

The Arctic forced open

The Arctic region and its the people

The first in the set of photos below shows Canadian Inuit, as many of the people of the Arctic region are called, pulling a narwhale up on the ice.

The Inuit have lived in this way off the sea for thousands of years, surviving on fish and mammals and with practically no plant food. The clothes of sealskin, ropes of sinews and hooks carved from bones have been replaced with modern materials, as rifles have replaced the harpoons.

This is still the life of a great part of the people of the Arctic, whether Sami in Northern Scandinavia, Inuit in Alaska, Canada or Greenland or the various Samoyedic people of Russia.

During the 1900s, many of these people experienced huge changes in their ways of life, for example because of governments interested in the land of these people for extracting minerals. Many were forced from their locations and their children were sent to boarding schools to be brought up as "civilized" citizens.

A new threat now is from global pollution. Directly in the form of poisons accumulating in the fat of the seals and whales they eat, to such a level that the breast milk of some Greenlanders could be classified as hazardous waste. This is because many of the poisons do not decompose in the cold waters, and because they are concentrated up through the food chains.

These people are also threatened indirectly as the greenhouse gases warm up the planet and the number of animals is reduced or their ways of hunting become impossible.

The Arctic climate warms faster than anywhere else

The second photo shows thousands of walrus, a large sea mammal that have now been forced on land. Normally in the summer months the walrus need floating ice, both to give birth and from which to reach the sea bottom to find food. Now, however, there is only ice over deeper waters, and the animals are forced on land in huge numbers.

Temperatures in the Arctic are increasing twice as fast as in the rest of the world, and the ice is therefore melting.

As more sea ice melts, less solar energy is reflected back in space. Instead the water gets warmer, which again melts more ice. And on it goes.

The changing climate also leads to drier northern forests, and with millions of hectares burning each year, more black soot lands on ice and snow. This again absorbs heat so more melting takes place.

Arctic areas also store huge amounts of carbon in frozen soil – called permafrost because it has until now been frozen year-round. This is also melting, leading to damages to houses as they fall, erosion of coastlines and to the release of even more greenhouse gases, in the form of methane, again accelerating the warming. The amount of warming due to this melting is on the same scale as the effect of deforestation worldwide.

The change of climate means that the Arctic has been opened up for activities that were totally impossible some years ago. And the multinational corporations and major nations have not sit idly.

There has been a rush of activities in the newly opened Arctic region – to explore and start extraction of minerals, gas, oil, to use the now open and much shorter sea-routes north of the continents, but also to carry out military exercises and establish bases and surveillance sites.

The hunt for the last resources

On the third photo we see the oil rig of the Russian company Gazprom. Greenpeace activists carried out actions against this, so far the only place in Arctic waters that is pumping up oil. The action ended in 30 activists spending two months in a Russian jail.

Other large companies have been investigating the Arctic Sea as soon as this became possible. The area is the last great untapped reserve of oil and gas – with an estimated 30% of the world's undiscovered gas and 13% of oil.

Recently, however, we heard the good news that Shell has, for the time at least, given up its plans of drilling north of Alaska in spite of having invested US\$ 7 billion. Chevron has similarly shelved its plans north of Canada, and Norway's Statoil, Denmark's Dong Energy and France's GDF Suez have handed back licenses for areas in waters off Greenland.

The Italian ENI is one of the few companies still going ahead with its Goliat project. If it gets the final approvals from the Norwegian government it will become the world's northernmost oil field, expecting to eventually pump 100,000 barrels of oil per day.

The reduced activities are not because of actions and protests from environmental activists. The reason that the Arctic region is given some respite is due to the politics of the far away Gulf states. They intend to keep the oil prices down until they have control over the oil market again. Oil is now at US\$ 45 per barrel and Goldman Sachs suggests that they could slide down to US\$ 20. With such prices there is no economy in drilling in the Arctic, nor exploring oil through fracking. The cheaply explored oil in the Arab region can therefore outcompete the more expensive methods in the years left before oil will be a thing of the past.

The Arctic, a fragile environment

There are many reasons to protest exploration activities in the Arctic, such as the kayaktivists on the fourth photo attempting to block Shell's oil rig from being transported up to the Arctic for its 2015 test drilling.

One obvious reason is that at least 80% of the known oil and gas should stay in the ground to avoid catastrophic climate change. So why use billions of dollars to open up new fields, when there is already more than enough.

Another reason is the dangerous effect of oil spills in the cold and icy waters. When disasters hits, as it will do sooner or later, just as it did at BP's Deepwater Horizon in the Mexican Gulf, it will be so many more times difficult to stop the oil spill. The petrochemicals will last much longer than in warm waters, because of the slow biological activity, and they will enter the food chains with totally unknown effects.

Another area of concern is pollution from the mining operations that are starting up or on the drawing boards. This is for example uranium mining. In spite of the 2011 Fukushima disaster and the reduced interest in nuclear power, uranium mining is still being planned also in the Arctic region. An Australian company thus has plans for a combined open pit mining of uranium and rare-earth minerals at Kuannersuit (Kvanefjeld) in Southern Greenland. The mining of what might be the world's second largest uranium deposit will release about thousand tons of radioactive dust annually. Nobody knows the consequences of this in the Arctic environment that recovers so slowly.

This is a situation we see all around the world. Is it worth while taking the risk of destroying a pristine environment and income from fishing and ecotourism, to get a few jobs and some promised income? In Greenland's case this mining will in no way eliminate the

dependency on the annual support package from Denmark. The people of the area have been promised a referendum to decide whether this project should go ahead. If the Greenlandic government pulls back from this promise, we will probably see a number of activities to try to stop the project.

China joining the other players in the Arctic

The Arctic sea routes are increasingly becoming accessible during the summer months. The Northern sea route from China to Europe is several thousand miles shorter than via the Suez Canal and this is of huge interest for Chinese exporters.

China, as by far the world's largest fishing nation, is also interested in the regions rich fish resources. Cod, a valuable fish, has been practically fished out in other seas, and now the open Arctic waters could be stripped of its fisheries in few years.

China is also trying to get more permanent access to the Arctic sea, for example attempting to buy a large area along Iceland's northern coast for a proposed golf course resort. The government, however, refused this, suspecting that this was a way to get an area for an Arctic port.

In 2014, a top EU official flew to Greenland and offered hundreds of millions of dollars in development aid in exchange for guarantees that Greenland would not give China exclusive access to its rare earth metals.

This demonstrates precisely the problems people in the Arctic are facing in an area with few opportunities for economic development. The large global players – China, Russia, USA, Canada, Australia or European nations – therefore have ample opportunities to influence people and companies in the region by offering money. It is increasingly difficult to maintain the traditional ways of life in a globalized world, and some people can be bought.

The ones affected will be the many people who will get just a fraction of the value of the resources extracted from their lands and seas, and, on top of that, will be affected by even more pollution and a warmer climate.