Introduction

Recent news coverage in the popular media has emphasized the role of global warming in Greenland’s agricultural sector. “Warming revives flora and fauna in Greenland,” states a New York Times headline. “Global Warming a Boon for Greenland’s Farmers” announces German news site Der Spiegel. Popular media depictions suggest an emerging agricultural center, with new areas opening up for agriculture and new crops being grown in Greenland. (See figs. 2 and 4.) The goal of this project was to examine how reality lines up with these depictions. What does Greenlandic agriculture look like, what directions does policy take, and to what extent do expectations of climate change drive policy?

Despite the depictions presented in various popular media outlets, Greenlandic agriculture is largely dominated by a single industry, sheep farming. Sheep have been the key component of Greenlandic agriculture since commercialization began in the 1920s, and policy does not appear intended to change this priority.

Greenlandic Agricultural Policy

In broadest terms, Greenlandic agricultural policy recognizes the needs of two interest groups, producers and consumers. The overall policy statement, translated electronically from Danish, reads, “Consumers must be guaranteed a supply of Greenland-produced food at reasonable prices and with good, stable quality. Greenlandic producers must have the opportunity to earn a reasonable income, to have continual opportunities for further development, and to produce in a sustainable manner.”

There is presently more suitable land than farmers, and so policy focuses on developing opportunities through infrastructure and education. Subsidies are recognized as necessary, though current policy seeks ways to reduce their need. Despite broad acknowledgements of its reality among the Greenlandic agricultural sector, climate change does not appear to be a major factor driving policy. This may be because even though climate change will open up new opportunities, there are more opportunities already available than farmers to utilize them.

Challenges at the Limits

Agriculture at its northern reaches is inherently bound by certain limitations. Broadly speaking, there are two types of limitations, natural and societal. Societal limitations that come into play in various northerly regions throughout the world include low populations, distance from markets, land availability and access issues, and absence of infrastructure. Neither land availability nor distance to markets are large issues in Greenland. Production is mainly intended for domestic use, and there is open land suitable for farming. Infrastructure is a greater challenge, a shortage of interested farmers.

Natural limitations include various types of temperature-related issues—short growing seasons, summers without sufficient heat, and harsh winters. As related as they might seem, these temperature issues do not always go hand-in-hand. Some parts of Greenland, for example, do not experience winter minima much colder than parts of the midwestern United States, but experience much shorter frost-free growing seasons, and with far cooler summer weather. Other natural limitations may include moisture availability and soil suitability.

The Norse Connection

Several of the popular media pieces on Greenlandic agriculture discuss the Norse period in Greenland as a similar era to the present. Viking Norse lived in parts of southern Greenland (fig. 1) from around 1000 to 1400 CE. Their agriculture focused on animal husbandry of various types, but mainly sheep. This project involved an examination of Jared Diamond’s book Collapse, which contains the most well-known study of Norse agriculture in Greenland, and an effort to place the current Greenlandic agricultural regime in the context of Collapse.

Diamond identifies five reasons why the Norse Greenlandic culture collapsed: environmental degradation due to overgrazing and overuse of turf for construction and fuel, climate change, loss of friendly trading partners, hostile confrontations with Inuit neighbors, and cultural conservatism. Today, hostile neighbors or the loss of friendly trading partners do not seem like imminent concerns, though efforts for self-sufficiency may reflect awareness of the possibility. Climate change is presently moving in a positive direction for Greenlandic agriculture, while sustainability is a key focus of Greenlandic policy.