Abstract

Tropical and sub-tropical forages (TSTF) are critically important for livestock feed and environmental benefits in extensive and intensive livestock systems of developed and developing countries. There has been focussed collection and conservation of forage genetic resources (GR), and research on their diversity, adaptation and use for the past 60 years. That work through the late 20th century laid the foundations for the impacts TSTF have had, and continue to have. However since 1995, there has been a global scale reduction in forage science investment, new knowledge and capability, which has strangely coincided with the rapid growth in demand for livestock products globally. The decline in capacity and knowledge must be urgently reversed if the tropical systems are to benefit from the best genetic material and knowledge. Relying on 20th century knowledge and capability is unsustainable, and it ensures that the livestock systems of rural communities in developing countries cannot reach their potential regarding efficiency and productivity. In 2015, the Global Crop Diversity Trust initiated the development of a strategy to overcome some of the major barriers to TSTF conservation, research and utilisation. That strategy was developed with input from across the TSTF-GR community and aims to build a strong, functional network of national, regional and international GR centres, introducing efficiencies, and enabling genebanks to improve their role as knowledge managers and advisors for research and development programs. The main objectives are:

1. Rebuilding the community of TSTF genebanks and genebank users to develop closer collaboration and trust;
2. Ensuring more efficient and rationalized conservation within and among genebanks;
3. Actively supporting utilisation by anticipating germplasm needs and responding to users’ requests for information and seeds.

That strategy, now in the early stages of implementation, depends on the buy-in and cooperation of international and national genebanks to make changes in management and use, and the long-term engagement of partner countries and the donor community. Without this commitment, 60 years of knowledge and expertise will likely have to be rebuilt and generations of farmers and others will not realise the production and environmental benefits of well-adapted and sustainably managed improved forages.

Keywords: Conservation, forage utilisation, genetic resources, strategy