Is Socioeconomic Development Consistent with the Conservation of Livestock Biodiversity?

Stephen Hall

University of Lincoln, Department of Biological Sciences, United Kingdom

Abstract

In the developing world, livestock production is increasing in order (a) to supply households (mainly urban) who can afford to buy animal products, and (b) to contribute to food security and rural development.

To consider the threats and opportunities facing livestock biodiversity, it is helpful to consider separately the consequences of policies aimed at increasing food availability, and those aimed at increasing food security.

**Threats from requirement for increased food availability**
1. Intensification following developed-world models
2. Standardisation of marketed products
3. Institutional bias
4. Shift in favoured species

**Threats from requirement for increased food security**
5. Standardisation of marketed livestock
6. Social equity and changing employment patterns
7. Provision of credit

**Opportunities from requirement for increased food availability**
8. Climate change and emergent diseases
9. Use of traditional breeds in sustainable crossbreeding
10. International trade in animal genetic resources
11. Internalisation of environmental costs

**Opportunities predicted from requirement for increased food security**
12. Past experience with livestock projects
13. Lower dependence on veterinary and nutritional inputs
14. Entry points for wider programmes
15. Appreciation of value of local and indigenous knowledge
16. Disaster or reconstruction aid
17. Biodiversity issues in natural resource management

The scientific community must (a) help to formulate policy by clarifying the issues involved and (b) promote research that can remove constraints on sustainable production. Two possible topics are, development of the concept of genetic impact assessment and exploration of its relevance to policy; and design of crossbreeding schemes that enable livestock biodiversity to be exploited in a sustainable manner.

**Keywords:** Livestock biodiversity

Contact Address: Stephen Hall, University of Lincoln, Department of Biological Sciences, Brayford Pool, LN6 7TS Lincoln, United Kingdom, e-mail: sthall@lincoln.ac.uk