

Deutscher Tropentag, October 11-13, 2005, Hohenheim

"The Global Food & Product Chain— Dynamics, Innovations, Conflicts, Strategies"

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