

## **Sustainable Livestock Management for Poverty Alleviation and Food Security**

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While many farming systems in developing countries include livestock production as an adjunct to crop production, meant to hold the fort during the period crops are in the field, livestock are fast assuming an important place in the economic and social lives of the people, especially smallholders. Many reasons have been adduced for this trend, not least of all the fact that the world population of those able to afford livestock products has been growing, and the recent price increases seem to have been less for livestock than for crop products, making livestock products even more affordable. There are good reasons to believe that livestock plays a crucial role in the lives of the poor who predominate in the developing world. Policy makers and donor organizations have therefore been promoting livestock production in recent years, with particularly the Food and Agriculture Organization of the United Nations and The World Bank being in the forefront.

This is why a book that specifically aims to develop capacity for expanding and sustaining livestock production systems within resource-poor settings is an important one. Its further appeal rests on the fact that it has been structured as a practical guide that targets the key players in the livestock economy such as the farmers themselves, the animal health practitioners, the extension services, the students of animal agriculture and those who teach them, making it an indispensable tool for training, operation, and advocacy alike. The book is an intelligible fusion of diverse perspectives of a rather vast constituency both local and international, and combining researchers, farmers, development administrators and publishers. Another important point that needs to be made is about the way the book originated, virtually from the grassroots, being, according to the acknowledgements at the beginning, the product of a workshop on Endogenous Livestock Development held in Yaoundé, Cameroon, that ignited interests among individuals and institutions that culminated in the publication of an earlier book released in four languages (with a DVD) in 2008, and now distilled into a practical learning guide and training manual.

That said, attention should turn to the book's structure which no doubt contributes to its instrumental value. There are all together 12 formal chapters which are somewhat glued together by a well-focused introduction and an appendix that artfully synthesizes the key recommendations already made in the three last chapters of the book. Of course, one might see the consigning of such crucial points to the appendix as somewhat unusual given the tendency to treat that part of book in much the same way as its human counter-

part. However, this may not detract from its high importance if the reader has read the introduction before delving into the book proper.

Chapter 1 kicks off with a presentation of the major trends in the livestock sector which are linked to the significant demographic shifts that have occurred with respect to population and incomes in the last two decades. Three critical issues that the livestock sector confronts are highlighted as the increasing resource intensification, globalization of the food system and the social implications of the structural changes in the sector. Some discussion of the phenomenon of land grabbing that began in 2009 is presented and what it means for land availability for arable farming and opportunities, and possible threats, for wider sectoral developments are explored.

Chapter 2 catalogues the various approaches for livestock development, starting with identifying the stakeholders for intervention, the motivation for productivity enhancement, and the theoretical case for optimization and efficiency in farming. Existing gaps are identified along with possible reasons for them and how they can be plugged. New challenges posed by Climate Change are recognized with some discussion on how they justify changing tactics in production and investment. Practical applications of these approaches are illustrated with insights drawn from far and wide, including Nicaragua, South Africa, Mexico, and India with the Netherlands representing best practice to be adapted to developing country contexts.

Chapter 3 highlights the methodological and organizational questions relevant to the implementation of the Endogenous Livestock Development approach with copious illustrations based on the experience in Cameroon. Chapter 4 provides a basis for the differentiation of livestock production systems, with clear distinctions made among High-Input, Low-Input, Extensive Land Use and Intensive Land Use systems. It is in Chapter 5 that the link to poverty is more explicitly made, showing how livestock keeping affects the household and what strategies farming families adopt to mitigate risk and uncertainties. This chapter brings together all the old arguments and fits them within the new challenges faced by developing country agriculture. The relevance of these systems to the attainment of the MDGs is elucidated.

Chapter 6 focuses on one of the two types of livestock keeping, namely the smallholder low-input and diversified livestock keeping. The specific aspects addressed include the characterization of this type of livestock keeping, level and sources of labour use, and its costs and advantages. Similar aspects are covered in respect of the other type of livestock keeping, namely, the specialized Livestock keeping, which is presented in Chapter 7. What it would take to change from the smallholder low-input and diversified type to the more specialized type is discussed in Chapter 8, again with rich illustrations from diverse environments.

In Chapters 9 and 10, the book presents recommendations for optimizing the low input and diversified as well as the more specialized livestock keeping types. The need

to adapt to local circumstances is highlighted. Recognizing that the principal production problem is high mortality of the livestock, the recommendations focus attention on ways of reducing animal mortality, especially through improved nutrition, improved pasture and rangeland management, addressing water deficiency to improve access to adequate water resources for the animals, effective disease control especially for the communicable (infectious) ones, control of parasites, breeding and selection, ensuring efficient protection of the animals from predators, accidents, theft and adverse weather through provision of adequate housing with guarantees, and establishing a range of other animal-friendly measures.

Chapter 11 turns to the crucial question of market access and begins by stressing the importance of

marketing and how smallholders can market their animals profitably. In Chapter 12 which is the final chapter, six case studies are used to illustrate how all these strategies work in practice in four developing countries and one industrialized Western country.

As a learning guide, this book is well-researched and comprehensive and has used the effective formatting of commencing each chapter with an itemized list of learning goals while the texts are organized in short paragraphs that are strategically interspersed with boxes, sketches, figures and graphs, presented in contrasting but subtle colour coding. All these enhance its appeal and accessibility and make it an indispensable tool for livestock development programming at all levels.

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Sustainability challenges for livestock in agricultural development. 10. Review and improve indicators and methodology and identify data gaps. 11. Recognize the importance of smallholder mixed farming systems for FSN and support them by: 12. Recognize and support the unique role of pastoral systems by

A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. 3. Request PDF | On Jan 1, 2013, Ajuruchukwu Obi and others published Sustainable Livestock Management for Poverty Alleviation and Food Security | Find, read and cite all the research you need on ResearchGate. [Show full abstract] poverty and to enhance the food security which can be addressing the need for sustainability. Further, the transition in over-exploited and capital intensive fisheries is other factors to consider while the emphasis on enhanced environmental review and distributive well-being in a highly flourishing global aquaculture industry environment. Livestock development: implications for rural poverty, the environment and global food security. The World Bank, Washington, DC, USA. Directive 1991/676/EC. Role of livestock in human nutrition and health for poverty reduction in developing countries. Journal of Animal Science 85, 2788–2800. Sere, C and Steinfeld, S 1996. Rotational stocking as a climate-smart grazing management strategy for sheep production. Science of The Total Environment, Vol. 753, Issue. , p. 141790. CrossRef.