the ICRC veterinary vouchers system for emergency intervention in Turkana and West Pokot Districts. ICRC, Nairobi.
- OFDA (2003). Livestock Interventions: Important Principles for OFDA. OFDA, Washington DC
http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/resources/pdf/livestock_guidances_11-19-02.pdf
- Oxy, C. (1994). Restocking: A Guide. Herd Reconstitution for African Livestock Keepers as Part of a Strategy for Disaster Rehabilitation. VetAid, Midlothian.
- RWA International/Vetwork UK (2000). Pastoral Livelihoods Programme Appraisal Mission: Final Report. Department for International Development, London.
- Save the Children UK (2005). Terminal evaluation of the restocking/rehabilitation programme for the internally displaced persons (IDPs) in Fik zone of the Somali Region of Ethiopia. Save the Children UK, Addis Ababa and Acacia Consultants, Nairobi