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A paradigm shift in
livestock management:
from resource sufficiency
to functional integrity

28th and 29th June 2008, Hohhot, China

Trish Kammili
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The need for a shift in Natural Resources Management Paradigm in the area of Livestock Research and Practices

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THIS BOOK IS the result of a workshop which was held at Hohhot a few days before the VIII Rangeland/XXI Grassland International Congress in order to open a space for a debate on what is at stake nowadays regarding livestock all over the world. In order to go beyond the current discourses, dilemmas and controversies on the contribution of livestock to greenhouse gas production either to meet the demand for meat from developed societies or at least to allow poor farmers to survive in hardy environments, we have considered that we have to change our worldview on what livestock farming means in a world which is at once globalised and diversified! Our aim was to promote dialogue and discussions between scientists and practitioners on the thematic of functional integrity and sustainable management of natural resources in livestock systems. The frame of reference was based on three factors crossed with three induced dynamics.

Three principal categories of factors that affect the sustainability of the system:

- Reconfiguration of markets, at both local and global scales;
- Change in environmental factors, particularly those linked to climate change;
- Evolution of public policies that could affect the role played by the State, market regulations or the importance given to environmental issues.

These above mentioned factors are clearly present in all the regions of the globe albeit to a greater or lesser extent. They influence livestock systems and drive them into a dynamic that can affect:

- Institutional set up and arrangements inside of which these systems are organized (social structures, modalities of the use of space);
- Modes of collective actions, bundles of rights, and reconfiguration of identities (linked to the profession, cultural values, locality etc.);
- Re-qualification of resources, practices and areas (forage intensification, innovative systems of pastoral resources management, breeder skills, sedentarization, etc.).

More than 100 people attended this workshop encouraging us to take the initiative of creating a network on these issues, the LiFLoD network ("Livestock Farming and Local Development") and to propose further actions involving those who are interested everywhere in the world, starting by another workshop during the next IRC, which will be held in April 2011 at Rosario (Argentina).

As a first milestone of this process we are very glad to publish this book, with three kinds of papers: (1) the texts of the full presentation that were made at Hohhot together by researchers, practitioners and pastoralists, (2) the reflection of the discussants who were asked to react during the workshop and (3) some voluntary papers that were submitted from the audience. These papers are grouped together by continents in order to facilitate browsing by the reader facing the diversity of the considered situations. The main outcomes stemming from the discussions during the workshop are presented in the conclusion of this book, as some recommendations for research and policy making priorities...

This is why, in this introduction I would like to put the papers presented to the test of the frame of reference we had previously set up and finally give some keys to the papers that are published in this book and how it illustrates the necessity of designing a new vision on what livestock farming is today and how it could evolve considering some major economic, social and environmental stakes our world is facing... But first in order to set the theoretical frame of this paradigm shift we are speaking for, I'll start by a concept note I wrote with an Australian colleague, Ray Ison, Professor at Monash University, Melbourne, and at the Open University in Milton Keynes (UK), presenting our theoretical basis.