Preface

Grassland degradation is a serious blight on the Chinese landscape. Encroaching deserts, invasive weeds and denuded pastures are some of the more visible signs of the degradation. Yet they are just the tip of the iceberg of adverse impacts on herder livelihoods and ecological services. The sheer magnitude of the grassland degradation problem has seen the hearts and minds of many officials and scholars both within and outside China devoted to resolving the issues involved. In recent years billions of yuan and an army of scientists, extension workers and consultants have been engaged in tackling the challenges posed. The high stakes involved and the complexity of this natural resource management problem make it a fascinating area of investigation.

The authors first became aware of the seriousness of the degradation problem in the pastoral areas of China in the late 1980s while undertaking a research project on the Chinese fine wool industry. It was apparent from an early stage of the project that fine wool from Inner Mongolia, Xinjiang and Gansu was being grown on highly degraded grasslands. Indeed grassland degradation in the fine wool growing areas in these provinces and in many other parts of the pastoral region had been occurring for many years and had reached serious levels by the late 1980s. However little attention and few resources were being directed at the problem at the time.

Since the early 1990s the authors have been involved in a series of other research projects on China’s ruminant livestock industries many of which have also involved fieldwork in China’s pastoral areas. The opportunity to observe grassland degradation and counter measures regularly over the last two decades has been extremely insightful. Learning from both the successes and mistakes of the past would seem vital to charting the way forward.

A dramatic turn around has occurred in recent years in the financial, institutional and human resources directed at the grassland problem. Much of the attention has focussed on trying to identify technical solutions to the problem. A plethora of articles and studies have emerged over the last decade both in Chinese and English that have added to our wealth of knowledge on the bio-physical nature of grassland systems. This book seeks to complement
this growing body of literature by focussing on the policy and institutional settings that govern grassland systems in China.

Policies and regulations specific to grasslands form just one part of a matrix of policies that impact on grasslands and the households that rely upon them. Thus in order to report on the influence of the government on grassland degradation in China, the book also covers institutional settings and policy instruments in areas such as organizational structures, livestock and feed systems, markets, settlement and economic adjustment. Some aspects of the policy matrix (such as measures to support production and processing with the aim of rapidly developing ruminant livestock industries) have placed extreme pressure on the grasslands while others (such as efforts to develop new market segments and channels) have generated opportunities for herder households to improve their livelihoods without increasing grazing pressure. Creating a policy and institutional environment that draws on the synergies between policy areas and minimizes unintended cross-effects is crucial in addressing problems in the pastoral region.

A major theme of the book is that the mix of technologies directed at grassland degradation and livestock systems needs to interface with this matrix of policies and institutions and with the characteristics and requirements of pastoral households. Unless the necessary policy-determined institutional structures and incentives are in place many purely technical solutions have the potential to make matters worse and, in any event, are unlikely to be sustainable in the longer term.

The analysis in the book was facilitated by involvement in an Australian Centre for International Agriculture Research (ACIAR) project entitled ‘Sustainable development of grasslands in western China’ in which the authors conducted a policy and institutional sub-project. The authors are indebted to other Chinese and Australian researchers on the project including David Kemp, David Michalk, Randall Jones, Taro Takahashi, Wu Jianping, Hou Fujiang, Han Guodong and Ma Zhifen for their insights on various aspects of grassland management. The authors would especially like to thank Zhao Yutian whose widespread and regular travel throughout all regions of China and close work association with officials at all administrative levels have been invaluable in facilitating the policy and institutional analysis even before consideration of his extensive and detailed knowledge of grasslands and ruminant livestock industries. Apart from the researchers on the ACIAR project, the authors made contact with researchers working on other projects and with other organizations and NGOs and appreciate the insights and information provided by Ian Auldist, Brian Bedard, Gail Berg and Dan Miller. The authors are extremely grateful to all of the people mentioned above and to many others for aiding our understanding of the technical and social issues associated
with grassland management. Of course they are in no way responsible for the authors misinterpreting this information or for any omissions or errors in the book.

Apart from the ACIAR sustainable development project the analysis in the book drew on other research projects that the authors have been engaged on as part of the China Agricultural Economics Group at the University of Queensland. Details about these projects appear on the China Agricultural Economics Group website at http://www.nrsm.uq.edu.au/caeg. Among the many Chinese collaborators on these projects that we would especially like to acknowledge are Zhang Cungen, Liu Yuman, Lu Xiaoping and Ke Binsheng for their ongoing assistance and understanding of issues in China’s pastoral region.

Information on which the book is based came from fieldwork and interviews over an extended period involving officials, bureaucrats, technocrats, academics, herders, traders and enterprise managers throughout the pastoral region and at various administrative levels. The authors interviewed officials in Inner Mongolia (especially Chifeng, Tongliao and Erdos prefectures), Xinjiang (Yili, Tacheng, Altay, Aksu, Shihezi and Changji prefectures) and Gansu (Sunan and Tianzhu counties) on many occasions over many years in connection with many projects. We would like to thank those officials for their hospitality, frank and open exchanges, enormous knowledge and desire to deal with the issues of sustainable development in China’s pastoral region. At the Central level, over the years many officials and researchers in the Ministry of Agriculture, the Academy of Agricultural Sciences and the Academy of Social Sciences have helped us in numerous ways. Particular thanks are due to Ministry of Agriculture officials in the Animal Husbandry Bureau (especially Wang Junxun) and the Department of International Cooperation (especially Lu Xiaoping and Gao Jinhong) for facilitating the fieldwork and research on which this book is based.

Finally many weeks of fieldwork in China and extended hours in the analysis and preparation of manuscripts such as this would not be possible without the wholehearted support and sacrifices of our families. We are deeply indebted to their unseen but invaluable support and contribution.

Colin Brown
Scott Waldron
John Longworth
June 2008