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Sommario/riassunto

This open access book is a rich resource that chronicles the abundant livestock genetic resources in Africa. Organized in five sections, the chapters trace special productive and adaptive attributes of African livestock breeds, past breed improvement efforts, capacity building and strategies to effective utilization of available genetic resources in the era of modern technologies. The authors cover major farm animal groups as well as dromedaries, rabbits and grasscutters. In view of the UN Sustainable Development Goals (in particular SDG 2, Zero Hunger, and SDG 15, Life on Land), the purpose of this volume is to catalogue opportunities that can be leveraged with available technologies and technical knowhow for achieving rapid genetic gain and improved livestock productivity in Africa. It fosters the utilization of genetic resources and the protection of indigenous livestock biodiversity. Natural selection and humans have generated genetically diverse breeds of domesticated farm animals which can significantly contribute to the livelihoods of millions of Africans today. Africa’s indigenous livestock are particularly hardy and well-adapted to local production contexts, having evolved adaptations to the continent’s diverse climatic conditions and environmental pressures. In spite of the wealth of desirable genetic traits, however, some of Africa’s iconic and lesser-

known livestock are disappearing at an alarming rate. Moreover, despite increasing recognition of what this diversity portends, little has been done to understand and optimally harness the full potential of these genetic resources. By combining scientific basis and practical instructions, this work is a valuable manual for a diverse readership, including students, researchers, livestock farmers, livestock and non-governmental organizations, policy makers and business professionals who want to understand the uniqueness of African livestock genetic resources, production systems and strategies for sustainable improvement for the African environment.