



Sustainable small holder goat production and commercialization in semi-arid regions of Mozambique

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Key points

- Goat production and commercialization are important livelihood options for rural communities in the semi-arid regions of Mozambique. Goats are often kept by female headed households and the elderly who produce and sell in an ad hoc, and informal way.
- Important measures to succeed include: widespread adoption of improved management practices in relation to health, reproduction and feeding as well as improved interaction among value chain actors to enhance smallholder market participation.
- Innovation platforms (IPs) provide an opportunity for different value chain actors namely, producers, input and service providers, traders and enabling agencies such as government departments and researchers to meet, and jointly identify and address constraints and opportunities.
- As access to animal health services is a challenge for many parts of the country it is important to engage with NGOs that can train community animal health workers to deliver animal health services at the community level.
- Livestock policies, in general, are skewed towards crops with limited attention to livestock especially small ruminants. A number of policy issues that may need to be addressed include for example: training and accreditation of paravets; establishment of livestock markets and official demarcation of communal pasture areas.

Goat production in semi-arid areas: Case of Inhassoro district (Inhambane)

Sixty per cent of the population lives below the international poverty line (USD 1.25 a day). Poverty is more concentrated in the rural areas than in the urban areas. Women and children play an important role in looking after goats while the men are more involved in the selling of the goats.

Because of the low literacy rates together with the absence of extension programs targeting goats, the knowledge of improved goat husbandry practices on health, feeding and reproduction is very low. The festive season December to January is the peak sales period during which most goat keepers sell their animals at the farm gate to (local) traders. It is not common for producers to bring their animals to the market.

Introduction

Goats are an important livestock species to increase household food security in the semi-arid and arid regions of the country as they are mostly sold to purchase food items when crop reserves are insufficient, and to cover emergencies. Hence, production is practiced on an informal basis that may not deliver its potentially larger benefit to the community.

While figures are scarce because of the informal nature of the sector, there is anecdotal evidence of increased demand for goat meat in urban centers and thus for more market-oriented production. To achieve this, linkages among value chain actors such as producers, middlemen, traders, butchers input suppliers, local authorities, etc need to be strengthened. Translating this increased demand for meat into increased productivity and sales could contribute significantly towards improving the food security status of farmers in semi-arid and arid areas if some technical and institutional constraints at different levels of the value chain could be addressed.

imGoats Project – in brief

The project, Small ruminant value chains as platforms for reducing poverty and increasing food security in dry-land areas of India and Mozambique (imGoats) aimed to transform goat production and marketing to a sound and profitable enterprise and model that taps into a growing market, largely controlled by and benefiting women and other disadvantaged and vulnerable groups while preserving the natural resource base. In Mozambique the 2.5 years project (2011-2013) was implemented by CARE in Inhassoro district, Inhambane province. The imGoats project worked with 523 participants (40% women) over 18 communities.

Results

Improved production

Delivery of animal health services for goats was improved through the ongoing training of 14 community animal health workers (called paravets). The paravets are persons with minimum literacy level, and are goat keepers. They provide basic services such as treatments against internal and external parasites, treatment of wounds etc. They are paid by the goat keepers for the services. Paravets also notify the livestock officer at the District Services for Economic Activities (SDAE) of any animal health issues in the communities bridging the information gap between the goat keepers and existing government structures. Figure 1: Overview of free services delivered by field guides in Jhadol block, Udaipur district.



Figure 1: Overview of paid services delivered by paravets per month in Inhassoro district, Inhambane province.

As shown in figure 1, the demand for animal health services exists and is growing.

The provision of animal health services has resulted in an additional source of income for the paravets up to 604MTN (20.3USD) per month.

The project also supported the establishment of 2 veterinary input suppliers to facilitate the access to drugs in the district. This is crucial as it saves paravets and producers having to travel 300Km to the nearest veterinary input supplier.

RESULT: Goat keepers are paying for paravet services generating an additional income of 20USD per month on average for the paravets. This incentive together with the availability of veterinary drugs in the district will ensure that the services continue to be provided after the end of the project.

Apart from improving the health management practices, paravets and goat keepers were also trained in improved reproduction and housing practices. Training manuals were developed for this purpose. In addition, 5 model farmers (of which 2 women) were selected to showcase the improved husbandry practices to their community members. Figure 2 shows an improved goat shelter of one of the model farmers built from local material.



Figure 2. Improved goat shelter from the model farmer in Chimanjane

RESULT: Recognition of, and closely working with model farmers in the communities helped improve the adoption of improved husbandry practices by the project participants and other community members.

Communal pasture areas

One of the production constraints identified was that goats were tethered in order to avoid intrusion into the cropping areas. This practice is not ideal as the grow rates are less than when animals can graze freely. The solution identified by the innovation platform members was the creation of communal pasture areas in the communities. While the concept is not new and regulations were in place, it was not

enforced by the relevant district authorities. The project team assisted with the identification and demarcation of the communal pasture areas (Figure 3).



Figure 3. Communal pasture area.

RESULT: Securing livestock grazing areas is important in order to increase livestock production and commercialization in a sustainable manner.

Increased commercialization

As shown in Figure 4, sales have been rather irregular due to lack of purchasing power of the local buyers although the situation seems to have improved since June 2013.



Figure 4. Overview of the number of goats sold and their average weight in 2012 and 2013 in Inhassoro district as part of imGoats (n=288).

Information from the goat markets conducted in Inhassoro district show that the average weight at sales is 22.85Kg at 10 or 11 months of age. The average price per animal is 1,063MTN (approximately 35USD).

The project introduced the use of weighing scales to improve producer's ability to value their animals and bargain with buyers but traders were reluctant to use scales.

Direct access to distant markets (Maputo) is limited for individual goat keepers as these buyers need larger number (100 animals or more) which they are unable to supply. However, collective action of the various goat keeper groups coordinated through the innovation platform has

allowed supplying these markets from June 2013 onwards. In addition, a local private slaughterhouse that recently opened in Vilanculos district may be another important buyer of goats on a regular basis.



Figure 5. Weighing of goat at a sale.

RESULT: Collective action by goat keepers as well as exploring new market opportunities will help improve the numbers of animals sold resulting in more household income.

Increased interaction among goat value chain actors

An Innovation Platform (IP) was established in Inhassoro district. This multi-stakeholder platform was comprised of: producers, community leaders, paravets, local traders; a representative of SDAE and the head of the Provincial Livestock Services (SPP); CARE staff and research staff (ILRI). The aim of establishing an IP is to jointly identify and subsequently address some of the constraints at different levels of the value chain. The IP meetings allowed for joint planning of activities such as creation of communal pasture areas, health service delivery and discuss commercialization strategies. Research results were also shared and discussed with the IP members. Figure 6 shows an example of the information sheets prepared.

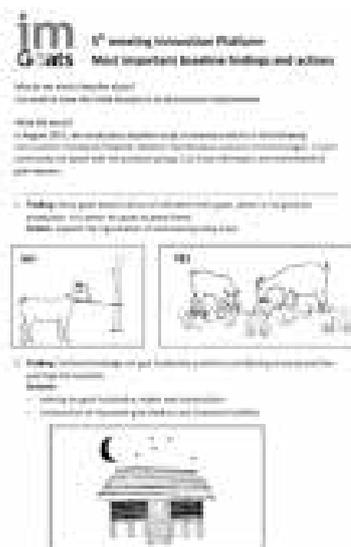


Figure 6: Sharing baseline results

The paravets facilitate that the issues raised at the IP meetings are also fed back into the goat keeper groups.

RESULT: Stakeholder interaction through the Innovation Platform process resulted in improved information flow and improved collective action regarding commercialization with paravets playing an important role in the facilitation process.

Conclusions

The following primary conclusions can be drawn from this 2.5 year project aiming at improving smallholder goat production and commercialization:

- Because of the relatively short reproduction cycle of goats (17 or 18 months from gestation to sale) goats have a great potential to improve household food security through sales in semi-arid regions of Mozambique.
- Goats are sturdy and resilient animals and can survive in harsh environments but improved husbandry practices on health, feeding and reproduction are needed to reach their full potential.
- There is potential for smallholders from semi-arid areas to increase their market participation as demand for meat, including goat meat is steadily increasing.
- The use of an IP process to jointly identify and address the value chain constraints and opportunities is a valuable approach even though it is time consuming and requires leadership and facilitation skills.

Implications for policy and investment interventions

Policy implication 1 is that the Ministry of Agriculture – National Directorate of Veterinary Services (NDVS) can adopt the imGoats model to improve smallholder goat productivity and commercialization.

Investment implication 1 is that DNSV should work closely with NGOs who can assist with training of field guides to improve animal health service delivery, in a form of public-private partnership. The DNSV should ensure that the training curricula meet minimum standards.

Policy implication 2 is that the Ministry of Agriculture together with provincial and district authorities should promote the establishment of more livestock markets as distance to markets is a crucial factor for smallholder (especially women) market participation.

Investment implication 2 minimum market infrastructure facilities should be built at strategic places throughout the country.

Policy implication 3 identification and demarcation of communal pasture areas should be enforced by district authorities to ensure dedicated land for livestock production.

Investment implication 3 identification of dedicated areas within a community for residential, cropping and grazing areas, etc is already part of most district development plans and in national strategy documents but its implementation should be reinforced.

References

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