

Animating Diversity: Supporting endogenous development of livestock keepers

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ABSTRACT *Ilse Köhler-Rollefson and Evelyn Mathias argue that the promotion of endogenous livestock development would help eliminate many of the negative and unintended side effects of industrial livestock. They describe the work of the League for Pastoral Peoples and Endogenous Livestock Development and their work to support small-scale livestock keepers and pastoralists.*

KEYWORDS *biocultural diversity; protocol; rights; local; global; value addition*

Introduction

Livestock is the most important asset of the rural poor. About 70 percent of the world's more than one billion rural people who live on less than US\$1.25 per day depend on it (FAO, 2009). These 'small-scale livestock keepers' include more than 200 million small-holder farmers in Asia, Africa and Latin America, and about 120 million pastoralists. The League for Pastoral Peoples and Endogenous Livestock Development (LPP) is an advocacy and technical support organization for such small-scale livestock keepers, in particular pastoralists. LPP collaborates with grassroots organizations in Asia, Africa and Latin America that share its goals and philosophy and are collectively known as the LIFE-Network (Local Livestock For Empowerment of rural people).

Endogenous livestock development (ELD)

LPP believes in endogenous livestock development. 'Endogenous' means building on local resources, including knowledge, institutions, fodder and breeds, and using these as a starting point for development (Homann *et al.*, 2008; Hooft *et al.*, 2008; Mathias, 2008). These local resources are as manifold and varied as our planet. The animals kept by livestock keepers range from alpacas to yaks and include species and breeds adapted to all imaginable environments from hot to cold, from dry to humid, from lowlands to high mountains. Superimposed on this biological diversity is cultural diversity. While different ethnic groups may keep the same type of livestock, they utilize it for totally different purposes. For instance, pastoralists in the Horn of Africa regard the camel as a source of milk and scorn its use for transportation, while in India camels

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are only used for work and not for milk. Different utilization systems require different social institutions to underpin them, as well as different local knowledge systems.

The biocultural diversity is an expression of human ingenuity in making use of local resources in a long-term sustainable manner and without outside inputs. It is an antithesis to the livestock monocultures that have been promoted by the predominant paradigm of livestock development that relies entirely on exogenous resources: genetically uniform high performance breeds, high-protein feed that is shipped around the globe, as well as veterinary inputs produced by transnational pharmaceutical companies.

The unique selling points of local breeds

Local breeds have been ignored and neglected, but have many advantages as starting point for livestock development:

- They utilize local vegetation and are independent of protein-rich imported feed, as well as able to survive droughts and famines much better than introduced high-yielding breeds. By not competing with humans for grain, the local breeds make a net contribution to global food security.
- Being largely input free, local breeds have a low carbon footprint – no energy is used in bringing feed to them; instead, they usually forage for themselves. Intact sylvi-pastoral landscapes make a major contribution to carbon sequestration.
- Local breeds produce tasty and unique products. Metabolizing local plants, their meat, milk and eggs are much tastier than those of high-performance breeds kept on standard rations of corn and soy. As they grow slower, their meat has an inimitable texture compared to the watery flesh of industrially raised animals.
- They contribute to regional and cultural identity, thereby enhancing the attraction of an area. They are also part and parcel of the identity of many cultures, for instance the Raika and the camel, the Maasai and their cattle, the Basques and their shepherds. Once

they disappear from a landscape, it loses its attraction.

- Local breeds produce healthy food. Since they are maintained on local vegetation their diet is free of feed additives, such as hormones and antibiotics. Their products are therefore very healthy. It is scientifically proven that the meat of free-ranging animals has a different composition. Sometimes their milk or eggs may have medicinal value, as is the case with camel milk that helps diabetes patients or eggs of indigenous chicken, which are general health boosters.
- Local breeds have the potential for specialty products. While they cannot compete in terms of output with the standard breeds, they produce unique products that are decidedly different. For instance, the wool of coloured sheep and of camels forms the raw material for many local craft traditions. While traditional skills have often disintegrated, they can be revived if wool is made available and crafts people are provided with designer and marketing support (LPP *et al.*, 2010).
- Local breeds are part of the local heritage and often spark off feelings of nostalgia among visitors to an area. Furthermore, with livestock increasingly hidden away from sight in industrial operations, the sight of grazing animals enhances the attraction of a landscape.

LPP's activities

LPP has linked the local with the global in all of its activities. It has provided local livestock keepers, their leaders and support organizations with a platform for articulating their perspective and for making their voices heard. In particular, LPP has supported the following processes.

Livestock Keepers' Rights

Livestock Keepers' Rights (LKR) is a concept that was developed during the 'Interlaken Process', the run-up to the First International Technical Conference on Animal Genetic Resources organized by the FAO in Interlaken in September 2007 (Köhler-Rollefson *et al.*, 2008). When the

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FAO first became concerned about the loss of local breeds, the crucial role of livestock keepers as stewards of this diversity was not realized. LPP and the LIFE-Network therefore initiated a campaign for getting livestock keepers recognized as guardians of not only livestock breeds, but also the eco-systems of which they are a part. The recognition has risen since (FAO, 2009). In the course of the campaign, the term 'Livestock Keepers' Rights' was born. Initially copied from Farmers' Rights, it was developed much further through a series of grassroots consultations with hundreds of pastoralist leaders and other livestock keepers. 'Livestock Keepers' Rights' are a set of principles that – if implemented – would support and encourage livestock keepers to continue making a living from their breeds and thereby achieve the combined effect of conserving diversity and improving rural livelihood opportunities.

Livestock Keepers' Rights are taken seriously by the FAO and frequently referred to as a means of protecting the rights of livestock keepers in the context of the emerging debate on Intellectual Property Rights on animal genetic resources.

Biocultural protocols

Biocultural or community protocols (BCPs) put on record the role of livestock-keeping communities in the conservation of biodiversity, including breeds and ecosystems. Establishing a biocultural protocol involves a facilitated process in which a community reflects about and puts on record its role in the management of biological diversity and is also made aware of existing national and international laws that underpin the right to *in situ* conservation. The three-part process – documenting, reflecting and learning about rights – can be an enormously empowering experience for a community.

They are a new tool poised to receive legal backing by the International Regime on Access and Benefit-Sharing that will be negotiated at the next meeting (COP 10) of the Convention on Biological Diversity in Nagoya, Japan, in October 2010.

LPP has supported four BCPs among the Raika and the Lingayat in India, the Samburu in Kenya

and the Pashtoon in Pakistan, whereby in each case the outcome was slightly different. The process proved nearly more important than the protocol itself. For example, it made the Samburu realize the value of their traditional red Maasai sheep because of its drought resistance. Over decades the Samburu had been told that this breed was not productive and should be replaced with the higher-yielding but less drought-adapted Dorper sheep. At the same time, the Red Maasai sheep was the object of much scientific interest and scrutiny for its resistance against internal parasites – a genetic trait coveted by Australian sheep breeders.

Value addition

Value addition to local breeds is another important strategy promoted by LPP. This has potential to generate secondary jobs in rural areas, especially for women. LIFE-Network member Lokhit Pashu-Palak Sansthan (LPPS) in Rajasthan (India) is involved in an extensive exercise to create new and innovative products from the one-humped camel – an animal ideally adapted to the local desert environment, but rapidly losing its economic importance due to loss of its transport function. With the help of technological experts, LPPS has developed a range of exciting items, including ice cream from camel milk, soap from camel milk, paper made from camel dung. It is also teasing out the value of camel wool – which was previously believed to be too short and coarse to be of any commercial value. With the help of designers and wool experts, the wool is now separated by colour and qualities. The processing involved – carding, spinning, weaving, etc. – is creating income opportunities for women, especially widows who according to local customs are not allowed to leave their houses.

Conclusion

It is time for the local to go global, rather than imposing the global on the local. LPP therefore supports establishment of a fund to enable local livestock keepers to add value to local breeds and explore their economic potential.

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Promotion of ELD would help eliminate many of the negative and unintended side effects of industrial livestock keeping, which include environmental damages, biodiversity loss and the rampant spread of zoonoses. While it will not be able to

satisfy the enormous worldwide demand for cheap livestock products, it has the potential to achieve the elusive goal of pro-poor livestock development for which the scientists and planners of international organizations have been clamouring.

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