

Improving small-scale livestock keepers' participation in the implementation of the *Global Plan of Action for Animal Genetic Resources*

This section presents options for fully and effectively involving Pastoralists and smallholder farmers in the implementation of specific Strategic Priorities of the *Global Plan of Action*, and ways and means to acknowledge the contributions of small-scale livestock keepers.

STRATEGIC PRIORITY AREA 1: CHARACTERIZATION, INVENTORY AND MONITORING OF TRENDS AND ASSOCIATED RISKS

Pastoralists and smallholder farmers can provide valuable inputs to breed characterization and inventory. They are often aware of the existence of breeds that have not been identified in national inventories or through breed registration systems. Small-scale livestock keepers live closely with their livestock, and in general have an excellent understanding of their production environments and of breed characteristics, such as behaviour, hardiness and ability to cope with environmental and climatic stresses, production potential, management and feeding requirements, and disease resistance. They also know the specific traits of individual bloodlines. All this knowledge could greatly assist in advancing breed-development programmes and research on breed comparisons and comprehensive valuation of local breeds.

According to the *Global Plan of Action*, Governments agreed to “promote participatory approaches to characterization, inventory and monitoring of trends and associated risks that foster collaboration among all stakeholders, including livestock keepers”² and to “develop protocols for participatory monitoring of trends and associated risks, and characterization of local breeds managed by indigenous and local communities and livestock keepers.”³ As their daily existence depends on livestock, pastoralists and small-scale farmers can play a key role in monitoring, and quickly detect changes in breed use and population structure – thus contributing to early warning systems for animal genetic resources (FAO, 2009d).

² *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 1 – Action 4.

³ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 2 – Action 3.



STRATEGIC PRIORITY AREA 2: SUSTAINABLE USE AND DEVELOPMENT

Small-scale livestock keepers can provide inputs to priority setting for breeding programmes and help select animals for breeding schemes. As they provide products from local breeds for local and niche markets, full participation of small-scale livestock keepers in determining appropriate breed development is needed in order to ensure that focus on access to these markets is not lost. It is also essential that breeding programmes address the challenges posed by the local production conditions. Small-scale livestock keepers are keenly aware of these challenges.

Strategies that combine traditional knowledge and modern science-based practices are needed to achieve the sustainable use and development of the multiple-purpose breeds that are essential to most small-scale livestock keepers. “However, a major obstacle to the further development of indigenous breeds is the lack of national strategies, programmes and institutional infrastructure to facilitate genetic and husbandry improvement programmes in low external input systems.”⁴ Therefore, according to the *Global Plan of Action*, “National institutions and research facilities are needed to make animal husbandry and animal health care services, facilities and techniques available to all livestock keepers”⁵. The relevant exchange, interaction and dialogue among indigenous and rural communities, scientists, government officials and other stakeholders should be promoted and enabled, in order to integrate traditional knowledge with scientific approaches.⁶

The *Global Plan of Action* further notes that “most countries lack comprehensive policies to support the maintenance and development of animal genetic resources held within their territories. Sustainable use policies should balance food-security goals and economic development with long-term sustainability and adaptation objectives. In addition, environmental and socio-economic changes, including demographic changes, climate change and desertification, require adaptive medium- and long-term policies and strategies for the management of animal genetic resources. These policies should also consider the contributions of livestock keepers ... to animal genetic diversity, respect the interests, rights and obligations of stakeholders, and take into account exchange, access, and the fair and equitable sharing of the benefits from animal genetic resources.”⁷

Strategic Priorities 5 “Promote agro-ecosystems approaches to the management of animal genetic resources” and 6 “Support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources” are of crucial importance to small-scale livestock keepers. Given the prerequisite that management decisions and policies on the sustainable use of animal genetic resources should be based on an understanding of their economic, social and cultural significance, human environments and livelihoods, and efforts to achieve food security and environmental objectives⁸ the *Global Plan of Action* therefore calls for

⁴ *Global Plan of Action for Animal Genetic Resources*, paragraph 29.

⁵ *Global Plan of Action for Animal Genetic Resources*, paragraph 30.

⁶ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 6 – Action 3.

⁷ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 3 – Rationale.

⁸ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 5 – Rationale, Strategic Priority 6 – Rationale.



"[integration of] agro-ecosystem approaches in national agricultural and environmental policies and programmes of relevance to animal genetic resources, where appropriate, particularly those directed towards pastoralist and rural smallholder communities, and fragile environments."⁹ Support to indigenous and local livestock systems of importance to animal genetic resources "may include the provision of veterinary and extension services, delivery of microcredit for women in rural areas, appropriate access to natural resources and to the market, resolving land tenure issues, the recognition of cultural practices and values"¹⁰ and promoting "the development of niche markets for products derived from indigenous and local species and breeds, and strengthen processes to add value to their primary products".¹¹

STRATEGIC PRIORITY AREA 3: CONSERVATION

Given the enormous animal genetic diversity currently held by small-scale livestock keepers, ensuring their involvement in conservation measures is essential. Small-scale livestock keepers' role in conservation can be facilitated by various means. "The historic contribution of indigenous and local communities to animal genetic diversity, and the knowledge systems that manage these resources, needs to be recognized, and their continuity supported."¹² According to the *Global Plan of Action*, governments, to aid conservation of animal genetic resources, may "provide and catalyse incentives for producers and consumers to support conservation of animal genetic resources at risk, as evaluated by individual countries, provided that such incentives are consistent with existing international agreements."¹³

STRATEGIC PRIORITY AREA 4: POLICIES, INSTITUTIONS AND CAPACITY-BUILDING

The full and effective participation of small-scale livestock keepers including smallholder farmers and pastoralists, in strategic planning, policy development and research may also be highly beneficial in the implementation of the *Global Plan of Action* and in the preparation and implementation of National Strategies and Action Plans for Animal Genetic Resources. Implementing integrated approaches to food security, rural development, poverty alleviation and the sustainable use and conservation of biodiversity is difficult but potentially highly rewarding. As, in many cases, small-scale livestock keepers are the targets of food-security and rural-development programmes, and as they use areas important for the conservation of wild biodiversity, participatory integrated planning and policy development approaches that take local knowledge and traditions into account are indicated.

Capacity-building and knowledge sharing among the world's small-scale livestock keepers should be encouraged. The *Global Plan of Action* recommends that governments "review the national educational needs of livestock keepers, while respecting traditional

⁹ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 5 – Action 2.

¹⁰ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 6 – Action 2.

¹¹ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 6 – Action 4.

¹² *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 6 – Rationale.

¹³ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 8 – Action 3.



knowledge and indigenous practices.”¹⁴ Although they may lack experience in modern technologies, many small-scale livestock keepers have broad experience and understanding of managing livestock where the climate is harsh or other aspects of the production environment are limiting. Their knowledge may prove to be of great importance in rapidly changing climatic conditions. Significant gains in production and productivity in small-scale livestock production systems could be achieved through capacity-building and introducing improved management practices.

“There are both moral and practical imperatives to provide support to livestock keepers and breeders, who are the custodians of much the diversity of the world’s animal genetic resources, particularly in developing countries, and who depend on them for their livelihoods. Their roles and needs cannot be ignored, if the *Global Plan of Action* is to succeed.”¹⁵

¹⁴ *Global Plan of Action for Animal Genetic Resources*, Strategic Priority 13 – Action 4.

¹⁵ *Global Plan of Action for Animal Genetic Resources*, Foreword.

