Contemporary issues of sustainability

In 1721 the king of Denmark – at that time also including what today is Norway and Iceland – sent a missionary expedition to Greenland. When the missionaries found no descendants of the Norse, they baptized the Inuit they met living there instead. The kingdom developed trading posts along the coast, incorporating Greenland into their kingdom, and imposed a trade monopoly on the area.

Greenland was kept isolated and dealt with through a monopoly trading administration though this did include local boards with the Inuit population in the administration. This was justified by the argument that the traditional way of life among Inuit catchers and hunters should not be overrun by changes imposed from the outside. During World War II, when Germany invaded Denmark, Greenland became socially and economically disconnected. The United States and Canada took over the supplies to Greenland. In return they used the cryolite from the Ivigtut mine for their aluminum production and established air bases on Greenland.

After the war, Denmark resumed control of Greenland and in 1953, converted its status from a colony to an overseas region of Denmark. Denmark also started a number of reform and modernisation programmes, which aimed to improve the living and health conditions of the Inuit. The Danish government invested in social services such as health care, education, and transportation and promoted centralisation to reduce dependence on seal hunting and facilitate other forms of economic development. These reforms have implied the occurrence of a number of problems, particularly unemployment among parts of the population and a loss of identity. A symbol of the modernisation and its failure is 'Blok P', a large concrete building that hosted 1% of the entire Greenlandic population. At first considered as an improvement and development, it became a ghetto for the urban poor.

In the 1970s, resistance against Danish influence and governance in Greenland rose. The band Sume was one of the most famous cultural representatives of this anti-colonial movement. As a consequence Denmark installed a new governance system providing elements of Home Rule in 1979, followed by a successful referendum on self-government in 2008. The Greenland Self-Government authorities comprise a democratically elected assembly – Inatsisartut (Greenland Parliament) – as well as an administration led by Naalakkersuisut (Greenland Government). In respect of the Unity of the Realm and special provisions in the Danish Constitution, responsibility for the following fields remain in Denmark: the Constitution, nationality, the Supreme Court, foreign, defence and security policy as well as exchange rate and monetary policy. Besides increasing political independence, the economic dependence on Denmark and on global markets still exists. Denmark subsidises public services in Greenland with DKK 3.2 billion (430 million in Euros) annually, making up around half of Greenlandic GDP. The Greenland Self-Rule Act regulates that the subsidies are fixed at the present level. It is intended that the income from mining will be used to increase the public revenue of Greenland and to reduce the subsidies provided by Denmark. Full independence for Greenland is promised, if a balanced budget can be achieved.

Today 56,000 people live in Greenland. While most of the country is uninhabited, the population is dispersed across 17 towns and 58 settlements mostly along the South-West coast. Contemporary social, economic, and environmental issues are related to hunting and fishing, to the provision of infrastructure and to a lesser extent to mining.

The traditional way of living is based on subsistence hunting and fishing providing seal, whale, a variety of fish, caribou, musk ox or polar bear. All other types of food have to be imported and are therefore expensive, though a small, but growing supply of meat from lamb and potatoes comes from South Greenland. Often the kill from hunting is shared amongst family members and members of the local settlement following traditional rules. But climate change causes challenges of adaptation. Seals are easy to see even in the darkness of the polar night, when they

show up in a small hole in the sea ice, but not in open water. The sea ice cap is also used for transport purposes as the rocky landscape with few roads requires the use of water and air transport.

Fishing has long been important to the Greenlandic economy. Fish and shellfish provide about 90 % of export earnings. This makes the Greenland economy extremely vulnerable to developments in the global markets for fish. The dominant species of trade shifted in the past from cod to shrimps to halibut. However, although the macroeconomic relevance of fishing stayed similar, the changes caused dramatic shifts in who is participating and controlling the fishing business. Additionally local fishermen compete with the huge industrial trawlers, which do not have to land the fish catch in Greenland at all. Nowadays less fish processing is happening in Greenland as increased shares of species caught in Greenlandic waters are transported to Europe, South-East-Asia or other parts of the world for processing, where wages are far lower. Due to the competition and disadvantaged market access the local fishermen experience difficulties earning sufficient money to buy imported goods, mainly technical products.

The provision of modern levels of infrastructure is challenging, with small villages spread over a huge area of land (e.g. the Southern municipality Kujallek has only 7,500 inhabitants in an area of ¾ of Denmark, while the Northwestern municipality Qaasuitsup has a population of 17,867 people and a land size twice as big as Germany). The provision of infrastructure until now requires subsidies from Denmark. Therefore, centralisation and urbanisation are encouraged, although this disconnects people from locally available food resources and a subsistence-based living and creates an increased dependency on wage-based employment.

Employment opportunities may be developed in mining and it is expected that each large-scale mine with a typical lifecycle of 10 years will provide revenue of £ 84 million a year. This would increase the state revenue required for the provision of public services, but not without environmental, social and economic costs and risks.
Given the small population of Greenland, a development strategy based alone on mineral resources cannot be realised without an influx of foreign labour. Further if the mining industry rapidly builds up, local capacity will be unable to keep pace with it. There is a high risk that the current population will be kept in their current lower-paid jobs while a new class of better-paid foreign workers enter the country.

The benefits for the Greenlandic society are politically debated, especially because the exhaustion of a mine for exports also means a loss of assets for future generations.

Structure of the exercises

The material on contemporary Greenland consists of the following exercises, which could be used in a sequence or separately.

	Method	Outcome	Duration
F	Photo quiz – Greenland or not?	Orientation, Awareness of diversity in contemporary Greenland, Questions for future research	25 minutes
G	Timeline of the recent history of Greenland	Overview of the development of contemporary Greenland the last 80 years, effects of the modernisation policies	45minutes
H	Local observation of climate change	Differentiated views on the impact of climate change in Greenland	60 minutes
I	Fishing practices and value chains	Understanding about the impact of different fishing strategies in regard to value chains, income distribution and ecological impacts	70 minutes
J	Strategies of young Greenlanders	Knowledge about different strategies and evaluation in regard to their impact for the future of Greenland	40 minutes

Further exercises will be provided as electronic documents on the website and USB-stick.

If used in a sequence, there is a certain narrative underlying the exercises

- **General Introduction:**
  Viking life in Greenland was not sustained in the longer run. Can you find out whether it is sustainable to live in contemporary Greenland? What are the challenges and requirements?

- **Exercise F:**
  Who lives in Greenland now? How do they live and how do they survive? For the Norse, Greenland was the edge of the world. How is it today? Some places in Greenland are abandoned. This triggers the question about reasons for settlement failure.

- **Exercise G:**
  In order to understand the present situation, we have to look back at the development of the last 80 years and identify the relationship between population growth, modernisation and local policies.

- **Exercise H:**
  We have learned that the changing climate was a huge challenge for the Norse on Greenland. How is the climate changing today? Is life getting easier with global warming on Greenland?

- **Exercise I:**
  Trade was also an important factor for the decline of the Norse colonies. Today Greenland's main export goods are fish and seafood. What are the economic structures in fishing today? What social and ecological implications do different fishing and trade practices have?

- **Exercise J:**
  After knowing about the challenges of living on Greenland, we should find out, what young Greenlanders think about it. What are their personal choices? Which future scenarios are possible for Greenland?

Literature

On adaptation to climate change

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