

Enhancing incomes and livelihoods through improved farmers' practices on goat production and marketing



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Cover caption: “Come, Bring money, Let’s go!” says the writing on this donkey cart on its way to a goat auction in Nhwali, Gwanda. Goat market development has huge potential in increasing income to goat keepers in southwestern Zimbabwe. Such improved markets provide incentives for farmers to invest in improved management.

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Enhancing incomes and livelihoods through improved farmers' practices on goat production and marketing

Proceedings of a workshop organized by the Goat Forum,
Bulawayo, Zimbabwe, 2–3 October 2007

Scientific Editors
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Acronyms

AGRITEX	Agricultural Technical and Extension Services
AMP	Associated Meat Packers
CAFOD	Catholic Agency for Overseas Development
CBAHP	Community-based animal health programs
CRS	Catholic Relief Services
CSC	Cold Storage Company
DAR4D	Ministry of Agriculture Department of Agricultural Research for Development
DFID	Department for International Development (UK)
DLPD	Department of Livestock Production
EU	European Union
FCTZ	Farm Community Trust of Zimbabwe
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDE	International Development Enterprise
MoU	Memorandum of Understanding
MRS	Matopos Research Station
PRP	Protracted Relief Programme
RDCs	Rural District Councils
SADC	Southern African Development Community
SC UK	Save the Children (UK)
SNV	the Netherlands Development Organization
TLC	Technical Learning and Coordination Unit
WVI	World Vision International

Foreword

Zimbabwe's smallstock population comprises 3.3 million goats. Approximately 97% of the goats are owned by smallholder farmers. The majority of goats are indigenous, either of the smaller type (East African goat) found in the eastern and central areas or the larger type (Matabele goat) of southern and western Zimbabwe.

Goats play an important role in the livelihoods of smallholder farmers in Zimbabwe. They are valued primarily for production of meat, milk, manure, skins and cash from the sales of goat products. Apart from these main functions, Zimbabwean goats are also important in a number of ways. These include food security, insurance against crop failure, and slaughter during religious and customary rites as well as festive occasions. Goat by-products such as blood and bone meal have a commercial value.

This workshop report is based on findings gathered during a survey in six districts in the arid areas of the southwestern part of the country. The workshop report highlights the state of goat production in the country, challenges and interventions that can be undertaken to improve the situation. This information is targeted at key players in the goat industry (goat keepers, service providers as well as policy makers in the country) who are seen as the major drivers.

Adolf B. Dube
Provincial Chief Agricultural Extension Officer
Matabeleland North

INTRODUCTION

Opening Address

Bothwell Makodza, *former director of DLPD, now AGRITEX*

Goat production plays an important role in Zimbabwe's agricultural development. As of 2003, there were more than 3 Mio goats in Zimbabwe, about 70% of which were found in the semi-arid areas and owned by small-scale farmers. More than other livestock, goats are particularly suited to the semi-arid areas due to their ability to adapt to harsh climatic conditions including drought. They also contribute immensely to improving livelihoods in rural Zimbabwe. As many women own goats, goat production is a means to empower women and HIV/AIDS-affected households, providing quality food and income.

Although the importance of goats has largely been recognized, the goat sector in Zimbabwe faces major challenges such as:

- Low genetic potential for increased production
- Inadequate nutrition
- Prevalence of diseases
- Poor management practices (high kid mortality, low birth weights)
- Limited market outlets for small ruminants and their products
- Inadequate research and extension services
- Lack of economic incentives leading to reduced offtake
- Lack of a central database to provide information for monitoring and evaluation

There are also a number of possibilities to develop the goat sector:

- Improving farmers' access to appropriate extension and technical support services
- Facilitating commercially oriented small livestock projects in communal areas
- Resuscitating small livestock production structures in resettled areas
- Advocating for concessionary finances for improved management (feeds and veterinary, breed stock purchase, fencing, handling facilities)
- Establishing small ruminant breeding and multiplication centers and propagating local breeds for distribution to farmers
- Facilitating genetic improvement programs for indigenous breeds and developing simple breeding procedures involving farmers at the grassroots level
- Supporting research on improved small livestock nutrition, health and hygiene, environmentally friendly housing and handling techniques as well as marketing
- Establishing market information systems for farmers and improving market infrastructure and services

We welcome the initiative of the Goat Forum in bringing the various players in the goat sector together at this workshop. We will use this opportunity to identify realistic options and agree on action plans to strengthen the existing potential of the goat sector and assist small-scale farmers in Zimbabwe to obtain the maximum from their goats.

Objectives of the Workshop

The overall objective of the workshop was to build a common understanding and initiate dialogue between stakeholders on how to establish competitive goat enterprises. With a clear strategy, the

research and development community in Zimbabwe will be better equipped to help small-scale farmers and other players benefit more from goats. To achieve this overall objective the workshop recognized the following issues:

- Being the first of its nature, the workshop was designed to set the foundation for a dynamic discussion process consisting of inputs, sharing ideas and experiences and feedback from all stakeholders. The dialogue is expected to continue outside the forum as more stakeholders adopt a multi-sectoral approach to research and development.
- A common understanding, sustained by joint visioning, should propel all stakeholders within and across their respective sub-sectors into active participation in the various activities aimed at developing competitive goat enterprises.
- The process of achieving the intended goal of a vibrant goat industry in Zimbabwe is as important as the output. There is, therefore, a need to establish a systematic approach that will ensure the synchronization of initiatives at all levels of the goat value chain.

The specific objectives of the workshop were to:

- introduce the Goat Forum to all stakeholders
- report on the existing work of the Goat Forum
- share experiences on other existing goat programs
- identify opportunities and design strategies to establish successful goat enterprises in Zimbabwe

Workshop Methodology and Structure

Those who work with goats at one or more stages of the value chain, including farmer representatives, farmer organizations, NGOs, government departments, universities and international research institutions, private players such as abattoirs and stock feed providers as well as policy makers were invited to the workshop. These stakeholders brought with them a broad spectrum of experiences as well as significant technical and organizational inputs.

In order to create a dynamic strategy development process based on a common understanding of the relevant issues pertaining to the goat industry in Zimbabwe, the workshop started with the sharing of existing information on the current state of goat production and marketing, as well as on-going activities that aim to enhance the sector. Thereafter, the participants jointly developed a vision for the goat industry, which would guide the rest of the meeting. The participants were then split into various working groups, representing different value chain levels, or sub-sectors, in the goat industry. Each group was tasked to debate the current state of the goat industry and identify opportunities and challenges for that specific sub-sector. Against the outcome of this brainstorming, the groups then analyzed existing strategies in goat production and marketing, and systematically developed directions for improvement. Maximizing on the strengths, tapping into existing opportunities and countering challenges would lead toward the joint formation of a vision for the goat industry.

At each step the groups presented their results in plenary sessions and included the feedback from the discussions into the next step of the strategy development process (Appendix 1). Finally, the participants were tasked with brainstorming their key programs and activities in goat production and marketing, which are presented as action plans in Appendix 2. These focal areas and capacities can be drawn upon for operationalizing the strategy developed during this workshop. A list of participants and their contact information is provided in Appendix 3. Appendix 4 lists the key reference literature that was cited in this report.

THE STATE OF GOAT PRODUCTION AND MARKETING

Context of the Goat Sector in Zimbabwe

Nicholas Nyathi, SNV

The goat sector has been recognized as having great potential to contribute to poverty alleviation and improved livelihoods for farmers in remote areas. The development arena has placed a new focus on this sector for food security, income growth and economic development. This contextual analysis gives an overview of the importance of the goat sector from a global perspective and with a special focus on Zimbabwe.

Global trends

More than 95% of the world's goat population is found in poorly endowed areas such as the dry zones and the mountainous areas in the developing countries of Asia and Africa. Of all the livestock species, goats are increasing in number. Goat populations have witnessed a +8.1% change between 1990 and 1996 at a global level, with the maximum change (+27%) in Asian countries (Morand-Fehr and Boyazoglu, 1999; Devendra and Chantalakhana, 2002).

Goats contribute a significant proportion towards national economies worldwide and this is projected to increase in the coming years. Small-scale farmers, especially those in remote areas, and the landless are gradually recognizing the potential of goats as a low-cost solution to their poor resource endowments. Therefore, goats deserve greater attention at both the macro and micro levels (Peacock et al., 2005).

Regional trends

The role of livestock is becoming more important in southern Africa. As elsewhere in the world, there is an increasing urban demand for livestock products based on growing urban populations with higher incomes and associated dietary changes (Delgado et al., 1999). However, southern Africa is not benefiting enough from these opportunities. The productivity and offtake of small-scale production systems remain low in most of the region, though there is also large variability. Countries such as Namibia and South Africa have well-developed goat markets and export livestock within the Southern African Development Community (SADC) region, whereas livestock markets in Mozambique or Zimbabwe are largely undeveloped (van Rooyen, 2007).

The countries in the region now realize the potential inherent in livestock and there are more initiatives to improve livestock production and marketing. The overarching aim is to assist rural households to escape the poverty trap through market-driven livestock production. Goats are the most common livestock species being promoted as they are now viewed as being a source of empowerment, especially for marginal groups, such as female-headed households and those affected by HIV/AIDS.

National trends

Zimbabwe has regions with different agro-ecological potentials and different suitabilities for goat production. In Natural Regions I to III crops do well because of the favorable climatic conditions whereas most livestock is found in the drier regions, IV (parts of Manica land, Mashonaland Central and East, Masvingo and Matabeleland North and South) and V (parts of Manicaland, Masvingo and Matabeleland North and South; Figure 1). In these drought-prone areas goats are considered to be highly valuable assets for income generation and source of investment. Almost all goats are found in communal areas;

thus, the goat sector has the potential to ensure food security and alleviate poverty for a significant proportion of the rural population.

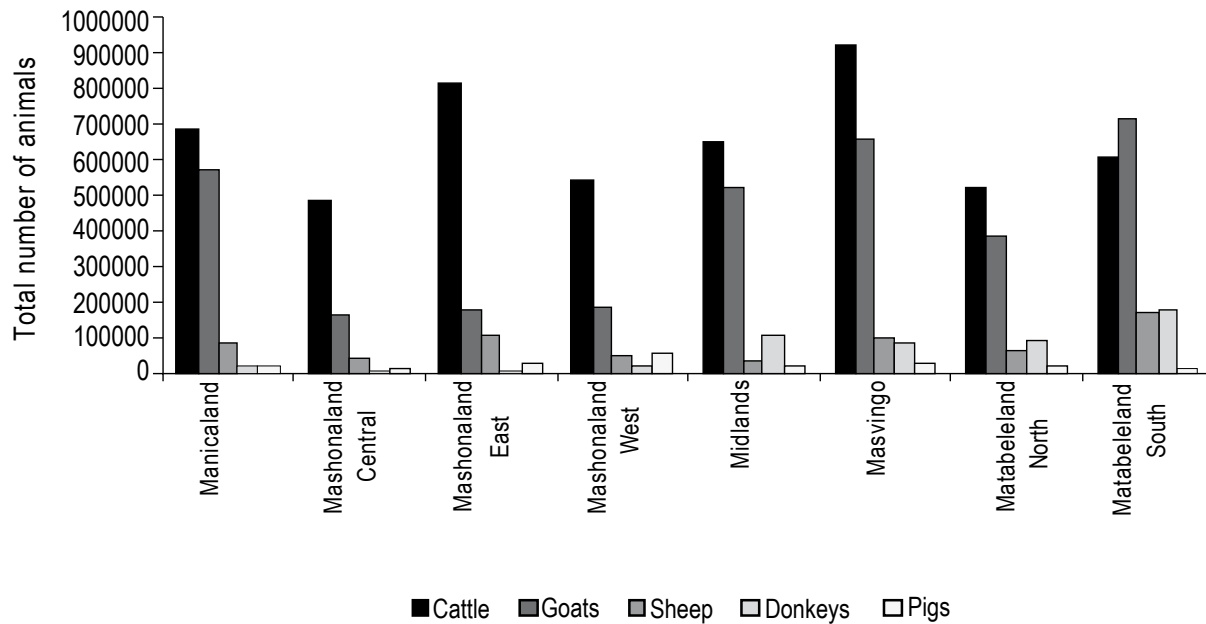


Figure 1. Distribution of livestock by provinces in Zimbabwe.

Source: Department of Veterinary Services Livestock Census, 2002.

The livestock industry in Zimbabwe has faced a lot of challenges over the last 10 years. Before the full-scale land reform program started in 2000, the livestock sector had a dual structure (large-scale commercial and small-scale subsistence). Large-scale commercial farmers in Natural Regions IV and V concentrated on cattle ranching. Supported by well-developed infrastructure and services they supplied livestock products to export markets such as the European Union. As a result of poor management and limited access to inputs and services, small-scale farmers could not comply with those market requirements and remained subsistence oriented. However, now the breakdown of the commercial sector since the land reform program gives small-scale farmers a new chance to venture into commercial livestock production in order to fill the gap in the demand for livestock products within the country.

Recent developments have pushed attention towards small stock production. Since the national cattle herd size has declined by more than 70% in the last decade (a result of land reform, unfavorable economic conditions, and droughts), small stock, particularly goats have assumed increasing importance. The reduction in cattle production has caused a deficit in beef supply. This has created an important opportunity for the goat industry because goat meat can serve as a ready alternative to beef given that the population of goats in Zimbabwe is currently at 3 million (FAO, 2005). Also, because they make no contribution to cropping activities, farmers are more willing to dispose of them. Goat numbers have been steadily increasing and there is a greater scope for goat market development in the urban and rural areas.

A recent market study conducted by the Netherlands Development Organization (SNV) has revealed some historical evidence that confirms great potential in goat markets: between 1985 and 2000, Zimstock exported 1000 commercially produced male goats to Mauritius per month. The export permit was, however, cancelled around 2000. In recent years, Cold Storage Company (CSC), Associated Meat Packers (AMP), and NashCo-Farmsaver (Mount Hampden) abattoirs have received some inquiries from Bahrain and Dubai for supplies of at least 30 tons of goat meat per month. They have so far failed to deliver the needed quantities.

Despite the great potential, the market demand for goat meat cannot be met by the current supply volumes and on average there is a demand gap for goat meat of at least 60% (Nyathi et al., 2007). Public investments in goat production and marketing are insufficient and policies incomplete. Traditionally, in Zimbabwe, government and NGO development initiatives have focused more on crops rather than livestock, mainly because food security has largely been defined in terms of crop production. Within the livestock sector, support was focused on the commercial sector (mainly beef), and on veterinary services, but other livestock management issues such as feeding, water and shelter were not adequately addressed.

Opportunities in the goat sub-sector

A livestock scoping study confirmed great opportunities for small stock, particularly goats, to improve livelihoods among rural households in Zimbabwe, provided that livestock productivity is enhanced and appropriate inputs and services can be availed (Sibanda, 2005). The study revealed that 98% of an estimated number of 3 Mio goats in Zimbabwe are produced by the less affluent section of the community. If farmers would improve their management regimes, the number of goats could be increased by 40–60% within 2 years.

A recent study on goat production and marketing commissioned by the Goat Forum revealed that farmers value the multiple functions of goats and rank income as most important, followed by meat, milk, manure and traditional rituals (Homann et al., 2007). Farmers find it easier to dispose their goats than their cattle because they keep their cattle for draft power and milk. Improved goat production and better access to markets can therefore make a substantial contribution to enhancing the livelihoods of the rural poor.

Looking at the major market flows of goats in Zimbabwe, Nyathi et al. (2007) confirmed that most goats and goat products originate in Matabeleland mainly from Beitbridge, Gwanda, Matobo, Bubi, Binga, Mangwe and Bulilima districts. For Masvingo, they originate mainly from Chivi, Chiredzi, and Mwenezi districts. For example, in 2006, more than 30000 goats from Gwanda were registered as being sold and another significant number was sold through informal channels that were not documented. The flows confirm that the main market destinations for goats are urban areas, such as the principal cities of Harare and Bulawayo, where many poor people need access to low-cost quality protein, and higher income groups can afford to pay for higher quality protein. Improving the efficiency in goat production and marketing operations could enhance these market flows. This would drive farmers in the rural supply areas towards commercialization.

Developing specific value chains can enhance the efficiency in goat production and marketing. This includes the establishment of public-private sector partnerships between the main players in the goat sector, such as government departments (AGRITEX, local authorities), private sector (butcheries, transporters, abattoirs, supermarkets and restaurants), non-governmental organizations (NGOs) (Plan

International, Heifer International, World Vision, Practical Action), research organizations (ICRISAT), and input suppliers (animal health, agro-processing feed suppliers, banks). These value chains are aimed at empowering small-scale goat producers and transforming them into well-informed players in market-oriented goat production. This should improve the competitiveness of goat producers and consequently contribute to economic development as well as improving the livelihoods of the poor.

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Importance of Goats for Small-Scale Farmers

André van Rooyen, *ICRISAT*

Introduction

To fully appreciate the role of goats in human livelihoods in Zimbabwe, it is useful to consider the contribution of livestock to the national economy. Sixty-six percent of Zimbabweans engage in agriculture as a major source of income and 27% find employment in agriculture. Agriculture contributes 17% of the national GDP and livestock production 21% of the agricultural GDP.

Recent changes in the agricultural sector in Zimbabwe have resulted in reduced commercial cattle herds. Beef production is down by between 60 and 75%. Furthermore, growth rates for meat and milk are negative and there are serious shortages of inputs – both hardware (infrastructure, animal health products, feed etc.) and software (information, support services, and institutions).

However, with these changes also come opportunities. There are opportunities for small-scale livestock keepers to engage in commercial production that would fill the void in the market left by the reduction in the number of commercial livestock farmers. In addition, the livestock revolution suggests that meat and milk production in Zimbabwe should rise to between 39% and 36% respectively to maintain current consumption levels; this in itself represents a huge opportunity. There have also been changes in the market demand. Goat meat now compares favorably with beef in local meat markets and retailers commonly cite shortages of goat meat as a challenge.

The role and value of cattle and goats

Results from the goat survey undertaken by the Goat Forum indicated that livestock is by far the most important source of on-farm income in the semi-arid areas of Zimbabwe (Homann et al., 2007). More than 60% of farmers cited livestock as one of the top three sources of income, followed by remittances and cash crops, crop farming, labor and other small-scale industries (Figure 1). Income from livestock is primarily used to purchase food items that are not produced on-farm and to fund education (Figure 2).

When comparing the role of cattle with goats it is clear that cattle are primarily used for their flow products (milk, draft power and manure) whereas goats are a major source of cash income and meat, adding to household nutritional security (Figure 3).

While cattle take the highest position in terms of cultural, monetary, insurance and prestige values, ownership has dramatically declined in the recent past. On average, 38.9% of goat owners interviewed for this study had no cattle, varying from 19.3% in Nkayi to as much as 49% in Gwanda (Table 1). Cattle herds were also small and varied between households. Among the cattle owners, 25% of the households owned less than three head of cattle, 25% owned between three and five head of cattle and 25% of the households owned more than 10 cattle. The remaining 25%, those with a potential for commercialization, ranged from 11 to 51 heads of cattle.

Table 1. Percentage of households that do not own cattle in six districts of Zimbabwe

Total	Beitbridge	Gwanda	Matopo	Binga	Nkayi	Tsholotsho
38.9	43.7	49.0	47.4	40.7	19.3	31.5

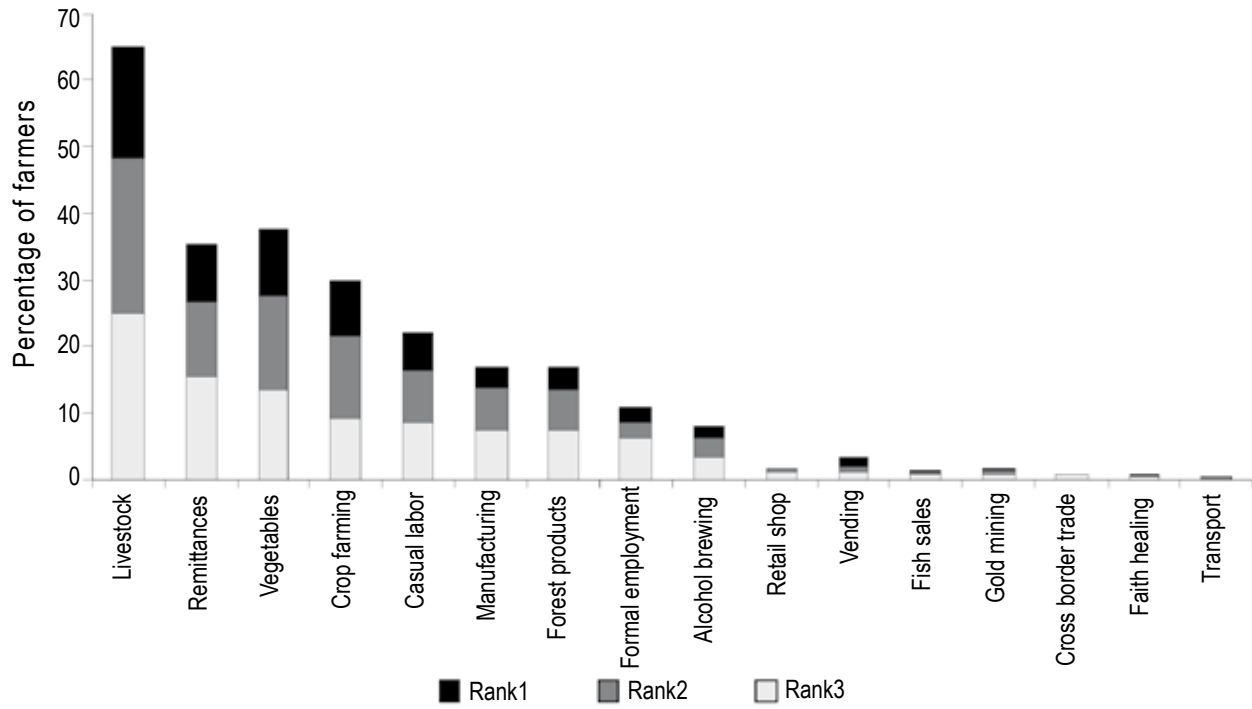


Figure 1. The sources of income for small-scale farmers in semi-arid Zimbabwe.

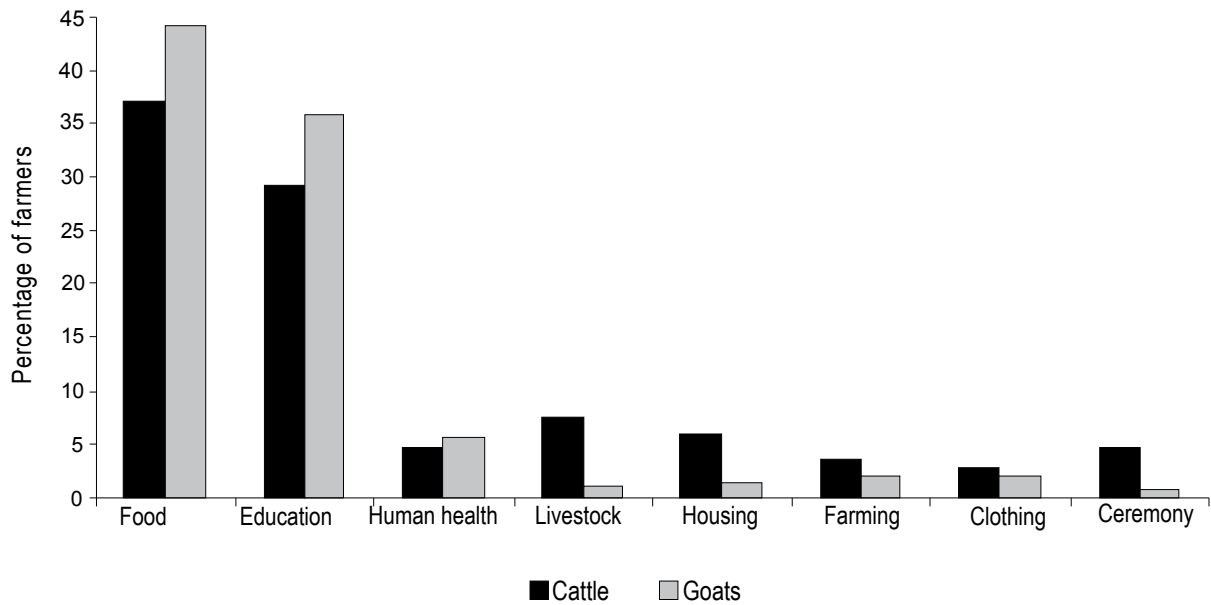


Figure 2. The investment patterns of income generated from livestock, cattle and goats, in Zimbabwe.

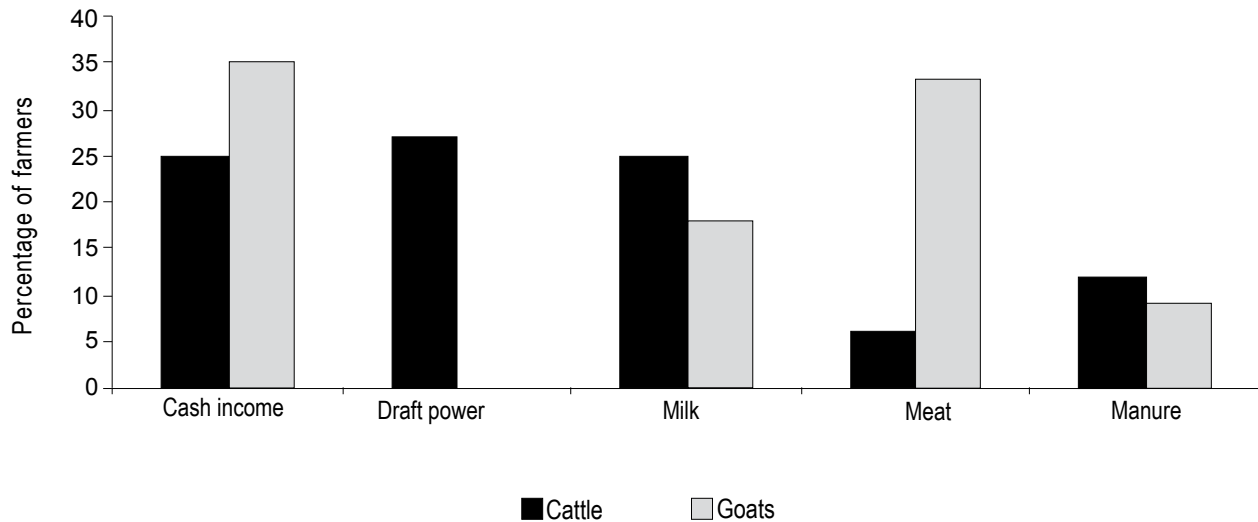


Figure 3. The functions and relative importance of cattle and goats in semi-arid Zimbabwe.

This shows that a very large sector of the rural poor do not own cattle and subsequently do not have access to the goods and services offered by cattle, which increases their vulnerability. Typically households without cattle cultivate smaller fields later than recommended and have less manure to fertilize fields, as they have to hire or barter draft power and only obtain oxen after wealthier families have completed their land preparation. These households usually do have goats and their dependence on their small stock is significant. Protecting and increasing these herds can make a huge impact on food security and education.

Determinants of goat ownership

Most owners of goats were fathers (41.7%), followed by mothers (35.8%), sons (13.9%), daughters (5.9%), and extended family members (2.7%). Goat ownership has a strong gender component as many women in all districts owned goats. The fact that sons and daughters owned goats underlines the importance of addressing the young generation as custodians of goats for improved management.

Male-headed households kept larger goat herds, followed by de facto female-headed households (Table 2). Households with a male component owned more goats than de jure female-headed households or child-headed households, the latter thus being more vulnerable. Ownership was not significantly influenced by age, but better educated household heads owned larger goat herds. This clearly illustrates the need for different development approaches when dealing with different types of ownerships.

Table 2. Mean goat herd sizes and socioeconomic household characteristics

	Mean	Median test
Household headship		
Male	14.1	*
De facto female	10.6	
De jure female	9.5	
Child	7.3	
Age		
40 yrs and below	10.9	ns
41–60 yrs	13.5	
More than 60 yrs	12.8	
Education		
Illiterate	10.5	*
Primary education	12.1	
Secondary education	14.7	
Advanced/tertiary	13.2	

* a statistically significant difference between the herd sizes within the categories: headship, age and level of education.

Decision making and labor in goat management

All family members contributed to the decision-making process and labor with regard to goat production (Figure 4). Fathers and mothers made the majority of decisions on goat management and sons were also involved. Fathers were more involved in decisions about health, slaughter and sales; however, mothers also decided in all aspects of goat management. It is important to note the high proportion of women involved in making decisions on slaughtering (household nutrition) and sale (income).

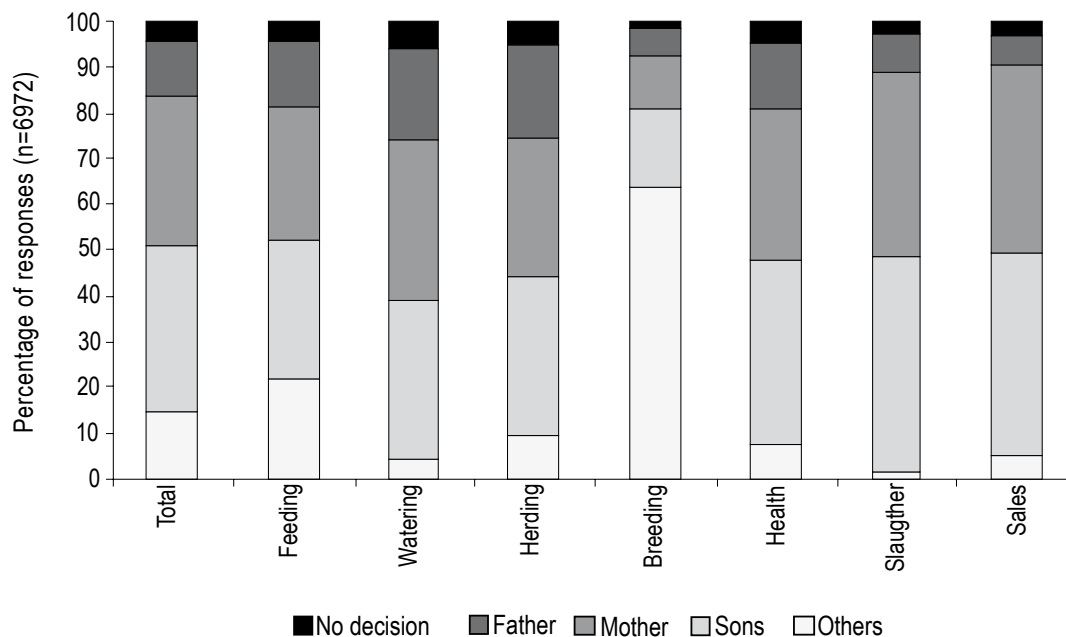


Figure 4. The relationship between labor division and household membership

In terms of labor, sons were generally more involved than fathers and mothers. They provided more labor for feeding, herding, and watering than other family members. Fathers and mothers provided more labor to animal health and sales and fathers and sons provided most of the labor for slaughter.

An important observation is that a significant proportion of farmers did not make any decisions or invest labor in goat management. Farmers exercised little control, particularly with respect to feeding and breeding, but relied on communal resources instead. More than 60% of the farmers did not actively manage breeding and more than 20% were not active in feeding. Addressing these two management aspects could have huge returns by reducing mortality and increasing the productivity of goats.

Conclusions

Goats contribute significantly to human livelihoods through the provision of food, directly through meat and milk and indirectly by increasing farmers' ability to buy foodstuff not produced on farm. Goats complement the value of cattle and their role is increasing in the rural areas of semi-arid Zimbabwe. They contribute significantly to funding education, which is a critically important determinant in increasing off-farm income and the ability to manage livestock more efficiently. Goat production is sensitive to the needs of the vulnerable and addresses important issues with regard to the increasingly important role that women play as heads of households and decision makers in the rural landscape. Facilitating the development of increased goat production will thus build human livelihoods and contribute directly towards the Millennium Development Goals. However, this will require the establishment of transparent and efficient markets where both the rich and poor can sell goats. Such markets will not only ensure a constant supply of affordable meat to both rural and urban consumers, but will also provide the incentives required for increased investment in sustainable competitive goat enterprises.

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Discussion

Question: Apart from cash income and food, did you consider other benefits of goats such as the social contributions and manure?

Answer: The study considers the social role of goats. Previous studies have shown the social contributions to be greater than others, but shifts in the contributions have been noted over time. Under current conditions in Zimbabwe, goats' economic and nutritional contributions outweigh social contributions.

Question: How significant is the cash contribution of goats compared to cattle?

Answer: The role of cattle is different from the role of goats. Cattle can be viewed as an interest and savings account whereas goats are a current account.

Goat Production and Management

Joseph L. N. Sikosana, *DAR4D*

Background

The Goat Forum study on goat production and marketing identified high numbers of goat mortalities as the key challenge that restricts small-scale farmers from realizing the maximum benefits from their goats (Homann *et al.*, 2007). On average, 26% of a household's goats died, whereas only 11% of the goats were sold and 7% were slaughtered. Goat mortalities affected young and adult goats across the study districts. Goat mortalities spike during the dry season (July–November) when feed and fodder resources become scarce and of lower nutritional quality. Poor nutrition renders goats more susceptible to diseases and less able to recover from stress. Farmers need their goats for sale mainly in January to cover school fees and for slaughter in December, the festivity season. Reducing the number of goat mortalities during the late dry season could directly avail more goats for the sale and slaughter peaks.

Although farmers appreciate goats for their multiple functions, they invest little in management technologies that would secure goats' survival in dry seasons or even to achieve higher performance of their herds. As a result, goat productivity remains low and farmers have fewer goats available for use. They are forced to keep their goats merely to maintain their herds. It is especially important for poor households to maintain their minimum herd size as they depend more heavily on goats and often have few alternative means for quality nutrition or to cover the purchases of their daily needs.

The study concluded that reducing goat mortality through improved management is the most effective way of supporting small-scale farmers in semi-arid Zimbabwe. This would help poor farmers maintain goat herds in production and better-off farmers would benefit from enhancing the performance of their goat herds, enabling them to enter into more commercially oriented production.

Priorities for goat production and management

The following paragraphs throw some light into farmers' existing management practices, their challenges and constraints, and how these can be overcome.

Feeding

Farmers depend on natural rangelands to feed their goats. However, these feed resources became limited in quantity and also vary with the prevailing weather conditions. During the dry season the rangelands lose feed quality and are not sufficient to maintain goats in healthy condition. According to farmers' information, feed shortages are common during the months of July to November. Dry season feeding is of high priority to them in order to alleviate feed shortages and ensure the survival of goats.

The feed calendar (Figure 1) shows that farmers supplement their small stock nutrition during the dry season, contrary to the assumption that goats survive from rangelands alone. Most farmers (83%) supplemented rangeland grazing by feeding legume residues (groundnut hay, cowpea hay, and bambara nut hay) or cereal crop residues to their goats (mainly sorghum and maize). Some farmers improved the nutrition of their goats by cutting and carrying legume trees or collecting Acacia pods. Few farmers also purchased commercial feeds. However, growing forages was not common. Despite farmers' efforts, mainly using locally available material, goats' body conditions during dry periods deteriorated.

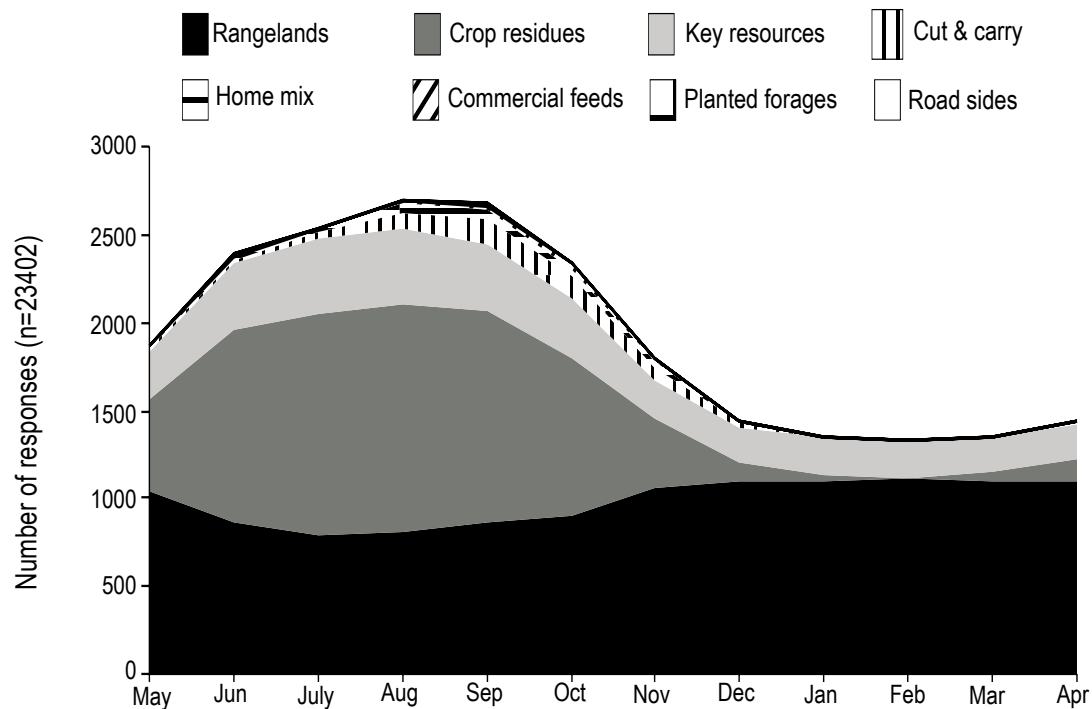


Figure 1. Seasonal feed resources across the study districts for the year 2005/2006.

Improving animal nutrition to reduce dry season mortality and augment animal condition will require access to information and support services, as well as inputs. Many farmers indicated they have access to alternative feed sources, but they lack the know-how regarding processing and storage. Much can be done to improve farmers' capacity to add value to their feed resources. In addition, there is a serious need to investigate the potential of improved dual-purpose crops and fodder varieties in semi-arid Zimbabwe.

Animal health

Farmers showed a basic understanding of goat diseases, prevention, and treatments. Most of the diseases mentioned by farmers were location and season specific (Figure 2). Three quarters of the farmers reported goat disease problems during the dry season, which could be due to poor nutrition and subsequent poor body condition. The common diseases during the dry season were pulpy kidney (enterotoxaemia), internal parasites, tick-borne diseases, and eye problems. Farmers reported fewer diseases during the rainy season; these included foot rot, tick-borne diseases, and pulpy kidney. Internal parasites were a common problem throughout the year.

More than 40% of the respondents attempted to prevent some of the diseases mentioned and more than 50% attempted to treat diseases. Disease prevention and treatment involved traditional, non-conventional, and conventional methods. The frequent use of traditional medicines was however not a reflection of farmers' deep indigenous knowledge, but rather existed by default as the inputs and know-how to apply the other methods were either inaccessible or unaffordable.

For effective disease prevention and treatment, farmers' need access to information on farm-level disease management and they also need access to relevant support services (animal health care clinics) and inputs (vaccines, dipping, dosing and medical care). This will require increased government investment in personnel, infrastructure, and input supply.

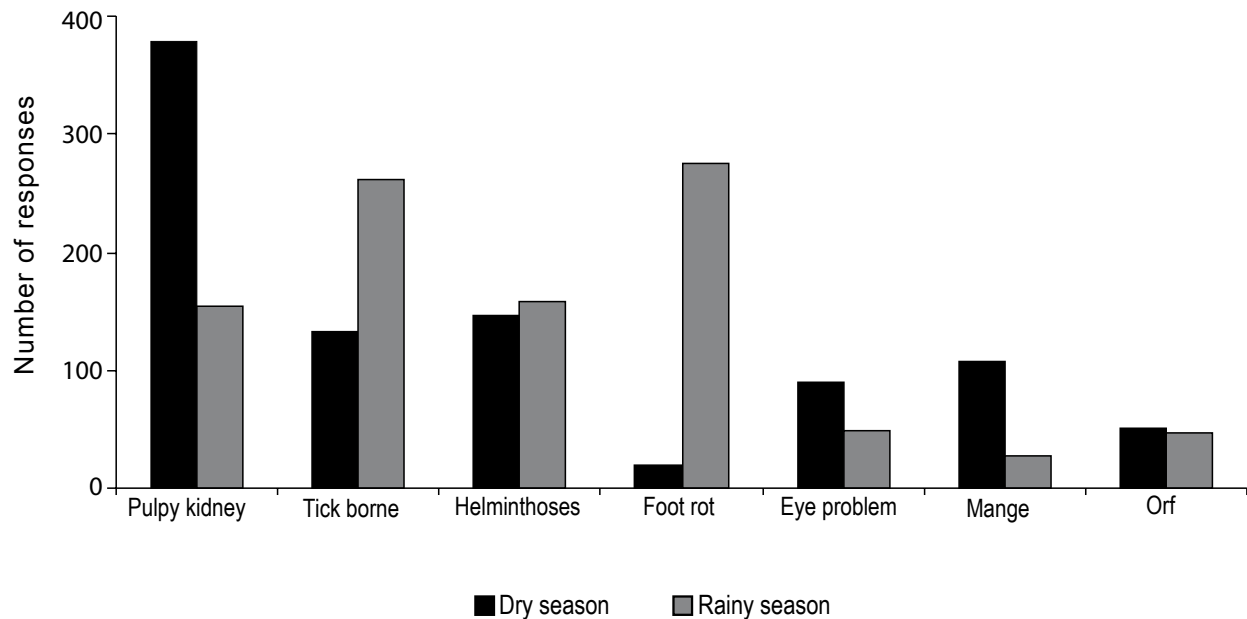


Figure 2. Most common seasonal diseases across the study districts for the year 2005/2006.

Housing

Most farmers house their goats in open kraals. They lack the awareness that appropriate shelter can prevent many goat diseases and reduce mortality rates, especially for goat kids. Kids are highly vulnerable to cold and wet periods and soon succumb to exposure. Foot rot is a common problem during the wet season when goats are housed in muddy or water-logged conditions. Dry, well-ventilated housing has been proven to be highly effective in reducing deaths during the wet season.

Many farmers also seem to be unaware that very effective goat shelters can be built from local materials costing little more than the price of labor. Proper housing would protect animals against wind, cold, disease risks, rain and muddy conditions, which prevail during the rainy season.

Breeding and husbandry

Maintaining and improving a good breeding stock is an important element to goat management. However, although farmers see the importance of improved breeding, uncontrolled breeding is practiced in the communal areas, compromising planning for mating periods and selection for quality criteria. As a result, goats tend to kid any time of the year. Under controlled mating, kidding could coincide with periods of better feed availability or planned supplementary feeding. Furthermore, only 33% of the farmers maintained their own breeding buck. In most of the flocks with a breeding buck the proportion of males to females was very low – 1:7 as opposed to the recommended ratio of 1:25. Many farmers did not realize the value of maintaining breeding bucks, as they could not control access to their bucks. Instead, they tend to castrate the males in their flocks, as a measure of reducing straying or improving meat quality. Farmers cull their goats, but this is mainly due to old age or poor condition, which does not improve the breeding quality.

Access to management information

Farmers had a major handicap in accessing information on goat management as well as information on markets, inputs, and service provision. Farmers prioritized a need for information on animal health, followed by marketing, feeding, and breeding. Most of the management challenges can be overcome with simple technologies or know-how on how to implement the improved management options.

Although more than 50% of the farmers had access to information from various sources, most information flows were between farmers. While information flows from farmer-to-farmer are highly effective, sources of new information or improved technologies are limited. The second-most important sources of information were government departments in the Ministry of Agriculture, NGOs, and local authorities. However, information from these sources are generally weak and interaction irregular. Appropriate ways of communicating with farmers need to be found and relevant information must be made accessible to them. In addition to this, enabling farmers to use new information or knowledge also requires access to inputs: improved dry season feed is often impossible because of a lack of genetic material, knowledge regarding growing, processing, and storage of feed and dual-purpose crops. Similarly, animal health is weakened by the lack of infrastructure, such as dip tanks for goats, acaricides, and other animal health care products. Success in improving the current situation thus depends on greater access to information, know-how and the relevant inputs.

Relationship between goat sales and management investment

The study also investigated whether farmers who sell more goats also invest more in goat management, indicating a disposition to commercialize. However, a clear pattern between higher sales and management investments could not be found. Farmers who sold more goats invested more in practices such as purchasing breeding bucks, castrating bucks more often, culling for higher performance, and providing roofed housing; but they were not necessarily more involved in disease prevention and treatment or feeding, which would be the most effective strategies to avail more goats for sale. These results indicate that although farmers are aware of the need to improve management and do participate in goat markets, they have not yet developed strategic investments for obtaining higher market benefits from goats.

Conclusion

As the first steps to building healthy profitable goat enterprises in Zimbabwe, basic animal health, nutrition, and housing initiatives are needed to reduce mortality rates. This would allow farmers to build their flocks and produce quality animals for household consumption and sale. Effective goat markets are needed to encourage farmers to invest in improved management. Linking extension and input delivery more directly with marketing strategies will improve production and create better prices for farmers. The resulting higher productivity and offtake rates would make significant contributions to improving rural livelihoods.

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Discussion

Question: In order to get a highly productive Matabele goat, what is the one single factor you need to work on?

Answer: There are several interacting factors, such as feed and health management, that affect mortality rates. These should be addressed first.

Question: Do you have any insights on the use of traditional remedies and disease prevention methods? Has any research been conducted on these methods?

Answer: The advantage of traditional remedies is that they have been known to reduce costs. However, traditional remedies also have limitations, for example, dosages are not known. At Matopos Research Station, research was conducted using some local herbs and other plants with high tannin contents to control internal parasites, mainly worms. In South Africa there are already similar efforts. There is a global shift towards animals that are organically produced (no chemicals). This represents an opportunity for Zimbabwe.

Question: How do the mortality statistics at Matopos Research Station compare with the survey data?

Answer: Mortalities at Matopos Research Station used to be at 30% before we started improving housing etc. However, it is still fairly high probably due to a high concentration of animals in one place.

Comment: Your results have shown that the primary means of information transfer is from farmer to farmer. However, the quality of information shared was not measured. We need to determine whether farmers are giving each other high-quality information. And if not, we need to determine how to provide them with good information so that they can pass it on to each other.

Question: What is the relationship between management and the number of goats that are sold? Did you analyze whether marketing had an influence on the activities that were invested in?

Answer: The study results show that those farmers who sold more goats invested in various management practices. But the investments were not consistent and did not necessarily yield higher benefits. For example, farmers did not increase feed utilization or invest in better quality feed. So while the inclination to invest in improved technologies is evident, farmers' actions do not necessarily translate to higher sales or greater profits.

Promoting Goat Markets and Technology Development in Semi-Arid Zimbabwe for Food Security and Income Growth

Sabine Homann, ICRISAT

Background

In the past 25 years, livestock production has tripled and per capita consumption of meat has doubled in the developing world. While developing countries accounted for 80% of the growth in global livestock production during this period (FAO, 2005a), this “revolution” has largely bypassed southern Africa (Delgado *et al.*, 1999). Livestock production in the region needs to double to fulfill demand during the period to 2020. For this to happen small-scale livestock producers need to be better integrated into the commercial market.

Zimbabwe has an estimated 3 Mio goats of which the vast majority is owned by small-scale farmers in mixed crop-livestock systems (FAO, 2005b). Although these low input systems are not highly productive, households do realize most on-farm income from livestock (FAO, 2005a). Goats, specifically, are utilized to supplement household food requirements and sold to purchase food items and fund educational expenses (Homann *et al.*, 2007). The recent collapse of the commercial livestock sector in Zimbabwe provides a unique opportunity for small-scale farmers to make use of existing infrastructure and local and regional markets to commercialize goat production.

However, at present, the commercial market for goats remains grossly underdeveloped. Weak public and private sectors are failing to provide the necessary inputs and know-how (Hargreaves *et al.*, 2005) and the erratic climate and frequent droughts often result in dry season feed shortages and high mortality rates.

Our major objective is to shift small-scale farmers from low input to more competitive market-oriented goat production systems. We hypothesize that if markets are better developed and market linkages are strengthened small-scale farmers will invest in improved technologies to increase production, improve animal quality, and consequently increase market-related offtakes. We expect that this will yield immediate (income growth, food security) as well as longer-term benefits (reducing environmental degradation, improved sustainability of agro-ecosystems).

Facilitating the development of competitive goat production systems in Zimbabwe

Most livestock projects in the past have focused on promoting specific technologies and have largely failed because they ignored socioeconomic and institutional issues (LID, 1999). We have followed a more integrated approach by investigating challenges (and opportunities) from production to consumption along a value chain, while also addressing policy and institutional factors affecting goat production.

Table 1 represents a simple goat value chain in Zimbabwe based on a reconnaissance survey conducted with goat market players in September–October 2005. Further analysis, based on key person interviews, household surveys and participatory rural appraisals identified the challenges at each stage of the value chain. The development objectives to address these challenges and probable impact pathways to achieve the overall goal are also included. An analysis of Table 1 reveals two critical factors – low production and poorly developed markets – as primary constraints to achieving more competitive goat production.

Table 1. Goat value chain challenges, development objectives and impact pathways in Zimbabwe

Players	Challenges	Development objectives	Impact pathways
Farmers	<ul style="list-style-type: none">• High mortalities• Low offtake rates• Poor animal quality• Low product prices	<ul style="list-style-type: none">• Improve access to input and support services (health, feeding/water, housing, marketing)	<ul style="list-style-type: none">• Higher goat production levels• Higher incomes and food security
Input suppliers	<ul style="list-style-type: none">• Lack of inputs, technology and information• Limited service capacity• Lack of policy and advocacy	<ul style="list-style-type: none">• Improve targeting and access to inputs and technologies• Create enabling legal frameworks	<ul style="list-style-type: none">• More technology uptake and production systems development
Market players	<ul style="list-style-type: none">• Poor market access, organization, facilities and infrastructure• Lack of market information, pricing, grading, weighing and control systems	<ul style="list-style-type: none">• Improve access to market services and infrastructure• Reduce transaction costs (transport bureaucracy)• Improve communication between stakeholders	<ul style="list-style-type: none">• Competitive markets• Investments in market development• New public-private partnerships sustain market activities
Processors & retailers	<ul style="list-style-type: none">• High processing costs• Inconsistent product supply (volume, quality)• Product demand not met	<ul style="list-style-type: none">• Evaluate market potentials• Develop markets for low cost and high-quality products• Align supply and demand	<ul style="list-style-type: none">• New niche markets• Investment in value addition and product diversification
Consumers	<ul style="list-style-type: none">• Lack of information on consumer preferences and willingness to pay	<ul style="list-style-type: none">• Higher flows of livestock products within rural and to urban areas• Improve low cost and high quality protein supply	<ul style="list-style-type: none">• Supply of low cost and high-quality products ensured

Production constraints

High mortality rates

The majority of households in Zimbabwe (52%) have herds of fewer than 8 goats and 30% have between 8 and 20 goats. Only 18% of households surveyed had more than 20 goats. Given the relatively small herd sizes, farmers in Zimbabwe cannot afford to lose many animals through mortalities. The study showed, however, that farmers lose 26% of their goats to mortalities whereas only 11% were sold and 5% slaughtered for home consumption (Figure 1). Even though the total outflows from the herds are large (>40%), only 16% of goats are gainfully utilized. Reducing mortality rates has thus been identified as the most effective strategy to increase productivity and herd sizes.

Poor management

The main cause of high mortality rates is poor management practices, and, more specifically, lack of dry season feed, poor animal health and housing. Addressing these three factors individually or collectively can substantially reduce mortalities. However, we argue that, without the appropriate market-based incentives, farmers will be unable or unwilling to invest in improved management strategies.

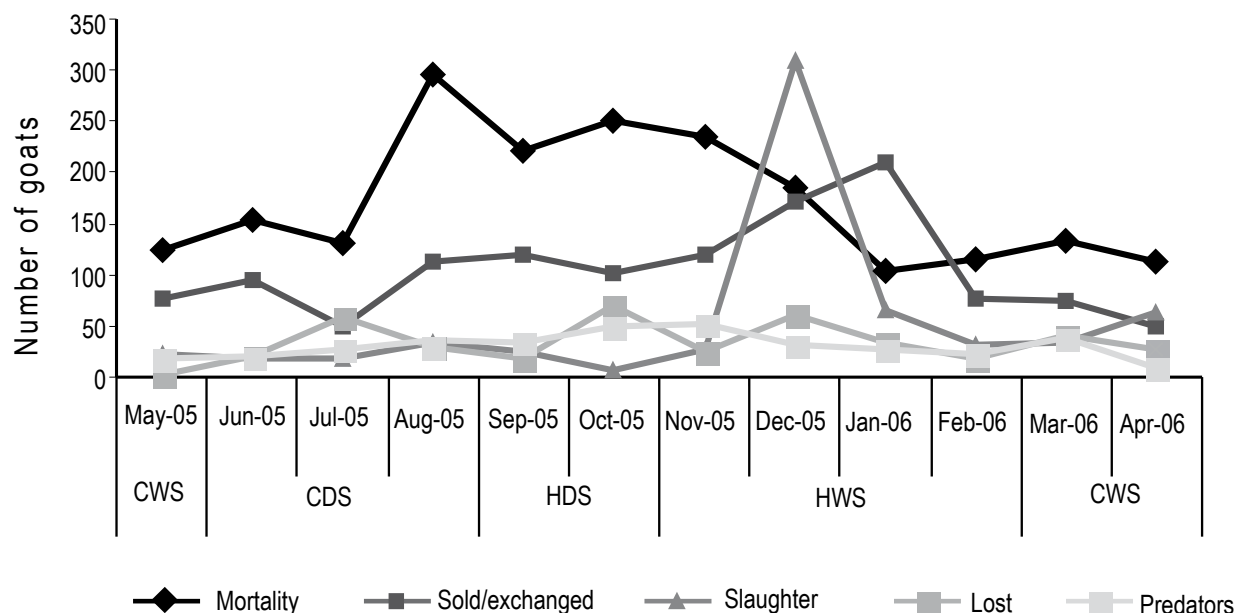


Figure 1. Monthly outflows in goat flocks in Zimbabwe.
(CWS=cold wet season, CDS=cold dry season, HDS=hot dry season, HWS=hot wet season)

Market constraints

Input markets and production support

Inputs, technologies and information have to a large extent been focused on the large-scale commercial producer. Therefore, apart from a lack of knowledge and information, inputs such as vaccines, acaricides, and commercially produced animal feeds are not accessible to the small-scale producer because of high procurement costs, transport logistics and costs, and bulk packaging.

Output markets and market intermediaries

Producers often do not have access to markets – a function of distance to a market place, market places with inadequate infrastructure, lack of information regarding the market process, rules of trade, pricing grading and control systems. On the other hand, buyers/traders/processors face challenges of low product quality and inconsistent and/or low product supplies, making continuous flow to the consumer impossible.

Can market-led technology development enhance the adoption of improved technologies?

Results from this study suggest that increased goat sales will increase managerial investment and that better market access improves offtake rates.

Goat sales increase managerial investment

Farmers who sold more goats invested more in certain management components such as purchasing breeding bucks, castrating bucks more often, culling for higher performance and providing roofed

housing than those who sold fewer animals. While these strategies suggest a willingness to invest in improved technologies farmers would have better results if they invested more in goat health and feeding.

Market access improves offtakes

More goats were sold in districts with better-developed goat markets (Gwanda and Binga) than where markets are weak (Table 2). In districts with more market development, traders often buy goats in bulk for sale to urban areas. These traders play an important role in facilitating higher offtakes. In the districts with limited market development farmers largely depend on farmer-to-farmer sales.

Table 2. Research districts categorized by the mean number of goats sold

Districts	Market development		
	Less	Medium	Higher
Tsholotsho	0.56		
Nkayi	0.75		
Matobo	1.13	1.13	
Beitbridge		1.52	
Gwanda			2.83
Binga			2.91

Need for improved input and output markets

There is thus some evidence of market-driven investment in improved management. However, considering the informal character of existing goat markets and lack of clear incentives (low and erratic price structures), we conclude that farmers would further increase managerial investment and sell more animals if both input and output markets were to improve.

Way forward

From the previous sections it is clear that improved goat production and marketing can play an important role in food security and income growth for small-scale farmers while providing options for local and regional market development. How does one implement such a process?

Innovation Platforms

Fora for participatory identification and implementation of strategies are being developed to facilitate competitive production systems and reduce transaction costs along the value chain. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and partners are establishing Innovation Platforms which bring all players in the goat value chain together to collectively identify opportunities and challenges that need to be addressed to improve goat production and markets in Zimbabwe. These Innovation Platforms, consisting of stakeholders pertaining to an existing local market system, evaluate specific local constraints in production and marketing and suggest agreeable options for improvement through dialogue, implementation, evaluation, and adaptation. With all role players present, buyers relate demand and quality expectations directly to producers, and producers and market intermediaries can articulate challenges and address these collectively. The research

and development community suggests specific technologies to address these challenges and opportunities. These changes in production and marketing are then implemented and evaluated.

This process allows for the selection of the most appropriate technology packages (feeding, animal health care, housing) and input delivery and improved marketing systems for any given location. Moreover, the approach engages public and private as well as policy players in a common vision and catalyzes a better understanding of how to achieve this. Keeping all players engaged and motivated requires a significant investment in facilitation during the initial phase. Ideally this role will be taken over by the key stakeholders during the course of the development of the Innovation Platform, thus ensuring sustainability.

Technology and market systems development for all

Farmers can be placed within two categories: those with smaller herds who rely heavily on goats during times of distress and who need support in building herds and increasing production, and those with larger herds who need support to improve both productivity as well as quality. An important consideration for the Innovation Platform approach is that research and development work should better target the specific needs of each category and better align production with market demands. This will improve the efficiency of the entire system and ensure that stronger individuals within the system do not trap all the benefits.

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Discussion

Question: From the marketing side, it is important to look at what the consumer wants. However, that seems to have been ignored.

Answer: This time the focus was on the production side. However, we will be conducting other studies, which will consider the consumers, among other issues.

Question: Did you determine whether farmers sell their goats for immediate needs or whether they plan their sales in advance as this will determine the quality of the goats sold?

Answer: Farmers are currently selling their goats mainly to meet an immediate need for cash. There is need to raise the awareness of farmers in terms of the potential of goats as a commercial enterprise.

Question: What do we need to energize the value chain to deal with the challenge of informal markets?

Answer: We believe that dialogue is the answer. The Innovation Platform promotes dialogue among the key role players in the value chain. This should generate a considerable amount of energy to achieve the desired commercial activities.

Question: We are concerned about re-inventing the wheel. What prevents this from going the same way as other projects?

Answer: We are not re-inventing the wheel as much as we are making sure the wheel gets used by adopting a participatory approach when identifying the challenges at production and management level. For instance, demand for goat meat increases in December but farmers want to sell their animals in January when they need money for school fees. Therefore, the project aims to bring/test those technologies that will match supply to demand.

Question: Does the lack of sale pens and infrastructure have an effect on the number of goats sold?

Answer: Infrastructure is very important. For example, at the Zimbabwe International Trade Fair, there were no facilities to display goats during the auctions and this had a huge impact on prices. The lack of sale facilities is critical in Zimbabwe. Other southern African countries have formal markets but have gone through some stages of development. In Zimbabwe, we cannot transport goats in large numbers effectively, but we should adopt facilities from countries such as Namibia, where they use double decker trucks.

ACTORS AND ACTIVITIES TO ENHANCE GOAT PRODUCTION AND MARKETING

The Goat Forum

Nicholas Nyathi, *SNV*

Introduction

In March 2006 key stakeholders involved in livestock promotion in Bulawayo came together to discuss challenges and opportunities in goat production and marketing. These discussions resulted in the birth of a network – the Goat Forum. This outcome was a recognition that strong partnerships are necessary and that each organization donated their expertise in a given area to develop the goat sector effectively and lead farmers out of poverty.

The founding members of the Goat Forum are the Department of Livestock Production (DLPD now restructured as Agricultural Technical and Extension Services (AGRITEX)), ICRISAT, Matopos Research Station (MRS, now restructured as Department of Agricultural Research for Development, DAR4D) and SNV. The Goat Forum has since expanded to include the Department of Veterinary Services (DVS) and the Organization of Rural Association for Progress (ORAP). The Forum also collaborates with organizations such as the FAO, Small Ruminants Network, Zimbabwe Farmers Union, local authorities, and NGOs such as Heifer International or Practical Action, and bi- and multilateral organizations such as Deutscher Entwicklungsdienst (DED), SADC, and the European Union.

Goal

The main goal of the Forum is to discuss issues related to goat production, marketing and policy development. The Goat Forum also tasked itself with conducting joint activities, sharing knowledge and resources for synergy. This will facilitate the achievement of improved farmers' livelihoods and economic development through competitive goat production and marketing systems by 2015.

Objectives

The specific objectives of the Goat Forum are to:

1. Identify opportunities and challenges in goat production, marketing, support services, and policy sectors
2. Develop goat markets and infrastructure, and provide information as well as appropriate management technologies
3. Facilitate input and service systems based on strong partnerships between the public and private sectors
4. Develop capacities of farmers and government and non-government support systems
5. Coordinate and evaluate development interventions
6. Influence donors and policy makers for more investments
7. Source funding for research and development projects

Target groups

The main target groups of the Goat Forum are the resource-poor farmers who choose to keep goats to improve their livelihoods and the commercializing farmers who want to invest in goat production and marketing to regularly supply high-quality goats to the market.

Mode of operation

The Goat Forum works through regular meetings with a flexible agenda, and is hosted by SNV. The Forum plans and implements activities by creating ad hoc task forces in line with the vision and objectives. Membership is sustained by interest and commitment.

Current activities

Farmer representatives, as well as a number of other stakeholders in the goat sub-sector, especially those from chosen supply chains, are involved in the activities of the Goat Forum. Private sector participation is viewed as the key to the success of marketing activities. The buyers, transporters, processors as well as input suppliers are involved in dialogue platforms to discuss goat marketing and production issues.

The Goat Forum is currently involved in the following activities:

1. Implementation of EU–ORAP project on: *Improved goat production and market participation for food security and sustainable livelihoods in Zimbabwe*. This project has four objectives:
 - a. to establish an Innovation Platform to facilitate information flow between all players along the value chain and support the development of appropriate market channels, technologies and services in Zimbabwe
 - b. to increase the efficiency of related value chain processes, ie, reduced transaction costs through improved infrastructure, information flow, technology and partnerships
 - c. to increase the competitiveness of smallholder goat producers
 - d. to improve feed management technologies and natural resources use
2. Household assessments using questionnaires and participatory rural appraisals
3. Facilitating and piloting marketing systems, for example, goat auctions at the Zimbabwe International Trade Fair (ZITF) and in Gwanda
4. Capacity development of smallholder producers through training and exposure sessions, for example, exhibiting goats at ZITF and goat management and marketing trainings in Gwanda and Lupane
5. Documenting activities and processes jointly carried out by the Forum, for example, look and learn visits to Namibian livestock markets and to South African goat farms
6. Participating at national level activities for positioning and profiling the forum, for example, attending regular meetings held by the Livestock Working Group, hosted by FAO in Harare

Achievements

The Goat Forum's formation and institutional set up has allowed the network to collaborate on activities such as:

1. Publishing a baseline report and briefing notes on goat production and marketing, with joint data collection, analysis, feedback to farmers and report writing
2. Holding a national workshop on enhancement of incomes and livelihoods through improved farmers' practices on goat production and marketing in Bulawayo
3. Developing training modules on goat management and marketing, as well as new business models
4. Publishing an article in New Farmer magazine on experiences in goat auctioning at the ZITF

In terms of capacity development, the Goat Forum invested in the following activities:

1. Mobilized farmers for alternative market options, including information dissemination, association building, dialoguing with market players
2. Trained farmers on running goat farming as a business, production and marketing strategies
3. Facilitated farmer-to-farmer exchanges and other look and learn visits locally and regionally
4. Established Innovation Platforms for improved communication between farmers and market players
5. Developed marketing models (auction systems) that have been adopted by local authorities for implementation
6. Designed and published the Goat Forum brochure

The Goat Forum also managed to raise new resources. We received €1.9 million from the EU for a joint project on improved goat production and market participation for food security and sustainable livelihoods in Zimbabwe (the EU–ORAP project).

Though recently launched, the activities carried out by the Goat Forum have already resulted in changes in the sector:

- Farmer behavior is gradually moving from subsistence to commercialization of goats. Farmers became more aware of the causes of animal mortality; they established producer groups and increased participation in development activities.
- Participating stakeholders have started to strategize and design plans that are based on market driven and business approaches.
- Private sector organizations are starting to appreciate added value of business linkages and participation of rural farmers in the supply chain.

Lessons learned

The short period of collaboration among the stakeholders in this Forum has revealed important lessons. It is important to note that facilitating a partnership of organizations with diverse aims and interests is not easy. Such relationships are successful only if they are based on a common vision and shared objectives. Without a common vision, partners will not see the benefit of participating in an activity that does not have a bearing on what they believe.

Another important lesson emerging from this collaboration is that to successfully develop effective and working partnerships, there is need for members to be honest and engage in frank dialogue, highlighting areas of conflicts and interests. Partnerships that do not disclose important information not only create operational barriers, but also create suspicion and reduce commitment to the interests of the partnership.

The development of partnerships is a long-term process, not a single event. Since it takes time to build trustworthy partnerships, there is need for all partners to show their commitment and have patience in awaiting results. To this end, it is vital to realize that a partnership can only work if there are win-win opportunities and the value of participation for all partners is clear.

Consultation among collaborating organizations has been noted as an important factor in cementing mutual understanding and fostering a unity of purpose, so that the organizations can effectively complement their different skills and expertise.

Conclusions

Although the Goat Forum is young and still needs nurturing, it has shown great potential to provide guidance in transforming the goat sub-sector with benefits for poor households as well as commercializing farmers in the semi-arid regions of Zimbabwe. It places multi-sectoral collaboration at a new level that encourages the participation of the private and public sectors in the economic life of goat producers.

Discussion

Question: What does it take to be a member of the Goat Forum?

Answer: Interest and motivation. It is an open forum.

Question: Is it strictly corporate membership?

Answer: Yes. It is not for individuals.

Question: Is there a membership fee?

Answer: No. The Forum is more about commitment and interest in the goat subsector. It is not just about coming together, but is action oriented.

Question: To what extent has the Forum been formalized?

Answer: So far the Goat Forum is informal. It is driven by the natural momentum with interest in the issues facing the goat sub-sector.

Promoting Goat Marketing through Exhibitions

Darlington Sarupinda, *SNV*

Farmers can sometimes underestimate the value of their own assets. Many farmers in Zimbabwe undervalue their livestock because they have no clear idea of the prices. By exhibiting goats at ZITF the Goat Forum in collaboration with the Bulawayo Agricultural Society attempted to demonstrate the true value of goats to farmers in Gwanda and Matobo districts and the importance of collective action.

The ZITF, a week-long annual event in Bulawayo, arguably provides one of the most competitive markets for different products. This is why it was deemed the perfect location to demonstrate the commercial value of goats. In early 2007, members of the Goat Forum decided to identify and support farmers who had the ambition to exhibit goats during the ZITF which was scheduled for the end of April.

Objectives

The overall objective of exhibiting goats at the ZITF was to facilitate a shift in the mindsets of the farmers from keeping goats under poor management conditions to realizing how much more they can benefit from doing goat farming as a business. The specific objectives were to:

- support goat producers to exhibit and sell goats at a high-value urban market,
- enhance goat producers' awareness about the existence and requirements of high-value markets, and
- facilitate contacts between goat producers and market intermediaries (traders, abattoirs, transporters, etc.).

Target groups, partnerships, and stakeholder involvement

The target groups who were involved in exhibiting goats at the ZITF were both male and female small-scale goat farmers from Dzembe ward of Matobo district and Manama ward of Gwanda district. Matobo and Gwanda were selected because members of the Goat Forum had already some contact groups in the selected sites and these districts boasted large goat populations. The farmers actively participated in the complete process of preparation, exhibition, and evaluation. Farmers at both locations selected a representative who accompanied the goats to the ZITF. The farmer representatives manned the exhibition site on a full-time basis and interacted with the various visitors.

Members of the Goat Forum facilitated farmer participation at the ZITF by contributing resources and expertise during the mobilization of farmers, transport, training, and evaluation of the initiative. Some private sector actors donated resources to cover handling, supplementary feeds, and housing the animals. A private auctioneer was responsible for organizing the auction. A number of retailers and processors registered for the auction. A reputable private sector meat-processing firm made the highest bid and bought the goats.

Activities: preparation, implementation and evaluation

To set the ball rolling Goat Forum members convened awareness creation meetings in Gwanda and Matobo districts a month before the ZITF. Emphasis was placed on the need to exhibit good quality goats (young, good body conditions, and castrated male goats) that would achieve higher prices at the auction. Those farmers who were interested in sending their goats to the ZITF were assisted to prepare

for this event in the selection of appropriate goats, and on the ground vaccination, dosing, and tagging for identification. A total of 20 goats were then taken to Matopos Research Station for a couple of days where they were weighed and had their hooves trimmed with the full participation of accompanying farmer representatives.

A day before the start of the fair the goats were transported to the exhibition site at the ZITF grounds. Two types of goats were displayed: breeding and slaughter stock. They were displayed in open pens alongside those goats owned by research stations and commercial farmers. This gave buyers and visitors a chance to assess the goats before the actual auction.

On the second day of the fair, the goats were classified according to age based on their teeth: milk, 2, 4, 6 permanent incisor teeth, or full mouth. The goats were then judged on their body condition, posture, size for age, and the width of their back. The idea was to teach farmers about the quality assessment criteria. Goats from the rural farmers competed well against the goats from research stations. Farmers with the best goats were given certificates and prizes.

On the last day of the fair, the 20 goats were offered up for bidding. However, they had to be sold as one lot due to lack of appropriate infrastructure. The prices for goats went from US\$0.50 to US\$0.85 per kilogram live weight. Live weight prices for cattle ranged between US\$1 and US\$1.20 per kilogram. This demonstrated to farmers that their goats are valuable assets and could be sold for highly competitive prices. The prices they received were three times more than the prices they could have received at the farm gate. Farmers understood that by selling at the auction they created competition among the bidders which resulted in higher prices.

A week after the fair, feedback sessions were held where the farmers were able to discuss their experiences with regard to lessons learned and costs involved with members of the Goat Forum. The farmers realized the value and economies-of-scale that could be exploited from jointly marketing their goats in the high-value urban markets.

Outcomes

The initial benefits that came from exposing the farmers at the ZITF platform were higher prices for goats, better access to market information, and an understanding of the requirements of high-value markets. Through the auction farmers realized the value of their goats and started negotiating higher prices in their home areas. Figure 1 shows that farmers from Manama who participated in the exhibition started selling their goats at much higher prices compared to farmers in other localities in Gwanda, Beitbridge and Mwenezi. Before participating in the ZITF auction, farmers in Manama had been selling their goats at the same low price as farmers in the other locations. The increase in prices after their exposure at the ZITF translates into better access to food, health and other services if sustained in a stable macro-economic environment.

Another benefit from the ZITF initiative was the formation of a producer association in Manama ward. More than 80 goat producers from six villages in Manama came together to form the Manama Goat Producers Association with the goal of improving goat production and marketing. The Association members requested the Goat Forum to provide training on goat business management and improved husbandry practices. The training resulted in farmers implementing some management strategies that would reduce kid mortality, increase kidding rates, and boost offtake rates. These include improved housing, kid management, health management and feed management.

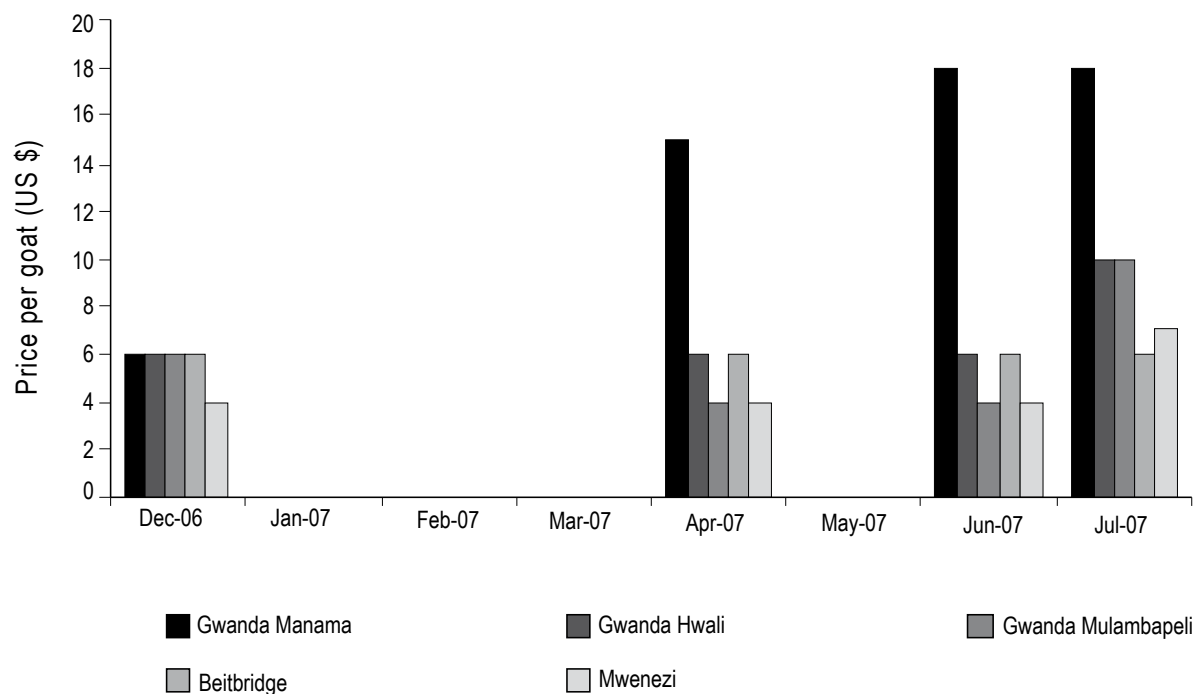


Figure 1. Average prices per goat (US\$) at different locations in Matabeleland South, Zimbabwe.

Lessons learned

Exhibitions provide a useful platform for small-scale farmers to learn about market processes and establish links with market intermediaries. A better understanding of market requirements and the support of various public and private service suppliers (stock feed suppliers, animal health services, traders, local authorities, transport, auctioneers, abattoirs, insurance) can enable farmers to sell improved animals at higher prices. Better collaboration with other stakeholders can result in better coordination, pooling of scarce resources at reduced cost, and improved service provision to the small-scale producers. Furthermore, exhibitions can encourage market development as they attract more goats for sale to supply the urban markets with higher quality products, and also as private sector actors participate with the intention of identifying new business opportunities.

Way forward

As a result of the ZITF initiative the Goat Forum planned a number of actions. These include:

- strengthening producer groups to increase their bargaining power and competitiveness, taking up additional functions such as bulking and transport, lobbying and advocacy,
- identifying other market opportunities and facilitating access to the markets and market information by smallholder producers,
- facilitating appropriate financial services for livestock sector players,
- facilitating multi-stakeholder dialogue and partnership building resulting in appropriate livestock business models with clear working arrangements, and
- supporting the development of enabling policy frameworks.

Discussion

Question: In preparation for the ZITF, goats were dosed and vaccinated. Are these normal farmer practices?

Answer: These are not normal practices for farmers in Zimbabwe. However, the preparations were meant to demonstrate to farmers good goat management practices that will result in better quality animals and eventually higher prices.

Question: How does the farm gate price of goats in Zimbabwe compare to that in Namibia and South Africa?

Answer: These prices cannot really be compared since Zimbabwe does not currently have a grading system.

Strengthening the Capacity of Goat Farmers through Training

Trinity Senda, *DAR4D*

Background

A goat production and marketing study carried out by the Goat Forum in the six districts of Matabeleland North and South showed that farmers lose a large number of animals to mortality, instead of being used productively for consumption and sale (Homann *et al.*, 2007). Low goat productivity keeps farmers at the stage of subsistence farming, trying to secure the survival of their existing goat herds. Under these conditions, farmers have little market orientation as few farmers have enough goats for sale and most goat sales are to cover farmers' immediate needs. Because farmers lack alternative market options they often sell their goats at the farm gate, where they are in a bad position to negotiate prices. As a result farmers have not been realizing the full potential of goat farming as a viable source of livelihoods for a long time. Since there is no attractive incentive, farmers invest little in goat production and management, perpetuating low goat productivity. It is because of this context that the Goat Forum found it necessary to train farmers as well as other stakeholders in goat production and marketing.

Objectives

The overall objective of the training sessions is to enhance farmers' understanding of marketing processes and strengthen their skills in goat production and management. This is expected to enable farmers to obtain higher benefits from their goats. The specific objectives are to:

- increase farmers' awareness that goat production is a viable enterprise for improved livelihoods if properly managed;
- strengthen farmers' capacity to produce, manage, and market goats to a level that competitive goat enterprises are established in the smallholder sector; and
- increase the interaction between farmers and other stakeholders in the goat value chain so as to increase the information about market requirements and the inputs needed.

Target groups

The training activities target goat farmers who are in the herd building stage as well as those who are more advanced in commercialized goat production. The activities preferably address goat producer groups who can easily mobilize each other and can promise mutual assistance after the training.

Activities

The training activities of the Goat Forum comprised several elements from conducting needs assessments to the development of a farmers' needs oriented training manual to actual training sessions for farmers, as well as integrating small stock issues on the agenda of extension services and producing awareness creation and information material.

Training needs assessments

Training needs in goat production and marketing were identified in Manama with the Manama Goat Farmers Association. The Association consists of farmers from different villages of ward 17. Farmers highlighted high kid and goat mortalities as one of their biggest constraints to goat production. These

mortalities were attributed to poor housing, poor nutrition, and high incidence of diseases. Another area of concern to the farmers was the lack of market information such as current livestock prices; alternative markets and what the market requires. To ensure that the suggested areas of training were not lost in the preparation of the manual, two members of the Association were invited to attend one of the meetings where the manual was being drafted.

Goat training manual development

Based on the results from the needs assessment and recommendations of the goat production and marketing study, the Goat Forum members developed a training manual that addresses the special needs of goat farmers in semi-arid Zimbabwe. The key topics of the module include goat production (ie, health, nutrition, housing, breeding,) as well as marketing and entrepreneurship. The research finding and technologies developed on Matopos Research Station were also incorporated into the manual. Department of Livestock Production (DLPD now restructured as AGRITEX), contributed their broad experience in livestock extension work and information dissemination to farmer groups. SNV contributed information on marketing and entrepreneurship. The module was drafted in such a way that it is easy to use by farmers and plans are underway to translate it into local languages.

Training sessions

Actual training sessions on goat production, marketing, and entrepreneurship were held in Manama and Lupane targeting farmers who were already organized into goat producer groups. The contents of the training were based on the manual and were further modified according to farmers' special request. The training team consisted of individuals from the different organizations engaged in the Goat Forum to exploit their expertise. The methods used for training included adult learning principles, meaning that a more participatory training approach was used. Farmers were invited to own the training process by organizing the venue for the trainings and selecting the group members to attend the sessions. During the training farmers were free to contribute to the way they were trained, and the agenda was arranged accordingly. Farmers were given breaks to boost the energy levels and keep them following the discussion. Members from the Goat Forum assisted in providing the materials required for training such as stationery and transport.

Extension services

The local DLPD extension staff was engaged in the training and was expected to provide further goat specific extension services for these farmers after the training. The DLPD has staff stationed in the communities in order to ensure continuous interaction with farmers. The department will enhance and improve the farmers' knowledge on goat production and marketing according to future needs. The department also drives the district agricultural shows and assists goat farmers in participating in these shows. This gives farmers an opportunity to interact with other role players in the goat sector.

Flyers, posters and pamphlets

The Goat Forum developed complementary material on contacts, activities, and key results that were distributed at various public places and events. This assisted in awareness creation and dissemination of key information to stakeholders along the goat value chain.

Impact

Training farmers went a long way in trying to improve their knowledge base in goat production and marketing. The training contributed to raising farmers' awareness on key production constraints, management options, and market requirements. This was evidenced by the farmers' interest to exhibit goats at the ZITF, and the type of animals they selected for this event. Most farmers are now keeping records on goat production parameters and tagging their animals. Some farmers have started purchasing veterinary supplies for their goats.

The training manual has reached many hands and generated a lot of interest from various farmers and support organizations. There have been a lot of enquiries on how the manual can be made available to the public. There has also been a call from the New Farmer magazine to write an article on goat production and marketing that would cover goat farmers nationwide.

Lessons learned

- Farmers have a lot of knowledge with regard to goat production. However, they need more information on the exact application of management strategies to reach certain purposes, as well as options for further improvements.
- Farmers learn a lot from each other and there is a lot of interaction between them. It is important to keep this momentum and strengthen farmers' opportunity to share experiences, especially during trainings. For instance, in Manama there was a farmer who was very knowledgeable on the urea treatment of stover, and after briefly presenting how it is done other farmers understood the subject a lot better.
- A practical session is always critical as farmers seemed to learn better by seeing and doing than by hearing or reading.
- Follow-up visits and further training is crucial to cover the full range of goat production and marketing issues during the different seasons of a year.

Way forward

- To promote easier understanding, the training manual needs to be translated into the vernacular.
- To reach a greater audience, the manual should be published and training opportunities for farmers should be advertised to various partners and at different events.
- There is need for further training of extension workers on goat production and marketing as they are in close contact with the farmers and can build on and further develop the training activities in their respective areas.
- Funds need to be availed for the further dissemination of training material as well as conducting training sessions for farmers and extension workers.

References

Homann S, van Rooyen A, Moyo T and Nengomasha Z. 2007. Goat production and marketing: Baseline information for semi-arid Zimbabwe. PO Box 776, Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid. 84 pp.

Discussion

Question: How big is the manual? Does it cover marketing and group formation?

Answer: The manual covers various aspects of goat production, management and marketing, but not farmer group formation. The topics covered are based on farmers' requests on training, and can be extended.

Question: How easy is it for one farmer to transfer the training to others?

Answer: The manual is still being worked on to make it more user-friendly.

Comment: Please involve extension agents in the development of the manual in order to get their inputs on layout, content and how it will be best addressed to the farmers.

Answer: Stakeholders are being invited to give their inputs into the manual.

Question: What extension methods are you using to conduct the training?

Answer: Adult extension with farmer participation in a classroom approach.

Goat Restocking and Improved Management

Leonard Maposa, *Heifer International Zimbabwe*

Background

Goats are believed to have been the first animals to be domesticated as early as 8000BC in the Middle East. They play a very important role in the culture and economies of indigenous Africans. They are used as an economic reserve and source of cash income as well as in socio-cultural activities such as paying a bride price and ancestral appeasement. Goats also serve as a source of meat, milk, manure, and skins. Many goat restocking programs have been initiated in Zimbabwe mainly to sustain nutrition and income. Goats are specially selected because they are hardy and adapt to a wide range of natural environments. Also, their productivity is high, and the initial, replacement and maintenance costs are low. Goats have a wide religious and cultural acceptance and can be easily cared for, which allows participation of women, children and the elderly.

Objectives

Heifer International's mission is to work in partnership with communities. Through the use of livestock – originally only heifers but now all forms of livestock and poultry – we aim to alleviate hunger and poverty and care for the earth. Passing on the gift is the cornerstone in our livestock restocking programs. Our specific objectives are to:

- promote household nutrition
- improve family cash incomes
- mitigate the effects of HIV and AIDS
- preserve indigenous animal genetic resources

Current activities

- Restocking programs for nutrition and income: Goat meat and milk provide sources of high-quality animal protein and goats can easily be liquidated to raise income for other household requirements.
- Breed improvement: Boer males are being crossed with indigenous goats to improve on the size of the local goats. Heifer International is working in partnership with DAR4D to establish Matabele goat multiplication units and training.
- Community based animal health programs (CBAHP): To improve animal health services delivery especially to resource-limited communities, Heifer International is working in partnership with the Department of Veterinary Services and AGRITEX on establishing CBAHP, farmer selection and training.
- Marketing initiatives: Organized markets have helped communities raise a meaningful income from their goats through increased bargaining power.
- Browse tree species analysis: This is being done in partnership with DAR4D to promote the sustainable utilization of those species of high nutritive value to goats. Heifer International is initiating a small ruminant network for Zimbabwe and the sub-region to provide a forum for promoting continuous information flow, exchange of knowledge and dynamic participation among stakeholders on every aspect of the small ruminant sector. Special emphasis is on goats. Heifer International also provides the secretariat to the International Goat Association.

Emerging issues on goat restocking programs in Zimbabwe

Despite the high potential of goats in addressing problems of nutrition and income, the importance of goats remains understated. Some people still regard goats as a poor man's cow and a threat to the environment. However, renewed interest in the role of goats in rural development in Zimbabwe has provided a good opportunity for further development of the sector. There is a large marketing opportunity for goats and goat products, and many farmers keep goats because of their wide religious and cultural acceptance. Goats play an important role in mitigating the effects of HIV and AIDS because of their high quality of milk in terms of protein and butterfat content. There is, however, still very little research on goats compared to other farm animals and most of the research has had a commercial bias.

Future priorities on improved goat management

There is need to establish baseline information on the production and productivity constraints that can be addressed by improved goat management. Also, more resources should be allocated towards the development of appropriate research and research results should be integrated into extension messages for small-scale farmers. The benefits of goats on farmers' livelihoods and the natural environment must be clearly illustrated. Promotion of farmers' indigenous knowledge and their strategies in maintaining indigenous breeds must be pursued to take advantage of locally available resources which will, in turn, cut on the production costs. The formation of a national collaborative network on goat research and development would go a long way in optimizing the benefits smallholder communities can derive from goats.

Conclusion

The majority of goats are kept in the small-scale farming sector where they fulfill multiple socioeconomic roles. Their comparative adaptability makes them an ideal investment, especially for resource-poor farmers. There is a bright future for goat production in Zimbabwe. To realize the full potential of goats, appropriate research needs to address information gaps from a holistic perspective and collaborative efforts in the research and development community need to be strengthened.

Discussion

Comment: Restocking programs must take cognizance of the carrying capacity and assess the environment's suitability for goats.

Comment: The criteria for selecting Matabele goat multiplication units should be self-contained farmers.

Assessment of PRP Small Livestock Interventions

Masimba Ndengu and Simba Sibanda, *DFID*

Background

Zimbabwe has been experiencing a progressive economic decline since 2000, reversing the socioeconomic gains of the 1980s and early 1990s. The unstable macro-economic environment has contributed to high unemployment rates, increased price distortions, increasing vulnerability and poverty levels among rural and urban populations, and food and nutrition insecurity.

DFID has responded to this growing need by contributing more than £301 million in humanitarian assistance to Zimbabwe since 2001. With the realization that Zimbabwe's food and nutrition insecurity was both acute and protracted, there was a need to consider longer term support to address the root causes in addition to providing direct food aid for acute humanitarian cases. As a result, in September 2004, DFID's humanitarian funding shifted from an 80% focus on food aid to increased emphasis on improved production, other types of resource transfer and safety nets that promote self-reliance. This approach is known as the Protracted Relief Program (PRP).

To improve its effectiveness the PRP is funding a TLC unit that provides specialist expertise and coordinates activities. The areas of technical expertise required will include monitoring and impact assessment, mainstreaming gender and HIV/AIDS, community-based planning and low input agriculture including small livestock. The activities are being implemented through both local and international partner NGOs working with local institutions and government service providers at district and local community levels.

The NGOs that are implementing the PRP small livestock interventions in Zimbabwe are the Catholic Agency for Overseas Development (CAFOD), Catholic Relief Services (CRS), Farm Community Trust of Zimbabwe (FCTZ), Oxfam (GB), International Development Enterprise (IDE), Save the Children (SC UK) and World Vision International (WVI). The NGOs either implement the PRP directly or through local NGO partners.

In the drier zones of Zimbabwe, crop production contributes to only a limited proportion of the total household income. Food security can also be promoted through better livestock interventions and the utilization of natural resources. Micro livestock such as chickens and goats will be promoted for the poorest groups. Small livestock constitutes a small but growing component of PRP activities.

Objectives

The overall goal of the PRP is to reduce extreme poverty and the proportion of people who suffer from hunger in Zimbabwe. The program's purpose is to improve food security and the livelihoods of more than 1.5 million people in Zimbabwe, particularly households affected by HIV/AIDS. This paper shares the results of a study that was undertaken in 2006, which assessed the appropriateness, effectiveness, and impact of individual livestock interventions and thereby contributed to the lesson learning process.

Methods

A two-member team conducted the study, comprising a review of secondary data, stakeholder consultations, and synthesis of experiences in livestock interventions. The team reviewed PRP project documents and reports from implementing NGOs, TLC-commissioned study reports, briefing papers

for the various PRP components, reports of PRP longitudinal studies on livestock interventions in selected districts, and evaluation reports of dip tank interventions and management options. Consultations were held with TLC personnel, project staff at implementing NGO headquarters, and local community-level stakeholders using key informant interviews and focus group discussions in the two selected districts of Insiza (WVI) and Nyanga (CAFOD/CADEC Mutare).

Key findings

Implementation of small livestock interventions

The NGOs who implemented livestock interventions consulted widely with the local stakeholders such as the Rural District Councils (RDCs), government structures at ward and village levels such as councilors and traditional leaders, technical partners, and the beneficiary communities before implementing the PRP.

The livestock species that were distributed through pass-on schemes varied with area and NGO but included female goats, chickens, guinea fowls, rabbits, ducks, sheep, turkeys, and pigs. CADEC and SC (UK) also distributed communally managed bucks, aiming to improve the genetics of the local goat breed.

There were two models of small livestock distribution in the pass-on scheme: (1) direct distribution (CAFOD, IDE, WVI) and (2) livestock fairs (CRS, FCTZ, Oxfam GB, SC (UK)). Depending on the NGOs and their implementing partners, beneficiaries could receive the animal with no strings attached (CRS, Oxfam GB, WVI) or would be required to pass-on some of the offspring to other targeted beneficiaries (CAFOD, FCTZ, SC (UK), IDE). There was further variation in the implementation; for example, some NGOs stipulated that two kids had to be passed-on by a beneficiary household to one other household (CAFOD), while for other NGOs the two offspring would go to two different households (FCTZ).

Other small livestock-related activities also included dip tank rehabilitation. WVI rehabilitated dip tanks in Insiza district and SC (UK) plans dip tank rehabilitation in Nyaminyami district.

Integration with other interventions

The livestock interventions were highly integrated with other PRP and non-PRP activities being carried out in the recipient communities. Manure from livestock was applied in gardens and fields. Excess vegetables and stover from crops was used as feed for livestock. Some households produced so much small grains that they could use some of it to feed their chickens. HIV/AIDS infected people benefited from better nutrition in the form of milk, meat, and eggs. Some beneficiaries have sold chickens, guineafowl, and rabbits to buy drugs and other supplies to combat opportunistic infections. The water provided under the water and sanitation program was also used for livestock, while other agricultural initiatives assisted in ensuring food security to avoid emergency sales of livestock or barter trade for grain.

Targeting beneficiaries

The implementing NGOs used variations of a livelihood model and engaged the traditional leaders in community-based targeting of beneficiary households. The PRP small livestock interventions generally targeted the poorest households, using demographic data, dependency ratios, and wealth ranking as selection criteria. The targeted households included those with chronically ill and HIV/AIDS households affected individuals, those who were headed by the elderly, women and children, those who did not

own productive assets such as livestock, particularly those without cattle or goats, scotch carts and hoes, and those with high dependency ratios and the unemployed.

The verification assessment randomly selected a sub-sample of 15–25% of the beneficiaries; however, some NGOs verified all selected households. Most of the visited households corresponded to the selection criteria, but isolated cases of miss-targeting were reported. These occurred where some influential members of the community such as traditional leaders and councilors had a conflict of interest, resulting in the inclusion of people who did not meet the set criteria, while leaving out some deserving cases. Miss-targeting also occurred through falsification of information where individual households had supplied information on their own, with little or no input from the rest of the community.

Stakeholder participation and technical assistance

The success of PRP implementation depended on government departments at district and ward level for technical support. Memoranda of understanding (MOU) between the assisting NGOs and the RDCs, technical departments such as AGRITEX and DVS were signed to facilitate support and cooperation. The MOUs stipulated the roles of each stakeholder in ensuring successful implementation of the PRP.

AGRITEX, DVS and NGO field staff provided training in livestock husbandry to the beneficiaries prior to and after distribution of livestock. Some NGOs also invited households that were not benefiting from livestock distribution to attend the training sessions. Issues covered in the training included construction of housing structures, choosing suitable animals from sellers, health management, breeding and nutrition. Veterinary and AGRITEX staff also provided assistance during procurement of livestock at fairs or for direct distribution by checking the suitability of livestock for breeding and general health. Where livestock needed to be moved from one area to another, DVS facilitated this by providing animal movement permits. However, the government departments faced serious challenges in supporting PRP activities. The most acute challenges were poor mobility due to lack of transport and fuel, lack of capacity and subsistence allowances for staff members, and paucity of drugs to treat the animals. The implementing NGOs facilitated the participation of government departments to a large extent by sharing transport to the field and providing travel and subsistence allowances at government stipulated rates.

Monitoring and evaluation

The study revealed that while the distribution records were good, the follow-up record keeping was generally poor, especially by the beneficiaries. There was no standard system of conducting routine follow-up monitoring and evaluation. Some NGOs established monitoring committees made up of either non-beneficiary members of the communities, representatives of local structures such as traditional leaders and councilors and technical partners or a mixture of beneficiaries, non-beneficiary members of the community, traditional leaders, and representatives of AGRITEX. These committees were responsible for monitoring the well-being of placed animals, changes in livestock numbers and the reasons, adherence to pass-on scheme conditions, and the livelihood status of the household. Other NGOs, for example, WVI used their own community-based workers to collect information from a selected group of beneficiaries using a standard format as part of their monitoring and evaluation system.

Impact of interventions

The communities benefited from the PRP small livestock interventions. The training had spillover effects to other community members and some non-beneficiary households started their own income

generating projects. However, although the numbers of goats has increased in the target communities, impact in terms of improved food and nutrition security and income was not yet quantifiable. The preliminary benefits were mainly access to goat milk for use in tea in areas where there is a tradition of milking goats and manure for use in vegetable gardens. Most beneficiaries still needed to fulfill the pass-on conditions and were building herds to numbers that would allow them to resist any sudden shock to the system. A non-quantifiable but important impact of goat distribution has been the reported increase in the owner's social status within the community and their creditworthiness. Beneficiaries now have confidence and feel empowered to the extent that they can participate in community initiatives as people with a stake in the local economy.

Lessons learned

The study revealed several important lessons that can be learned from the first experiences in PRP small livestock interventions:

- Restocking programs need to distribute livestock that communities are familiar with.
- The animals should be sourced from the vicinity to avoid adaptation problems.
- A mixture of livestock species in restocking programs will protect beneficiaries from total losses in the event of disease outbreaks.
- Fairs provided a livestock market to the communities and offered the beneficiaries a wider range of decision-making options than direct distribution.
- Vouchers for work programs for able-bodied beneficiaries engender a greater sense of ownership.
- Pre-investment by beneficiaries increases their commitment to look after the goats.
- Study circles and/or farmer field schools provide learning opportunities to beneficiaries and communities.
- Beneficiary training needs to be staggered according to the production cycle and delivered with demonstrations.
- Livestock distribution needs to be backed by a veterinary support package, possibly through CBAHPs.
- The number of pass-ons should be limited to the value of the original hand-over or the number of animals should be increased so that beneficiaries can quickly enjoy benefits.
- Greater involvement of community structures early in project cycle and the existence of an exit strategy will contribute to the sustainability of interventions.

Discussion

Question: What checks and balances do you put into place to ensure that the goats are not used for human consumption?

Answer: We either give a significant number of goats to each household or combine animal distribution with food distribution.

Question: Have there been any efforts to quantify the impact and benefits from goat distributions?

Answer: We are still working on the impact assessment, which will provide us with quality data.

Livestock Database for Zimbabwe

Elma Sikala and Frank Chinembiri, FAO

Background

The Livestock Working Group is a national forum with representation from the various government departments, NGOs, UN agencies, international research, farmer unions, the private sector and other stakeholders interested in livestock production. The purpose of the Livestock Working Group is to provide an enabling forum for relevant players to promote the profile of the livestock industry by addressing current and emerging issues on animal health, livestock production, marketing and research. This facilitates the exchange of technical and strategic information and sharing of experiences so as to ensure appropriate livestock development support and closer collaboration and networking among partners. This will, in turn, form a platform for mutually agreed project development and implementation priorities. Partners compliment each other's work and avoid duplication, while ensuring that responses in the livestock sector have wider coverage and target vulnerable groups. Several meetings exposed gaps in the livestock sector and the various stakeholders then reached a consensus to create a livestock database custom-made for Zimbabwe.

Objectives

The main objectives of setting up a livestock database for Zimbabwe are to:

- serve as an inventory of all livestock--related projects implemented in Zimbabwe
- inform those interested in livestock production and rural development in Zimbabwe
- prevent unnecessary and costly duplication of efforts in livestock interventions
- provide a 'one-stop' source of information on livestock production and marketing
- encourage establishment of linkages and networking among those with similar interests
- enhance better coordination of efforts among key players in the livestock sector
- avoid mistakes/pitfalls experienced by others
- identify and formulate appropriate strategies for livestock interventions
- identify gaps and determine the potential impact of proposed livestock interventions

Target groups, partnerships and stakeholder involvement

All stakeholders can expect to benefit from the database. Information for the database is being compiled from the following groups:

- NGOs, UN agencies, and international research organizations
- Government departments and parastatals
- Private sector, for example, abattoirs, veterinary drug companies, stock feed manufacturers
- Other educational, research and training institutions

Current activities

An action plan was developed that defined:

1. A checklist for requested data to be specified to the different target groups
 - Project title/department mandate
 - Implementing partner
 - Project location/operational areas (province, district, ward)
 - Duration of project/activities
 - Brief project/activity description including technical and service capacities
 - Target beneficiaries
 - Key results of impact assessments or evaluations carried out and problems encountered
 - List of publications following the realization of the project
2. Methods of data collection
 - Key person interviews by visits or distance correspondence. Some of the data is being collected from the internet and some from journals.
3. Data analysis and format for dissemination
 - Compilation of key information in data sheets using Excel and Access software
 - Dissemination as electronic and hardcopy

The idea is to have an IT specialist on board who can create a user-friendly webpage as well as store the data on CD-Roms/DVDs which would be made available to the public.

A consultant is currently working to compile the database, which should be completed by August 2008. Funding for the second phase of the database compilation is now being sought, which includes the hiring of an information technologist to work hand-in-hand with the consultant. Data collection will, however, be ongoing and expected to continue beyond the scope of this consultancy.

Lessons learned

Creating a database is a complex and time-consuming assignment and data collection, entry, and analysis requires more time than originally envisaged. At first the idea was to compile data for the last 5 years but it soon became evident that data from as far back as 1947 was just as relevant today, particularly from a research perspective. Some of the data is in hard copy format and will have to be scanned and preserved electronically to be available for public exploit. This has made the work even more laborious than expected.

Way forward

The livestock working group proposed the creation of a website with all the various databases and profiles and other packaging, such as CD Roms or DVDs. It is planned to continue to add data onto the database. Additional funding will however be required for this.

It has been decided that access to the database will not be restricted and will be available for public use. However, information deemed sensitive would be restricted. FAO will house the database for now and it will later be released to the Ministry of Agriculture. FAO will for now be able to add, edit and delete data where necessary.

STRATEGIES TO IMPROVE GOAT PRODUCTION AND MARKETING

Strategies to Improve Goat Production and Marketing

Zivayi Nengomasha, ADRA, facilitator

The workshop has brought together members from all sub-sectors (goat production, marketing, support services and the policy sub-sector) to stimulate partnerships and a joint learning process between all those who have an interest in developing the goat sector and who can contribute their various experience and knowledge. Acknowledging that the members of the different sub-sectors are quite heterogeneous and with different backgrounds, a lot of emphasis was placed on sharing information and discussing different viewpoints. A skilled facilitator was engaged to manage the group dynamics in order to ensure equal participation and mutual understanding. These group dynamics are expected to continue to be challenging and must be managed well in the long run so that partnerships in goat production and marketing can be fostered.

Being aware of the challenges in multi-stakeholder involvement, participants at this workshop were first requested to jointly formulate a common vision. The common vision as well as key indicators were used as a base for reviewing the sector-specific strategies during this workshop. Each sector group was requested to define their specific situation and identify key opportunities and challenges. They then further analyzed existing sector strategies and finally developed the improved sector strategies. The vision of the goat sector as well as the results of each sector group are presented below.

Joint vision for the goat sector

The vision for the goat sector stems from the needs of small-scale livestock producers to enhance their incomes and thus livelihoods through competitive goat enterprises. As van Rooyen, Sikosana, and Homann have shown in these proceedings, the environment for small-scale goat producers in Zimbabwe is characterized by high mortality rates for goats, poor service provision and infrastructure, and lack of information on production and marketing.

Against this background, the workshop participants stated a common vision as:

- Improve livelihoods and economic development through competitive/commercial goat production and efficient marketing systems by 2020.
- Strengthen the role of goats in sustainable crop-livestock systems.

Indicators of progress include:

- Availability of good quality breeding stock
- Expansion of the goat production base through adoption of appropriate and best-bet practices
- An increase in the number of farmers with a deliberate commercial orientation in goat production
- Appropriate marketing facilities that are accessible to both commercial and non-commercial farmers.

Sub-sector specific strategy development

A sector-specific strategy can be generally defined as a broad policy direction (visionary, conceptual) that influences program and project design. The policy targets are guided by a vision and objectives, which are specific, measurable, and time bound. In practice, the objectives are met through a combination of related, well-defined, and well-coordinated activities.

In the special case of goat production and marketing in Zimbabwe, competitive goat enterprises can be attained through the integration of improved production and marketing systems enhanced by the development of efficient and sustainable support services and the creation of an enabling policy environment (Figure 1). This can be achieved through operationalizing relevant strategies developed by the different sectors while mainstreaming gender and HIV and AIDS issues.

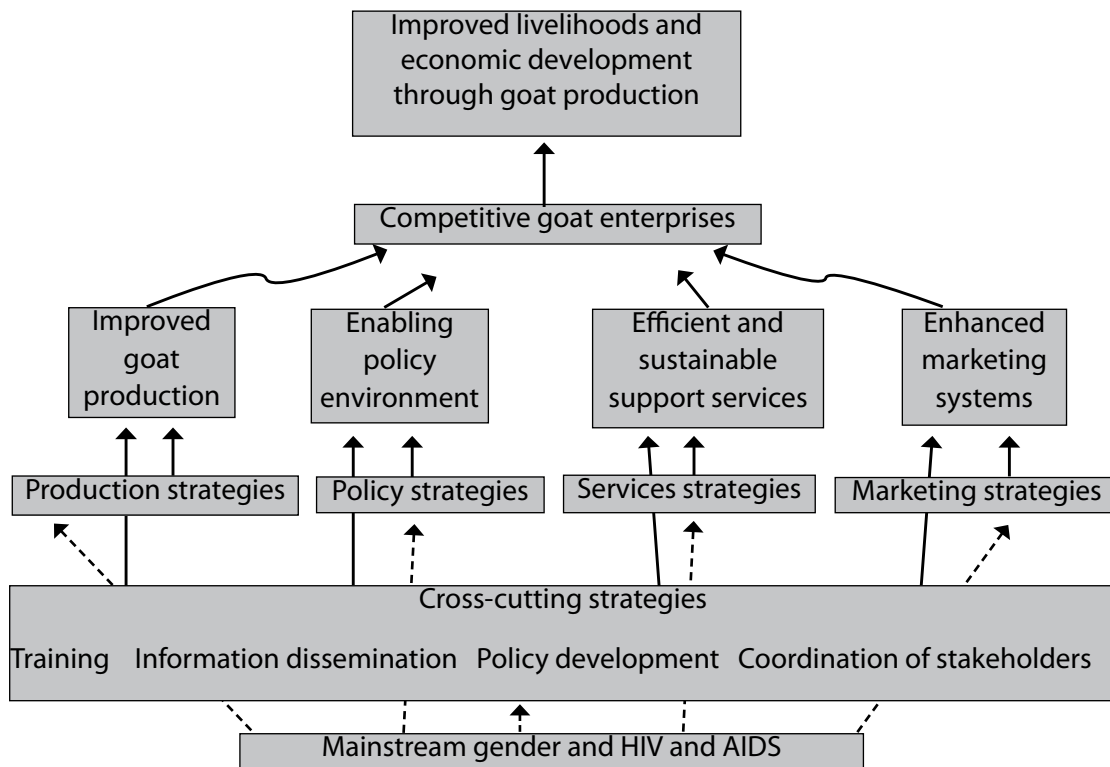


Figure 1. Strategies for the improvement of goat production and marketing.

Furthermore, there are crosscutting strategies such as training, information dissemination, policy development, and coordination of stakeholders within and across sectors. These will need to be refined within a particular sector and defined against the objectives of sector strategies and related activities. Stakeholders need to be trained in order to effectively carry out their responsibilities contributing to the development of the goat sector. Simultaneously, policies have to be developed and reviewed to create an enabling environment. This can start at the district level and move up to provincial and national levels. Well-coordinated activities are necessary in order to ensure that the focus and approach is consistent with the shared vision of the goat sub-sector. This will also provide an opportunity for monitoring and evaluating different initiatives.

In the process of strategy development, stakeholder involvement ensures the creation of realistic and attainable strategies for the different sectors and effective interaction between sectors. Stakeholder involvement is important so that collaboration and conversation assist the strategies and policies in one sector, not to hinder, but rather promote development in the other. Flexibility within and between sector strategies is necessary so that where strategies are antagonistic, necessary adjustments can be made in time.

Goat production

The main role of the production sector is to produce healthy and good quality goats with a surplus for the meat market in a timely and efficient manner. This requires adequate planning and implementation of best-practice practices in animal health, nutrition, breeding, housing and marketing while utilizing available resources such as rangelands in a sustainable manner (see Sikosana in these proceedings).

Table 1 shows the opportunities and constraints in goat production as defined by the production sub-sector group. The goat production sector currently reflects more challenges than opportunities. This indicates a strong need to develop strategies that would address these challenges to make full use of the opportunities that exist in goat production.

Table 1. Opportunities and challenges in the goat production sub-sector

Opportunities	Challenges
Recognition by farmers of the commercial value of goats	High goat mortality rates
Fast reproductive rate of goats	Few producers have transformed into commercially oriented production systems
Adaptability to a wide range of environments	Breed types not well developed
Low maintenance requirements rendering goats inexpensive to produce	Inbreeding
Existence of dry season feeding technologies	Poor housing
Easy to handle and already available, an advantage especially for vulnerable groups	Poor documentation of indigenous knowledge systems and novel practices
	Poor dry season nutrition
	Poor rangeland condition
	High disease prevalence
	Drug and chemical shortages
	Poor beneficiary selection criteria by NGOs resulting in failure of projects

As also discussed in the articles by van Rooyen and Sikosana, one has to be aware that farmers differ in their resource endowments and capacities. Only few farmers are actually in a position to produce goats commercially; most farmers are challenged to ensure the survival of their existing herds. Although farmers increasingly recognize the value of goats, the majority have not yet transformed into commercially oriented production systems. The current commercially oriented producers could serve as satellite farmers from whom others can learn.

The participants confirmed that priorities and perceptions on goat production can differ between more or less commercially oriented farmers, reflecting the heterogeneity in the goat production sector from one area to another. For example, the existence of improved breeds is an opportunity, but maintaining them incurs higher management investments. Selecting for strong traits within the local breeds can be a cost-effective alternative, but also requires more controlled breeding strategies.

To capitalize on goats as an asset that can reach relatively high productivity while being easy to access and well adapted to the harsh natural environment, simple management technologies are required,

most importantly for improved nutritional, health and housing (see Sikosana). The feedback from the production sub-sector group was well in-line with the recommendations of the baseline survey, indicating the existence of a common understanding for most critical issues in goat production.

The strategy analysis built on the defined opportunities and challenges and pointed out the advantages and disadvantages of existing strategies in goat production (Table 2). The production sub-sector group was of the opinion that no strategies to systematically guide and govern appropriate goat health, nutrition, breeding, housing and marketing currently exist. As the participants explained, where there are strategies, they are limited to individual farmers and cannot be generalized to apply to the average goat farmer.

Participants recognized that there is a need to invest in improved goat production and they defined a set of priority strategies for improved goat production (Table 2). These strategies seem realistic and feasible to achieve the aim of the production sub-sector to commercialize goat production through improved production systems.

Beyond strategies specific to production, participants identified a need to accommodate crosscutting issues that might also apply to goat marketing:

- Practice record keeping at all stages of production and marketing
- Promote information dissemination on appropriate technologies and practices
- Promote gender balance and equity

Table 2. Characteristics of existing and improved strategies in the goat production sector.

Production area	Existing strategies	Advantages	Disadvantages	Priority strategies
Goat health	Traditional remedies	Low to no cost, locally available	Do not treat all diseases, used by default	Reduce goat mortality to <10% • Develop appropriate health management infrastructure
	Para-veterinarian training	Para-veterinarians can improve service delivery	Para-veterinarians limited to a few areas where there are funded projects	• Develop and expand para-veterinarian program to improve access to health services • Advocate for availability of veterinary resources
Nutrition	Fodder production Supplementary feeding	Enhance quality of goats	Affordability in semi-arid areas	Maintain productive goat flocks all year • Develop and disseminate appropriate feeding calendar • Promote the effective storage and use of crop residues • Promote the production, conservation and utilization of fodder crops
Breeding	Uncontrolled	Low management requirements	Cannot produce a uniform crop of goats	Produce good quality meat and milk • Develop goat multiplication centers • Promote controlled breeding • Form goat breeders' associations
Housing	Open kraals		Exposure to weather	Establish cost-effective housing that reduces theft and mortality • Develop cost-effective housing structures for goats • Promote appropriate housing

Goat marketing

The marketing sector forms the critical link between the producer and the consumer. It should ideally provide infrastructure, organization, and information to support decision-making by farmers and consumers. Participants of the goat marketing sub-sector group identified multiple opportunities, reflecting great potential in goat marketing triggered by the increasing demand for goat products in domestic and international markets (Table 3). Table 3 also shows that there are a number of challenges in goat marketing, especially the lack of commercial value attached to goats and several constraints in the market system. As the articles by Nyathi and Homann in these proceedings have also shown, markets are underdeveloped at the moment in Zimbabwe, resulting in imperfect market situations with low prices, little information to farmers, and also high transaction costs for the other market players.

Table 3. Opportunities and challenges in the goat marketing sub-sector

Opportunities	Challenges
<ul style="list-style-type: none"> • High demand for goat meat • Shortage of beef 	<ul style="list-style-type: none"> • Lack of commercial value attached to goats • Underdeveloped marketing system including: <ul style="list-style-type: none"> o Poor market and transport infrastructure o Inadequate information on goat marketing o Lack of a formal grading and pricing system
<ul style="list-style-type: none"> • Opportunity to develop formal markets • Harnessing foreign markets • Potential to develop a goat commercial sector • 2010 soccer World Cup • Value addition and product diversification 	

In the analysis of the existing goat marketing situation, the marketing sub-sector group explained the functioning of various market channels with differences in accessibility to farmers and price building mechanisms (Table 4). Poor market development is reflected in the fact that most farmers use farm gate sales, rather than collection points or sales parallel to cattle auctions (see Homann in these proceedings). As participants explained, at farm gate sales, although farmers incur low costs, they might end up in an unfavorable position to negotiate prices, especially when they are in dire need for cash. Other market options bear more transparency in price setting, for example, auctions which allow farmers more room for price negotiation or collection points where prices are declared upfront. However, if not well organized these alternative market options might also result in non-transparent price setting to the farmers' disadvantage.

Participants agreed that strong investments are required to capture the strength in the goat marketing sector when addressing the constraints. These need to be linked with investments in the production sector, so that market development goes hand in hand with an increasing supply of quality goats. In line with the characteristics of the goat market channels, participants defined a set of priority strategies for improved goat marketing:

Table 4. Characteristics of existing goat market channels

Market channels	Advantages	Disadvantages
Farm gate sales/ Private sale or market	<ul style="list-style-type: none"> • No levies for farmers • No transport costs • On the spot payment • Low risk of losses 	<ul style="list-style-type: none"> • No market information • No competition, low process • No grading system • Low reliability • Farmer has low bargaining power
Auction points	<ul style="list-style-type: none"> • Diversity of buyers • Sale dates are known • Greater market information • Better grading and pricing system 	<ul style="list-style-type: none"> • Long distances from farmer to auction point • Low disease control • Added levies and tariffs • Lack of infrastructure • Sellers travel long distances with cash
Collection points	<ul style="list-style-type: none"> • No need to pay levies • Reduced transaction costs for buyers 	<ul style="list-style-type: none"> • Single buyer • Has a prescribed price • No grading system • Time consuming due to negotiations
Barter and exchange	<ul style="list-style-type: none"> • Can be a win-win outcome, especially when traded goods reach into remote areas 	<ul style="list-style-type: none"> • Limited market information

- Institutional development: Goat producers must organize themselves in order to increase their bargaining power, facilitate knowledge sharing, ownership and sustainability, enable resource mobilization, collective marketing and for lobbying purposes. This will be achieved through the establishment of associations or syndicates. Support must be given to community-based planning and curricula development, locally requested trainings and capacity building, negotiation skills, peer review, look and learn visits as well as dialogue fora. This must be complemented by the development of service providers and private processors. Special marketing boards will facilitate efficient market operations and ensure quality.
- Improved access to market information: Farmers must be provided with better access to information on product prices, quality requirements, timing and requested volumes of sales. Other local market players must be better informed about marketing calendars, new marketing opportunities, as well as logistical and infrastructure requirements. This will assist the local market players to learn about market requirements and have better price control. Contacts between farmers, local market players and regional abattoirs, retailers and consumer groups as well as local and regional market analysis will provide relevant information. Effective information transfer technologies will be promoted, for example, price declarations through newspapers, cell phone systems or the radio. Better-informed market players will be in a good position to identify options for more efficient market operations with mutual benefits.

- Improved market infrastructure: In order to reduce transaction costs and ensure healthy and animal friendly market operations, infrastructure (eg, grading systems, road networks, transport facilities, handling and sale pen facilities, slaughtering and processing plants) need to be improved. This requires collaboration between government departments, RDCs, other support services and the private sector.
- Supportive policy environment: Policy makers must formulate regulations that favor the development of the goat industry, including fair prices, health and disease control including animal movements and product traceability, as well as domestic and international trade.

Support services

Delivery of relevant and appropriate services to farmers is critical for the development of competitive goat enterprises. The support service sector (NGOs, government departments, universities, and international research institutions) provides a wide range of services, including livestock strategy design, technology development, trials and demonstrations, veterinary services, information dissemination, farmer training, market linkages as well as regulatory services, advisory services, structural designs, information dissemination, farmer awareness creation, mobilization and group formation. Table 5 and the discussions of the support services sub-sector group confirm that although a strong interest in developing the goat sector has been declared and services, infrastructure and facilities to support such development exist, most support services operate below capacity and some are not operational at all.

Table 5. Opportunities and challenges in the support services sector

Opportunities	Challenges
• Interest is high among stakeholders to promote goat production	• Lack of awareness on available services
• Availability of technical and organizational skills	• Poor coordination of stakeholder efforts
• Current training programs are available for skills development	• Inadequate animal health services
	• Shortage of foreign currency and subsequent lack of inputs
	• Closing of abattoirs limiting options
	• Inefficient service provision due to poor institutional support
	• Poor monitoring and evaluation systems
	• Inappropriate design and timing of farmer training

The existing support services should enhance the capacity of farmers in goat production and marketing. However, as the participants pointed out, currently the disadvantages outweigh the advantages in this sector (Table 6). An urgent need to restore existing structures and find ways to provide farmers with necessary inputs and access to new technologies was manifested. Strategies from the collapsed commercial sector, eg, farmer associations, information dissemination systems, market linkages, could also be revitalized and adapted to small-scale farmer needs. Gaps in service delivery were also identified; for example, no special services exist for commercializing farmers as compared to those whose primary objective is to sustain herd survival and growth.

Table 6. Characteristics of existing goat support services

Support services	Advantages	Disadvantages	Priority strategies
Livestock strategy design	Designs are farmer specific	Service has a low coverage No capacity building of the farmer	<ul style="list-style-type: none"> • Coordinate service providers to ensure that available resources are used efficiently and farmers are not confused by disjointed efforts
Technology development	There is a wide range of technologies ready for dissemination	Inappropriate packaging of technologies Poor dissemination pathways Research is not demand-driven Technology evaluation processes are not participatory	<ul style="list-style-type: none"> • Research and develop farmer-driven technologies and involve farmers in technology evaluation
Veterinary services	Accessibility of services increases for CBAHW Movement controls curb disease spread	Training of CBAHW is not wide spread Veterinary supplies and other resources are not adequate	<ul style="list-style-type: none"> • Improve the availability of veterinary and other inputs in communal areas • Train CBAHWs to cover more districts in animal health care
Information dissemination	Normally done in local language	No local radio station and programs Radio transmission does not reach all farmers Media are generally not accessible	<ul style="list-style-type: none"> • Disseminate information on service providers for farmers and other stakeholders to benefit • Develop appropriate channels of technology dissemination between specific partners
Farmer training	Approaches provide a learning environment Builds skills for specialization/intensification	Trainings are not synchronized with activities on the farm, are expensive and reach only a few farmers Low commitment levels Curricula for goats are undeveloped	<ul style="list-style-type: none"> • Develop practical farmer training that is synchronized with the production and marketing cycles • Establish farmer working groups for sharing of information on production and marketing
Market linkages	Information on monitoring is available	Information dissemination is poor	<ul style="list-style-type: none"> • Identify efficient value chain and support communication and interaction between the relevant players

Strong investments are thus necessary for the support sector to fulfill its role in enhancing efficient goat production and marketing. From the discussion of the support services sub-sector group, and also pointed out in Table 6, the different support providers need to improve the following priority strategies:

- **NGOs:** International and national NGOs must become better at quickly mobilizing funding for special activities upon request, such as market development, institutional development or infrastructure building. They should allocate a significant budget for crosscutting activities such as information dissemination, trainings, communication, networks or stakeholder coordination. This can be part of larger development programs, but allows flexibility in using funds for locally emerging issues. NGO activities facilitate proactive development and networking between multiple sectors, in tandem with and supportive to government and research activities.
- **Government departments:** The various government departments must align their activities to provide encompassing technical and organizational support to the goat sector. They should integrate recommendations that come out of local experience, collaborate with partners, and give

close feedback to policy makers. They are open for new information and technology dissemination channels and new partnerships, particularly with the private sector.

- Universities and international research institutions: Research institutions should take up questions and gaps that come out of current activities and needs in the goat sector for further investigation, evaluation and debates. They engage all stakeholders in a process of joint problem formulation and strategy development, and facilitate such multi-stakeholder processes until the actual players themselves have the capacity to take over full ownership. They provide all stakeholders with updated and relevant information to make the best choices at hand.

Policy sector

Policies define the parameters within which stakeholders can operate to promote competitive goat production and marketing. They affect production, marketing and service provision and operate at various levels. At the community level there are locally accepted bylaws and cultural arrangements that regulate, for example, the use of rangelands, trees, fruits and wildlife, water management or settlement patterns. These regulations need to be developed and refined at the local level, engaging community representatives in bylaw formulation and amendments, according to the community-specific issues at a given time. The local level regulations must correspond to and must be taken up by the broader national legal frameworks. Interaction between these two levels is therefore important. Existing legislations at the national level are:

- Animal Health Act
- Livestock and Meat Grading Act
- Dairy Produce Act
- Anti-Stock Theft Act
- Rural District Council Act
- Communal Lands Act
- Traditional Leaders Act
- Regional, Town and Country Planning Act
- Environmental Management Act
- Water Act

The participants of the policy sub-sector group pointed out that although there are quite a number of policies governing livestock production and marketing, there are no specific policies for goats (Table 7). However, sections relevant for goats could be applied. The RDCs are responsible for coordinating activities at the district level to ensure that legislative requirements are met. The Government of Zimbabwe has made strides, through the Reserve Bank of Zimbabwe, to provide loans for agricultural production. However, the information is not adequately disseminated and the requirements are too stringent for small-scale communal area producers. There is need to create representation and lobby for better terms.

Furthermore, the group assessed that the existing policies are not well integrated. For example, health management is a production activity; it will be affected by policies relating to the procurement of veterinary services. Similarly, controlled breeding may imply the development of a paddocking system but individual farmers are forbidden from fencing off own portions within communal area rangelands. Therefore, those involved in policy making should consult all affected sectors.

Table 7. Characteristics of existing policies

Advantages	Disadvantages
<ul style="list-style-type: none">• Existence of livestock legislation• Each policy has a department which is responsible for its implementation• Pedigree stock is protected for all livestock	<ul style="list-style-type: none">• No specific legislation for goats• Poor enforcement of policies such as meat grading, stock cards• No mandatory registration of goats• Poor dissemination of information concerning current policy• Poor or lack of consultation in policy formulation (top-down approach)• Departments are not adequately funded to carry out their mandate• The provisions of some policies are contradictory, eg, abattoirs involve both the Ministry of Health and Agriculture

A question for further discussion was how the reorganization of the Ministry of Agriculture, which resulted in the 'moving' of DLPD back to AGRITEX will affect livestock-specific service delivery.

Considering the above challenges, the policy sub-sector group suggested the following strategies to create a policy environment that would be able to support the dynamic growth anticipated in the goat sector:

1. Develop local and national regulations and policies that address goat production, breeding, protection and marketing, and harmonize conflicting provisions in the existing regulations and policies.
2. Form institutions that promote favorable goat production and marketing regulations and policies, including advocacy, lobbying, fundraising and stakeholder coordination. Farmers should be empowered to influence policy formulation and implementation.
3. Clearly define the roles and terms of reference of actors and institutions responsible for regulation and policy formulation and implementation at local and national levels.
4. Build capacities of the actors and institutions that implement the respective goat regulations and policies.
5. Develop a well-researched national goat database for policy gaps and need for adjustments of existing regulations and policies.
6. Mainstream gender and HIV and AIDS in regulations and policies.
7. Create an accessible and simplified funding facility for goat production and marketing.

CONCLUSIONS: PROSPECTS FOR THE GOAT SECTOR IN ZIMBABWE

Conclusions: Prospects for the Goat Sector in Zimbabwe

Zivayi Nengomasha, ADRA, facilitator

This workshop has created the first opportunity to discuss the state of the goat sector before all stakeholders. The participation and commitments for further contributions have revealed a real interest to develop this sector and invest in its improvement. It seems that the time is right to revisit the real value of goats in terms of food security for the rural poor as well as a marketable high value commodity that is in great demand, locally and within the region.

The participants from different sub-sectors jointly recognized the importance that goats play in poverty reduction and economic development. They agreed on a joint vision to establish competitive goat enterprises in the country to enhance the incomes and livelihoods of small-scale farmers in the country. The fact that all stakeholders endorsed the strategy development supports the idea of establishing a multi-sectoral approach based on strong partnerships to drive the process of technology and market development.

The review of existing strategies revealed huge gaps and inconsistencies in and between all sub-sectors to an extent that the given potential of goats can actually not be exploited. Key issues for strategy development by each of the goat sub-sectors are listed below.

Production

From looking at the challenges in the goat production sub-sector it is clear that the high goat mortalities result from a lack of adequate production strategies. Simple technologies such as improved animal health and feeding, which can enhance goat survival and productivity effectively, exist. However, these still have to be made accessible to the average goat farmer through consolidated strategies by all sub-sectors. Farmers should be empowered to make the right choices, hold service providers accountable, and participate and make contributions to strategy development.

Marketing

Low goat productivity affects the market sub-sector, as small numbers of marketable goats and poor goat quality would attract only few buyers. This results in low market volumes and a persisting demand: supply gap for goat meat, as mentioned in Nyathi in these proceedings. It is consistently clear that even if the demand for goats is there, the lack of adequate production and marketing strategies prevents the supply of sufficient goats (number and quality) to the consumer. New multi-stakeholder partnerships are required to kick-start investments in goat markets which would further enhance the development of the production sub-sector.

Support services

Reflections from the support services sub-sector add to the dilemma of unexploited potential in the goat sector. The absence of adequate support service strategies prevents farmers from adopting the right technologies to improve production and delays farmers and market response to the demand. Support services need to play a stronger role in disseminating adequate information and facilitating multi-stakeholder processes in technology and market development.

Policy

The above insights extend to the policy sub-sector. The absence of overall policy frameworks as well as sub-sector specific policies implies that none of the sub-sectors can actually develop its strengths

and capacities as the benefits from investments in the goat sector are not secured. All sub-sectors, therefore, need to be involved in developing enabling policy frameworks and refined sub-sector policies. Communication and enforcement mechanisms need to be established for that.

Given the contradictions between a commonly recognized potential in the goat industry but deficit or absent strategies to achieve tangible benefits, the workshop was unique in stimulating joint strategy development and learning process among the sub-sectors concerned. A key outcome of the workshop is that the members of the different sub-sectors managed to review their own systems, strategies and approaches with the view on how to improve the way they function.

Through the discussion process, the members of the different sub-sectors became more aware of their roles and responsibilities. There was, by the end of the workshop, a better understanding of where each sub-sector fit in the bigger goat production and marketing agenda. This is instrumental for success and will form the basis for future multi-stakeholder collaboration in which individual efforts will contribute towards the commonly defined vision.

During the common strategy development and action plan design, the participants made several cross-cutting issues apparent:

- Coordinating institutions to bring stakeholders together at the district, regional and national level are required. Their task is to guide the strategy development process, assess the extent to which the strategies and individual initiatives are being implemented, and facilitate technical and organizational backstopping. Such institutions build strong linkages among each other for effective information sharing, monitoring and evaluation and also for the application for further funding. At district level, the RDC through the Rural District Development Committee coordinates the activities to align the various sub-sectors that work with the communities. At the regional level this could be handled by the Goat Forum, and at national level the Livestock Working Group hosted by FAO in Harare. Participants expressed an interest to join the Goat Forum as well as the Livestock Working Group and this can be capitalized upon to ensure that the goat industry is developed.
- The performance and efficiency of the sub-sectors should be enhanced simultaneously through capacity building, lobbying, development of effective communication and multi-stakeholder approaches. This can begin with a detailed institutional assessment of the various organizations so that capacity building is relevant and specific. Resources have to be mobilized to implement effective coordination and communication so that the improved sector strategies will achieve the desired end.
- Where the objectives of a project are centered on relief, the design should be such that it can be scaled up into a development program. Lobbying is necessary to influence the donor community so that programming is designed to achieve successful goat production and marketing. One of the critical issues is that of targeting. Whereas the general trend is to target the poorest of the poor, this might not be the farmer who will be able to drive development. One option is to have a multi-targeting system so that the poorest are not neglected and yet development needs are catered for.

The development of improved strategies jointly by the different sectors is a first step towards the establishment of competitive goat enterprises. This should be followed by prioritization within and across sectors after which resources are mobilized in order to carry out activities to achieve strategic objectives. Critical to this process is constant dialogue among stakeholders to create a conducive working environment and ensure that interactions between sectors, including feedback to policy levels are taken care of. This being a learning process, a pilot scheme is a better starting point to be followed by scaling up of the best strategies and approaches.

APPENDICES

Appendix 1: Workshop Program

Day	Item	Responsibility
DAY 1	Session 1	
	Opening remarks	B. Markodza, DLPD Director
	Introductions	Z. Nengomasha, ADRA, facilitator
	History of the Goat Forum	N. Nyathi, SNV
	Presentation on the goat survey results	
	-Importance of goats	A. van Rooyen, ICRISAT
	-Goat management	J. Sikosana, DAR4D
	-Goat marketing	S. Homann, ICRISAT
	Presentation on goat marketing through exhibitions: A case study of the ZITF	D. Sarupinda, SNV
	Strengthening goat farmers through training	T. Senda, DAR4D
	Session 2	
	Restocking and improved management	L. Maphosa, Heifer International
	Protacted relief programmes	M. Ndengu, S. Sibanda, DFID
	Livestock database for Zimbabwe	E. Sikala, F. Chinembiri, FAO
DAY 2	Session 3	
	Recap of Day 1	A.B. Dube, DLPD
	Presentation of recommendations from the goat survey	A. van Rooyen, ICRISAT
	Identifying opportunities and designing strategies for improved goat production and marketing (group work)	Z. Nengomasha, ADRA, facilitator
	Report back session	Z. Nengomasha, ADRA, facilitator
	Wrap up on discussed strategies	Z. Nengomasha, ADRA, facilitator
	Way forward	D. Sarupinda, SNV
Concluding remarks	P. Nyathi, ZFU	

Appendix 2: Action Plans for Different Stakeholders

The stakeholders drew up some action plans based on their organizations' current programming thrust (Table 1). Most stakeholders already have funded programs in different parts of the country, which were not necessarily designed with the current strategy in mind, although some parts of the projects do meet the strategic activities proposed here. Through these programs, the strategies drawn up during this workshop can start to be operationalized. Where action plans are shared, a proper monitoring system can be developed and outputs shared so that strategies are reviewed and modified as required.

In this context, the Goat Forum has, to date, spearheaded the review of the goat enterprise and has brought stakeholders together for purposes of building competitive goat enterprises. During the workshop, it became clear that as a way forward the following activities should be part of the Forum's action plan:

- Coordinate stakeholder activities
- Contribute to the livestock database
- Promote joint planning and review
- Build capacity of RDCs, farmers and other stakeholders to improve their efficiency in implementation of activities
- Engage in policy discussions at various levels to create a conducive environment
- Mobilize resources for the implementation of strategies in pilot areas

Table 1. Action plan designed for the organizations who participated the goat workshop.

Organization	Activity	Category			
		Production	Marketing	Policies	Support Services
Private Sector					
RDCs	Take program to council for a resolution			X	
	Councils to develop/review existing bylaws to cater for all forms of livestock (+goats) and conservation and land use			X	
	Pilot wards will be selected in all districts (except Gwanda) by November 2007	X	X		
	District level awareness including buyers, abattoirs and RDDCs (Nov 2007)		X	X	
	Awareness campaigns of rural communities starting with pilot wards and buyers		X	X	
	Test running (Jan 2008)				
	Construction of goat sale pens		X		X
Farmers	Form goat producer groups	X			
	Start practicing controlled breeding	X			
	Source good quality goat breeds	X			
	Lobby for training of producer groups in goat production and marketing				
	Establish goat handling structures	X	X		

Cont...

Cont...

Organization	Activity	Category			
		Production	Marketing	Policies	Support Services
ZFU	Farmer mobilization and organization – facilitate the formation of goat producer associations	X			X
	Information dissemination (Lupane District)				X
NGOs					
SNV	Support look and learn visits for farmers and service providers				X
	Complete goat manual in collaboration with other actors				X
	Assist RDCs (Gwanda, Bubi, Mangwe and Beitbridge) to develop internal and external gender and HIV/AIDS policies				X
	Facilitate coordination of service providers				X
	Further develop the capacity of DLPD in Matabeleland and Masvingo				X
	Co-implement EU-ORAP project proposal	X	X		X
	Finalize and disseminate the goat sub-sector analysis report				X
MDTC	Sensitization of farmers for goat production	X			
	Procurement and distribution of goats to two production groups	X			
	Organize wards 10 and 14 for goat marketing by Care Zimbabwe for distribution to other farmers		X		X
	Start on needs assessment for goat farmers in wards 10 and 14				X
Practical Action	Ensure the successful planning, implementation, monitoring and evaluation of the project initiatives at provincial, district and community levels – 15 wards of Gwanda, Matobo, Bulilima, and Mangwe.	X			X
	Provide timely inputs into project implementation processes				X
	Respond to partner and stakeholder capacity building needs				X
	Effective project management	X			
	Contribute to production and sharing of learning outputs (articles, publications, videos) on sustainable food production and livelihoods diversification including goat enterprise development.				X
	Facilitate community, district and provincial level knowledge sharing workshops and other reflection activities.				X
ORAP	Conduct stakeholder analysis				X
	Conduct baseline study in the target areas (Beitbridge, Nkayi, Chivi)				X
	Facilitate participatory market chain analysis and identify opportunities for strategic alliances		X		X
	Facilitate the development of appropriate business models through multi-stakeholder dialogue				X

Cont...

Cont...

Organization	Activity	Category			
		Production	Marketing	Policies	Support Services
	Develop an efficient infrastructure and marketing strategy and mechanism		X		
	Link farmers to markets using the business models		X		
	Disseminate information on market requirements for goats		X		
	Support the establishment of or strengthening of farmer association for joint action				X
HPI Zimbabwe	Form small ruminant network	X			
DED	Provide advice and resources to ZFU with consultation with goat FORUM				X
ADRA Zimbabwe	Develop proposals on IGPs for orphans and other vulnerable children and women's groups in peri-urban and rural areas				X
Local and international institutions/ organizations					
Universities (Lupane State University, Solusi University)	Adapt curriculum to cover goat production in greater details				X
	Encourage students' industrial attachment at grassroots levels				X
	Collaborate with research stations and extension and farmers on appropriate technology development	X			
	Identify and select appropriate forage materials already worked on for use in specific environments	X			
	Work with students to translate information from English to vernacular				X
	Conduct short courses for training in conjunction with other stakeholders in production, marketing.				X
ICRISAT	Establish baseline information for enhanced decision making in crop-livestock systems development	X	X	X	X
	Develop Innovation Platforms for market development, stakeholder coordination and information exchange	X	X		X
	Develop improved feeding systems	X			X
	Analyze and list recommendations for improved livestock water productivity	X		X	X
	Define the drivers of environmental impact of livestock (GIS facilities)	X	X	X	
	Identify and promote improved crop-livestock production strategies	X	X	X	X
	Conduct exploratory work on technology development within the context of gender, poverty and livelihoods	X		X	
	Communicate information: Develop information packages, briefing notes, project reports and policy recommendations	X	X	X	X
	Encourage capacity building in research and development approaches, impact monitoring and evaluation, proposal writing and project management				X

Cont...

Cont...

Organization	Activity	Category			
		Production	Marketing	Policies	Support Services
FAO	Support training and production of goats				X
	Mainstream HIV/AIDS in goat production	X			X
	Support provision of building materials for housing	X			
	Supply veterinary kits	X			
	Empower disadvantaged women in the above communities				X
	Complete database (information)				X
	Provide input into livestock policy document			X	
Government Departments					
Veterinary department	Disease surveillance (post-mortems) – movement permits				X
	Diagnosis/treatment – animal health training				X
	Inspection of facilities				X
	Meat inspection				X
	Providing drugs				X
DLPD	Training needs assessment in Tsholotsho and Gwanda				X
	Identify farmer groups in production and marketing	X	X		
	Finalize a goat training manual				X
	Facilitate look and learn visits	X			
	Prepare for Bulawayo Agricultural Show		X		X
	Link producer groups to buyers		X		X
	Conduct baseline surveys in Tsholotsho, Lupane, Gwanda, Beitbridge				X
AREX	Formulate guidelines for the goat grading system and breed standards on station				X
	Train farmers in collaboration with DLPD and produce a Goat Production and Marketing Manual (Gwanda, Tsholotsho, Matobo, Chivi)				X
	Distribute forage planting material	X			
	Exchange breeding bucks	X			
	Establish carrying capacity for different areas	X			X

Appendix 3: Workshop Participants

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Appendix 4: Key Reference Literature

The Goat Forum, based on its collaborative study in six districts of Matabeleland, produced the following information material, which reflects the current situation of goat production and marketing in Zimbabwe. These documents were made available to the workshop participants as reference literature and can be requested from ICRISAT.

1. **Homann S, van Rooyen A, Moyo T and Nengomasha Z.** 2007. Goat production and marketing: Baseline information for semi-arid Zimbabwe. PO Box 776, Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid Tropics. 84 pp.
2. **Homann S and van Rooyen A.** 2007. Goats in semi-arid Zimbabwe: The importance and the development challenge. Briefing Note No. 1. PO Box 776, Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid Tropics.
3. **Homann S and van Rooyen A.** 2007. Animal health and dry season feeding. Briefing Note No. 2. PO Box 776, Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid Tropics.
4. **van Rooyen A and Homann S.** 2007. Matabeleland's informal goat markets: Their role and function in smallholder livestock development. Briefing Note No. 3. PO Box 776, Bulawayo, Zimbabwe: International Crops Research Institute for the Semi-Arid Tropics.

About ICRISAT



ICRISAT
Science with a human face

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that does innovative agricultural research and capacity building for sustainable development with a wide array of partners across the globe. ICRISAT's mission is to help empower 644 million poor people to overcome hunger, poverty and a degraded environment in the dry tropics through better agriculture. ICRISAT belongs to the Alliance of Centers of the Consultative Group on International Agricultural Research (CGIAR).

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