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**Title:** *Sámi Knowledge of Snow and Ice: Future Challenges and Opportunities*

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Sámi snow terminology is in daily use in reindeer herding. Sámi snow and ice terminological provides systematic information about snow and ice conditions. Some snow and ice-related concepts have been passed down from generation to generation and is as old as the Sámi language itself. Reindeer herders observe and manage snow conditions from two perspectives; the snow physics and the ecology of herds in the winter grazing area, which reveals a holistic knowledge and view. Sámi reindeer herders used 318 snow related concepts, contain factors that affect reindeer survival and sustainability, well-being of reindeer and the human working conditions. Snow concepts are central for daily work with the reindeer, and constitute important parts for reindeer herders' traditional knowledge. The use of Sámi snow concepts mirror reindeer herders' traditional knowledge of the management of the herd on snow covered ground and how herders deal with these complex systems. This kind of knowledge has contributed to the survival of reindeer herding since time immemorial. The snow concepts have multidimensional content and show that they are based on the physical characteristics of snow while others have elements connected to the different herding strategies. Some snow concept are complex categories in the sense that a term contains and includes many factors simultaneously, such as information of snow, snow conditions, snow physics, weather, temperature, location, time and impacts of animals and humans. The analysis of snow concepts show the importance of using Sámi reindeer herders' specialist language and traditional knowledge in mainstream the governance of reindeer herding.