Forum: EB2-Finance
Issue: The prevention of future exploitation of natural resources of the Arctic for economic gain.
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Introduction

The Arctic has many natural resources such as; petroleum, minerals, fish and forests. It is estimated that the Arctic has 13 percent of the world's undiscovered oil and 30 percent of the world's undiscovered natural gas. The forests of the Arctic attract the interest of economies for purchasing power. The Arctic's natural resources draws the interests of many industrialized countries thus, Arctic's natural resource extraction is a major contribution to the world production.

Economic profit or loss is the difference between revenue, the costs of all inputs, and opportunity costs. Economic gain happens when the revenue received is greater than the costs a country faces. As the ice in the Arctic melts, territories for oil and gas drilling programs open, creating access for countries like Norway and Russia for economic gain. This mining is a financial opportunity for Arctic, however, noise, wastewater, chemicals and uranium dust could have environmental and health consequences if they are not controlled or disposed of properly.

Norway produced almost 3.5 million tonnes of seafood in 2011, and a total export value of almost $9.5 billion. And in Iceland, the fishery sector employs about 6.5 percent of the workforce. To proceed cautiously with fishing, in 2015, the five Arctic coastal nations (Canada, Denmark, Norway, Russia and the U.S.) agreed to ban commercial fishing in the waters near the North Pole.

Definition of Key Terms

Economic profit is the difference between the costs of all inputs, opportunity costs and the revenue received.

Opportunity costs is the benefit missed out when choosing between alternatives.

Background Information:

In the early 1600's the large scale exploitation of living marine resources in the Arctic started. Due to the high prices of whale oil, countries hunted northern right whales for economic gain and this industry grew during the 1560's and the 1570's, lasting until the 1700's. This stopped due to the depletion of the whale stock, rise of whaling in the European Arctic in the early 1600s, and competition from Dutch and English whalers on the European market, and political turmoil in Spain. However, demand for whale oil continued to grow and new technologies were invented to lower production costs.

Indigenous peoples in the Arctic were the first to utilize the metal resources, primarily iron and copper, using pre-industrial techniques. Large-scale mineral extraction increased in the nineteenth century, funded by North America and Europe. In 1880-1906, with gold discoveries mining increased. including gold rush in Klondike, Yukon 1896. After World War II, lead, zinc and uranium extraction increased in Northern Canada. With the construction of the Murman Railway at the end of World War I, the Arctic attracted the attention of Soviet leaders. For military capability, new infrastructural investments, and expanding industrial programs, Soviet leaders increased mining in the Arctic. In Russian Arctic there are many mines which produce nickel, copper, tin, uranium and phosphate.

With political influence in the twentieth century, competition over mining industry and mineral resources arose. Each country acted according to its own geo-economic logic. The companies developed strategies somewhat consistent with the mining laws of the country's origins. With increased competition, hydrocarbon extraction in Alaska had increased. With mining in the Arctic, negative effects were created due to the lack of sustainability. However, with sustainable new technology, improved training of staff, less hierarchical organization, reasonable restrictions, and frequent non-corrupt inspections this negative externality can be reduced. However, all of these methods add onto the cost of inputs and creates opportunity costs.

The Arctic has also attracted many tourists, however, tourism can have negative impacts on the environment and positive effects on economic growth. With tourism, coastal regions are vulnerable since many species immigrate during breeding seasons and can be affected by pollution. Vehicles may disturb wildlife and contribute to global warming through carbon dioxide release. Some countries like Greenland use tourism in the Arctic as a way of economic growth and economic gain. One-fifth of freshwater and many of the world's largest

rivers are found in the Far North of Arctic. This environment is home to many different species and has an important role in global diversity.

Around ten percent of all global oil production takes place in the Arctic. Many surveys have indicated that around 2010-2020 global oil supplies of OPEC countries will decrease. Thus, Arctic has the potential to continue as an important supplier of oil. OPEC countries can take advantage of this for economic gain. This puts pressure of developing countries to secure their resources before the OPEC, creating a global competition.

With climate change, there is a longer ice-free period which gives Greenland access for a longer fishing season. As lakes grow in size, so does the possibility to build hydropower plants. Drilling for oil also becomes safer as the ice retreats. An increase in interest to see Greenland and the melting ice has led to an increase in cruise ship tourism. However, the International Maritime Organization (IMO) sets no special equipment requirements for ships going to the Arctic via international waters, and following additional Arctic guidelines is voluntary.

Major Countries and Organizations Involved

International Maritime Organization (IMO):

IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping.

The United Nations Convention on the Law of the Sea (UNCLOS):

This is an international treaty which was adopted and signed in 1982, with a total of 133 countries. Article 76 of the convention provides the coastal state with certain rights to living and non-living resources on and below the sea bed.

European Environment Agency (EEA):

EU's Arctic policy is to increase economic, development of the Arctic, analyse and prevent global climate change and its rapid effects on the Arctic, and analyse international cooperation related to the Arctic.

Previous Attempts to Solve the Issue

The EU has made investments in satellite observations in the region and the EU Framework Programme for Research and Innovation will significantly contribute to a better understanding of relevant developments and processes. This includes knowledge on the Arctic ecosystems.

The Council of the European Union has requested for an EU Arctic policy to be presented by December 2015 on;
i) strengthening the knowledge base to address the challenges from environmental and climate changes;
ii) contributing responsibly towards a sustainable development in the region;
iii) intensifying constructive engagement with Arctic states, indigenous peoples and partners regarding challenges that require an international response.

The size of any future EU Arctic footprint will be lower if EU Member States are able to adhere to agreed targets, such as reducing greenhouse gases by 40% before 2030 and 80% before 2050, phasing out long-range polluting substances, or moving towards a more resource-efficient and circular economy.

UNFCCC's meeting in Paris in 2015.
It sets an upper limit on acceptable global risk from climate change at well below 2°C warming above pre industrial levels by the end of this century.

1) Obligation on all Parties to regularly update their nationally determined contributions informed by the overall progress made.
2) Transparency on implementation through reporting and review.
3) Scaled up cooperative action and support to developing countries.
4) Comprehensive global stocktake of progress toward long-term goals.

Possible Solutions

- Regarding Arctic shipping, further international cooperation is needed to ensure it is safe and clean.
- Emergency and immediate responses to potential oil spills and search and rescue operations.

- Arctic Council to adopt an agreement on marine oil spill prevention
- The International Maritime Organisation's Convention to reduce the risk of introducing alien species in the ecosystems in the Arctic Ocean.
- Establishment of support infrastructures, including icebreakers and port facilities, along the northern shipping routes to address usage and carrying of heavy fuel oils in the Arctic.
- Imposition of quotas on natural resources to limit imports from the Arctic.

Useful Links For Further Research

https://ccacoalition.org/en/resources/us-canada-joint-statement-climate-energy-and-arctic-leadership

https://www.eea.europa.eu/soer-2015/countries/arctic

https://unfccc.int/news/arctic-council-contribution-to-the-impact-of-the-paris-agreement

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"Protecting Vulnerable Ecosystems in the Melting Arctic." IUCN, 17 Feb. 2020, www.iucn.org/content/protecting-vulnerable-ecosystems-melting-arctic.

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UNFCCC, unfccc.int/news/arctic-council-contribution-to-the-impact-of-the-paris-agreement.