

Pradeep Man Tulachan, Mohammad A. Jabbar, and M.A. Mohamed Saleem, eds. 2002. *Smallholder Dairy in Mixed Farming Systems of the Hindu Kush-Himalayas*. Kathmandu: ICIMOD and ILRI (International Livestock Research Institute).

Small-scale dairying is one of the emerging livelihood strategies in the Hindu-Kush Himalayan region. Farmers keep a few dairy animals to generate cash income and meet household requirements for dairy products. In accessible (near the road) areas, this enterprise has become popular among small farmers who cannot generate enough food and cash income from crop production. *Smallholder Dairy in Mixed Farming Systems of the Hindu Kush-Himalayas*, published recently by ICIMOD and ILRI, analyses the characteristics, constraints, and development opportunities of smallholder dairy farming in the hilly areas of Nepal, India, and Bhutan.

This book or research report is based on four case studies – one each on Bhutan (by Phanchung, Phub Dorji, Thubten Sonam, and Kinley Pelden) and Nepal (by Bikash Sharma and Kamal Banskota), and two on India (Uttaranchal and Himanchal Pradesh by Ranveer Singh and C. Shekar Vaidya, and Vir Singh, respectively). Of the five chapters in the book, four chapters are devoted to four case studies and the first chapter summarizes and compares the findings of the four case studies. All these case studies seem to follow a standard questionnaire survey and the same methodology for the collection of information. Accordingly, all these chapters are organized in the same style. This seems to have some advantages and some problems. The style of reporting has made it easier to compare the case studies. But this also seems to miss many of the unique features and problems of each case study site. Moreover, the

report reads like a mechanical piece of work lacking individual creativity and diversity. Broadly, the case studies describe the context, study site and methodology, dairy production systems, species and breeds of dairy animals, animal feed and resources, livestock health services, gender and livestock, marketing of dairy products, supply and demand of dairy products, and implications of the study.

As a student of rural economy and society, I was drawn to this book as it argues that a rural transformation, especially in accessible areas, is being triggered by smallholder dairy production. The book considers smallholder dairying as the driving force for such a transformation. The interventions that led to this transformation are identified as the establishment of markets for fresh milk and the development of milk co-operatives and milk collection centers from where milk is supplied by government supported agencies and private agencies to the consumers in towns and cities.

The above argument leads to various questions for social scientists and students of development studies. The role of accessibility (transportation facilities), marketing opportunities, rural-urban linkages, the ability of poor and small producers to organize, and marketing supports are important factors in bringing about desired changes in rural economies and livelihoods of small producers. This also challenges development theories that argue that rural areas are cheated by the urban or core areas, and that increased market-orientation is not conducive to the livelihood security and sustainable development of rural areas. The aim of the study was to gather knowledge about the specific nature of the changes and transformations taking place and how they have affected the sustainability of smallholder dairy production systems and lives of the people.

Even though the various case studies presented here provide interesting information as to the technical aspects of smallholder dairy farming and marketing, there is not much information that helps in analyzing the aim of the study – the role of smallholder dairying in rural transformation and in sustaining the livelihood security of people. To begin with, the study does not specify what is meant by smallholder dairy farming, which could have different meaning in different contexts, even within the Hindu Kush-Himalayan region. Smallholder dairying could be defined in different ways – in terms of the number of animals, total volume of milk produced, location of the enterprise, and the like. Again, generalization in terms of number is not a sufficient criterion as the pressure on resources and environment and production of milk depend

upon the types of animals (breed and species) and the system followed in raising them. No attention has been paid to this aspect of the study except in one case study, which states that households owning two cows are considered to be smallholder dairy farmers.

Even though it is stated at the beginning that smallholder dairy farming is increasing, the data presented do not support this statement. This is especially so in the case of Nepal, where growth in dairy production has remained slightly below the population growth rate. This means that output per capita has been decreasing. In Nepal's case, the contribution of the livestock sector to agricultural GDP is growing, but this proportionate increase is seen because of a decline in crop production.

The study is devoid of any analysis of economic changes or improvement in livelihood through the increased role of smallholder dairy enterprises. The contribution of dairying to the income of small farmers' household economy has not been analyzed. Other social transformations brought about by changes in household and village economy as a result of increased involvement in dairy farming have also not been analyzed. Unless these analyses are done, one cannot say anything about rural transformations. This book does not say anything about the impact of dairy production on household and village economy or rural transformations.

All of the case studies touch on the implications of smallholder dairying for gender roles. This analysis is limited to considerations of women's time allocation to dairy activities. All case studies clearly reveal that dairy activities are mostly undertaken by women. This essentially means that dairying increases women's workload. The consequences of this increased workload for other household activities are not analyzed. Clearly, women's greater workload means that other aspects of household livelihood and food security--including health, sanitation, childcare, education, and political participation--might have suffered. Unless we know more about these possible outcomes, we are not in a position to say whether or how smallholder dairy production has contributed to the livelihood security of rural households.

The study clearly shows that dairy enterprises are profitable, which also means that the incomes of families undertaking these enterprises have increased. Yet what this increase means for families is not analyzed in the book. To understand rural transformations it is also essential to understand how this new income is distributed within the village and within the household, and how this income is used. Whether women have

access to this income or whether this income is used for better nutrition, education, or other productive assets, is important to know.

One of the ways to bring about change in rural areas is through increased associations or co-operatives for collecting and selling milk. That organizations such as these increase political and social capital is without question, but how dairy groups or associations have been able to increase such capital has not been discussed in this book. The study just assumes these organizations have helped in the transformations of rural areas. Moreover, there is no description of what farmers (women or men) feel about the benefits, costs, constraints, problems, challenges, and opportunities entailed in dairy farming.

Overall, the book has gathered some useful information about the technical aspects of smallholder dairy farming which also facilitate a cross-country comparison. But there are several areas where information and analyses relevant to the book's aims are missing. Accordingly, we cannot make any firm conclusions about the transformation of rural areas through smallholder dairy farming. Moreover, this study makes no reference to increased globalization and its impact on smallholder dairy production. What if an increased amount of milk enters our markets from overseas? Would this not ruin smallholder dairy enterprises?