Characterization of smallholder goat production and marketing systems in Udaipur district, Rajasthan State, India: Results of a baseline study

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Goat production and marketing are important livelihood options for rural communities in the dryland regions of India and Mozambique. However, these activities are often carried out on an ad hoc, risky and informal basis with little benefit to the communities.

The project, Small ruminant value chains as platforms for reducing poverty and increasing food security in dryland areas of India and Mozambique (imGoats), was designed with the overall goal of increasing incomes and food security in a sustainable manner by enhancing pro-poor small ruminant value chains in the two countries.

The aim of the two and a half year project (2011–13) is 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.

The main target beneficiaries of the project are poor goat keepers, especially women and other marginalized groups and scheduled tribes (ST). According to the population census of 2001, Udaipur district has the highest proportion of ST population in Rajasthan State accounting for 17.75%. About 47% of the total households in the district are considered as living below the poverty line. Other beneficiaries include goat value chain actors such as small-scale traders and providers of inputs and services.

This research brief presents a summary of the results of a baseline study carried out from August to October 2011 in Udaipur district, Rajasthan State, India, as part of the imGoats project, to characterize goat production and marketing systems in the district. The study also identified the main production- and marketing-related constraints faced by the goat value chain actors. Based on these constraints, a number of interventions are recommended to improve goat production and marketing in the district.

Objectives of the imGoats project

To pilot sustainable and replicable organizational and technical models to strengthen goat value chains in India and Mozambique that increase incomes, reduce vulnerability and enhance welfare among marginalized groups, including women.

To document, communicate and promote appropriate evidence-based models for sustainable, pro-poor goat value chains.
Project area
The project area was the district of Udaipur, Rajasthan State in Northwestern India. The district is situated in southern Rajasthan and covers an area of approximately 13,419 square kilometres with a population density of 242 inhabitants per square kilometre. The imGoats project villages are in the Jhadol and Sarada blocks (figure 1).

Methodology
In Udaipur district, the imGoats project works with 2685 households of which 161 are female-headed households. These households are distributed over 44 villages across two administrative blocks: Jhadol and Sarada. The baseline study was carried out in nine project villages and three control villages, which were randomly selected.

The information from the baseline study comes from:
• secondary information;
• focus group discussions at village level;
• key informant interviews; and
• individual household interviews.

Of the total 177 households surveyed, 20 were female headed households and 61% were participants in the imGoats project.

Baseline study villages
Total project villages: 44
Sample project villages selected for survey: 9
Control villages (non-project villages) for survey: 3

Baseline households surveyed
Total households participating in the project: 2596
Sample project households selected for interviews: 138
Sample households of control villages: 39

Results
Goat keeping is mainly practised as a side occupation
• The goatkeeper households participating in the project are living below the poverty line with a very high dependence on their small land and livestock holdings.
• Crop production is subsistence in nature with wage labour as the main income source. Almost all the households take up crop production activities during the rainy season but this is mainly for household consumption during the year. Cash income generated through sale of surplus crop production accounts for 20% of total annual household income and wage labour contributes to almost 33% of the total annual household income.
• Goat husbandry is mainly a complementary source of income to support household needs or during emergencies and accounts for about 12% of the total annual income.

Husbandry practices
• The prevalent breed is the local nondescript breed locally referred to as “desi”. The goatkeepers do not follow any specific breeding practices.
• The goat keepers practise a combination of open browsing and stall feeding, which varies according to seasons. Forest land is considered as an important feed source by almost 58%, 63% and 62% of the goatkeepers in winter, summer and rainy seasons, respectively. Sixty-three percent of respondents expressed that they experienced shortage of feed for goats in the previous one year especially during the summer months of April to May.
• About 66% and 49% of sample goatkeepers indicated that the goats are housed inside the house during the rainy and winter seasons, respectively.

• At present, the awareness levels about health management practices among the surveyed goat keepers are almost negligible. Almost all the sample goatkeepers have not undertaken any health management practices such as vaccination, deworming, treatment against ticks and curative treatment. Majority of them indicated that no investments were made in goat rearing and considered it as a low-input (cost) system.

• In goat rearing, women are more involved in day-to-day activities whereas men are involved in activities such as medication and selling of animals.

Selling of animals

• The goats were mostly sold to the local butchers at the farmgate. According to the goatkeepers, the most important factor that buyers consider while determining the prices of goats is weight (as per 73% of the sample households). The second most important factors are the body condition (healthy appearance) and age of animal.

• The peak sale months are the winter months of November, December and January, which coincide with important Hindu and Muslim festivals. The male goats (age group of more than 5 months and not castrated) are sold at an average price of 2195 India rupees per animal. Most often, the goatkeepers felt that the weight of the animal was underestimated and they received lower prices.

• Both women and men are involved in the decision making process to sell the animals and have equal control over the money generated.

Collective action

• About 62% of the sample goatkeepers indicated that they did not have membership in any active community group.

• There has been a general lack of coordination among the goatkeepers with respect to planning of different goat husbandry activities.

Recommended project interventions

Based on the baseline results and constraints identified by project participants, the following interventions are recommended:

• Given that goat husbandry is currently considered as a secondary activity with low investments, it would be best to first focus on improving production through better management before working on commercialization aspects.

• Application of the innovation platform (IP) approach is the unique feature of the project. Its role has to be seen as that of nodal point for knowledge transfer/exchange between the various value chain actors. It provides an opportunity for different actors to meet, discuss and plan activities for addressing immediate issues. In the imGoats project, IP is performing the role of knowledge sharing and planning of activities. The enhanced human capital, in terms of increased awareness among the goatkeepers and the trained local resource person who is also a goatkeeper (called field guide) in the villages, are critical for sustaining the goat development activities as well as the IP.

• Community access to health care for goats is hindered both due to lack of a veterinary doctor or livestock assistant in the immediate vicinity and lack of awareness among the farmers about the health care practices and facilities. The imGoats project aims to bridge this gap by imparting technical training to field guides to make them the key link between the community members and the State animal husbandry department. In the present set-up, the field guide is expected to become a service provider in the future and performs multiple tasks.

• The literacy levels of the field guides and the community members are very low. Since knowledge sharing is a continuous process, a proper communication strategy (responsibility of collecting information, translating and dissemination) has to be planned with focus on demystification of technical knowledge and emphasis on practical orientation.

• A systematic process of identifying the main gastrointestinal parasites through faeces analysis in the area and giving specific treatment can be more effective.

• Almost 87% of the goatkeeper respondents indicated their willingness to invest more money for bucks of an improved breed, which is an indication of their interest in breed improvement. At present, Sirohi breed bucks (recommended breed for the area) are given to each goatkeeper group as part of the project activities along with training for buck upkeep.
Goatkeeper groups have been formed as part of the community mobilization efforts of the project. Consolidation and strengthening of these groups by orienting them to the benefits of collective thinking and action will play a key role in future course of action. This will help in making available input services, access to credit facilities and developing collective marketing strategies.

Recommended areas for further research

- A value chain study to better understand the commercialization dynamics.
- An analysis of herd size, composition and mortality rate to ensure sustainable increase in sales and avoid depletion of the herd.
- An analysis of labour division in goat production and the involvement of women and children.

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