Record Nr. UNINA9910747592303321 Autore Dong Shikui **Titolo** Grasslands on the Third Pole of the World: Structure, Function, Process, and Resilience of Social-Ecological Systems / / by Shikui Dong, Yong Zhang, Hao Shen, Shuai Li, Yudan Xu Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 3-031-39485-2 ISBN Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (379 pages) Altri autori (Persone) ZhangYong ShenHao LiShuai XuYudan Disciplina 333.7409515 Soggetti Environmental sciences - Social aspects Grassland ecology **Environmental management Environmental Social Sciences** Grassland Ecology **Environmental Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1-Introduction to the Third Pole -- 2-Overview of the Third Pole's Grasslands -- 3-Third Pole's Grasslands in the Global Context -- 4-Grassland Plant-soil interfaces -- 5-Grassland biodiversity and conservation -- 6-Grassland ecosystem function and service -- 7-Grazing management and pastoral production -- 8-Grassland Socialecological systems -- 9-Grassland degradation and restoration -- 10-Climate change and adaptation of Grassland -- 11-Future of the Third Pole's Grasslands. This book comprehensively covers the topics of origin and distribution, Sommario/riassunto evolution and types, regional and global importance, biodiversity conservation, plant-soil interfaces, ecosystem functions and services,

social-ecological systems, climate change adaptations, land degradation and restoration, grazing management and pastoral

production, and sustainable future of the grasslands on the Qinghai-Tibetan Plateau (QTP), which is a globally unique eco-region called the "Roof of the World" because of its high elevation, "Third Pole on Earth" because of its alpine environment and the "Water Tower in Asia" because of its headwater location. The grassland ecosystem covers above 60% of QTP, which is about 2.5 million km2, 1/4 of Chinese total territorial lands. The grassland ecosystem of the QTP (the Third Pole) is an important part of the palaearctic region, which features alpine cover and low oxygen. The Third Pole's grasslands not only provide important ecosystem functions such as biodiversity conservation, carbon storage, water resource regulation, climate control, and natural disaster mitigation at a global scale, but also provide critical ecosystem services such as pastoral production, cultural inheritance, and tourism and recreation at local and regional scales. The purposes of this monograph are to address the following questions: (1) What are the special features of the Third Pole's grasslands? (2) How have climate changes and human activities changed the structures and functions of the Third Pole's grasslands? (3) How can we cope with land degradation and climate change through innovative restoration and protective actions for Third Pole's grasslands? And (4) How can we promote the sustainable development of social-ecological systems of the Third Pole's grasslands through best management practices including grazing? The goal of this book is to attract the attention of international audiences to realize the importance of the Third Pole's grasslands, and to call for the actions of global communities to effectively protect and sustainably use the Third Pole's grasslands. This book can be served as textbooks, teaching materials and documentaries for different audiences. The target audiences include students, teachers, researchers, policy makers, planners, government officials, and NGOs in agricultural, environmental and natural resources sectors.