Language not only communicates, it defines culture, nature, history, humanity, and ancestry [1]. The indigenous languages of the Arctic have been formed and shaped in close contact with their environment. They are a valuable source of information and a wealth of knowledge on human interactions with nature is encoded in these languages. If a language is lost, a world is lost. This deep knowledge and interconnectedness is expressed in Arctic song, subsistence practices, and other cultural expressions but especially in place names across the Arctic. Place names of the indigenous peoples reflect subsistence practices, stories, dwelling sites, spawning sites, migratory routes of animals, and links to the sacred realms of the indigenous peoples of the north.

The preservation of languages is a crucial step in allowing us to benefit from traditional knowledge and form a better understanding of our environment. The Convention on Biological Diversity (CBD) recognizes that linguistic diversity is a useful indicator of the retention and use of traditional knowledge, including knowledge of biodiversity. It has, therefore, been included in the suite of indicators being used to assess progress towards meeting the 2010 biodiversity targets. With this in mind, this chapter considers the vitality of indigenous languages in the Arctic and explores their current status and trends. The United Nations’ Educational, Cultural and Scientific Organization (UNESCO) has developed a framework comprised of six factors which can be used to determine the vitality and state of endangerment of a language [2]. This chapter looks at two of these criteria (absolute number of speakers and proportion of speakers within a total population) and applies them to the Arctic to provide an indication of the status and trends of indigenous languages. However, the assessment of language vitality is a complex issue and no single factor alone suffices. The number of speakers of a language provides an indication of the viability of a language but taken alone does not provide a complete picture. An equally important factor is the percentage of the population which can speak the language, i.e., the higher the percentage, the better the chances of a vibrant and healthy language.
The development of circumpolar statistics for indigenous languages in the Arctic is a challenging task. Information on indigenous populations and their languages varies in coverage and extent. Statistics are often not collected consistently or are only recently being done so. Thus by necessity, the creation of circumpolar datasets requires a combination of official sources and estimates. When attempting to compile circumpolar datasets, it must be remembered that even when cohesive national datasets are available, they may be chronologically difficult to compare i.e., they are collected at different intervals or address the issue of linguistics from different approaches. Therefore, circumpolar statistics for languages such as the Saami, Aleut, and Inuit must be approached with caution. Attempts to address this gap in knowledge, however, are important as they help to stimulate awareness of possible changes, encourage further research, draw attention to the challenges facing the long term vitality of many indigenous languages, and hopefully spur positive actions.

Arctic language structures
The Arctic is inhabited by an array of ethnic peoples with different cultures and language groupings. For this report, information was compiled on 90 Arctic languages. These can be grouped into six distinct language families including a number of isolated languages presently unconnected to any other language grouping (Figure 22.1).

Changes in the populations of indigenous peoples
It was possible to consider changes in populations for 47 languages (Figure 22.2). Of these, 36 had populations of fewer than 10,000, and 18 had population levels of 1,000 or less. Nineteen populations experienced decreases in size ranging from 5-50%, the majority of these being located in the Russian Federation. This implies either a decline in indigenous populations or alternatively a change in the methods used for census survey. The indigenous population which experienced the greatest increase in net population were the Inuit (Figure 22.3).

Absolute numbers of speakers and proportion of speakers within a total population
It was possible to calculate change in the absolute number of speakers and proportion of speakers for 44 of the surveyed languages (Figure 22.4). Only 4 languages displayed an increase in absolute numbers of speakers, proportion of speakers and net population (Figure 22.5).

1. Note on information sources: Data used to compile the information for this analysis, including Figures 26.2 – 26.6, came from a wide variety of sources both official and academic. Each of the CAFF countries where possible provided statistical information. The Indigenous Peoples organisations (Permanent Participants to the Arctic Council) provided information and further to these sources academic publications were utilised.
Thirty-nine of the surveyed languages experienced a decrease in vitality over the last decade, i.e., a decrease in numbers of speakers and in the proportion of speakers within their populations.

Thirty-five languages experienced reductions in proportion of speakers and 22 of these ranged from 10–50%. Of the remaining languages all but seven experienced reductions of over 10% in the absolute
numbers of speakers within their populations. Some languages, such as the Enet language of the Russian Federation experienced a 70% decrease in the numbers of speakers. Only twelve languages displayed an increase in absolute numbers of speakers. The Inuit language(s) had the highest gain while the Chukchi language had the greatest loss (Figure 22.6).

### Language vitality

UNESCO has classified the vitality of each of the languages on which data was collected (Figure 22.7). It is striking to note that 20 languages have become extinct since the 1800s and that ten of these extinctions have taken place after 1990 indicating an increasing rate of language extinction. Of these extinctions, one was in Finland, one in Alaska, one in Canada, and seventeen in the Russian Federation. With this in mind, it is urgent that the 30 languages classified as critically endangered be well-documented and attempts at revitalization considered.

### Concerns for the future

Since the 19th century, indigenous languages in the Arctic have been subject to pressures and challenges from the colonial powers active in the Arctic. In the early 20th century, this involved a process whereby indigenous languages were not incorporated within educational and civil systems. This often resulted in weakening ties to language and subsequently to culture and traditions. Today the dominant languages in the Arctic are Russian, English, and the Scandinavian languages.

The majority of Arctic indigenous languages have experienced significant decreases in the absolute number of speakers and the proportion of speakers. This indicates that Arctic languages are facing an uncertain future and efforts to increase our understanding of the cultures and traditions contained within these languages should be increased. However, some indigenous languages have in recent decades gained stronger status and been subject to sustained efforts to revitalize them both as tools of cultural heritage and as official languages, e.g., in Greenland, and in Nunavut and the Northwest Territories, Canada. While such developments are encouraging, it is clear that many indigenous languages face enormous challenges. The increasing rate of language extinction emphasizes the urgency and cause for concern and need for concerted efforts aimed at revitalization and documentation.

“In the Indigenous landscape is decoded by stories and names and old knowledge. Every place name has a meaning.”