A Tale of Two Arctic Cities: Vorkuta and Salekhard

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Vorkuta and Salekhard are two Russian cities in the Arctic. Vorkuta, once a Gulag prison camp and booming coal town, suffers from a poor economy and a declining population. Salekhard, on the other hand, is undergoing its own boom through the influx of private investment and continued state support of the natural gas industry and amid rising oil and gas prices since the early 2000s. Through a comparison of the two cities, Suter demonstrates how cities contend with drastic boom-bust cycles, shifting demands for natural resources, political upheaval, and climate change.

- Vorkuta was a once-thriving single industry city built around explosive demand for mineral sources by exploiting prison labor.
- What is the relationship between the natural environment, changing demand for natural resources, and the urban landscapes of Vorkuta and Salekhard? How do historical changes play out in a city’s physical landscape?
- What caused Vorkuta’s decline? Will Salekhard one day meet the same fate as Vorkuta?
- How did the same historical events hit the two cities differently? How can you facilitate and encourage urban growth while avoiding the pitfalls that caused Vorkuta’s decline?
Labytnangi is highly urbanized and infrastructure is adapted to the weather of the region. For example, buildings are connected by above-ground pipelines to isolate heat, preventing infrastructure from thawing the permafrost, which functions like bedrock, below.

Salekhard, a nearby city, is the capital of the oil and gas rich Yamal-Nents Autonomous Okrug (YNACO). The Russian state-owned natural gas producer Gazprom is highly active in the region. The influx of capital from the oil and natural gas industries have enabled massive transformations in housing, luxury developments, and modern facilities.
Vorkuta is located in the coal-rich Pechora Basin, only 130 kilometers from Salekhard. Today, it is full of empty and deteriorating buildings.

50 years ago, however, the network of 16 highly productive coal mines surrounding Vorkuta was extremely critical during World War II. The city eventually became a symbol of Soviet industrial power. However, as demand for coal has decreased, the city's population has declined drastically. Because Vorkuta’s economy, maintenance, and infrastructure depended on the success of a single industry, the declining demand for the coal industry drastically crumbled city’s infrastructure.

Suter uses this point to show how the success of “boom-bust” cities are not always unsustainable. He encourages alternative approaches to promoting economic prosperity, ones which harness local resources and innovation which can withstand shifting national or global economic forces.
Salekhard was originally founded by Russian settlers as a small town called Obdorsk in 1595 as a prison town. The town has repeatedly housed exiled prisoners, from the first tsars to the October Revolution and the formation of the Soviet Union. Forced prison labor was used to develop remote regions of the Northern Territories, in what would eventually become a central function of Stalin’s forced-labor camps known as the Gulag system.

In 1930, the geologist Georgii Chernov discovered a seam of high-quality coal on the banks of the Vorkuta river.

During WWII, high demand for coal dramatically expanded Vorkuta. State-run coal company Vorkutaugol was incorporated into the city and the town became a company town as well as a prison camp. The coal industry eventually attracted a large non-prisoner population of engineers, managers, and other skilled laborers, though more prisoners were sent to Vorkuta to meet labor demands.

Meanwhile, a new major railroad project called the Transpolar Mainline connecting Salekhard to Igarka to the Russian Rail network. It allowed for the efficient transport of metal resources.

Tens of thousands of people died due to the harsh conditions. The railroad project was typical of Soviet development, characterized by megaprojects and centralized planning without much regard to local conditions.
The Gulag labor system was dismantled after the death of Joseph Stalin in 1953. Construction on the Transpolar Mainline halted after Stalin's death. Both cities faced population declines but Salekhard experienced explosive growth in the 1970s and 1980s when oil and gas were discovered on the Yamal Peninsula.

On the other hand, Vorkuta's promises of high wages, secure work, and large apartments were used to lure engineers and other skilled workers to the mines. The prisoner and non-prisoner populations slowly integrated.
In 1991, the Soviet Union collapsed, which hurt many cities depending heavily on state support. This ended subsidies for workers and led to the privatization of many industries and evaporation of workers savings due to hyperinflation.

Decreasing demand for coal mines and the high costs of unsubsidized coal production in the Arctic led to the dramatic decline of Vorkuta. The 1990s were characterized by numerous strikes and work stoppages. By the mid-2000s, only six of the thirteen mines once fueling Vorkuta remained operational.

After decades of expansion, the city is now facing painful contractions and an austere budget. The number of people working in mining has dramatically decreased.

Vorkuta has since become a transport hub for shift-workers in northern oil and gas fields, but it remains staunchly a single-industry city.
In Salekhard, dramatic economic decline was mitigated by private investment and state support of the natural gas industry. Gazprom, still one of Russia’s largest gas producers, was founded in 1989, just two years before the collapse of the Soviet Union.

Growth soared in the 2000s with rising oil and gas prices and it has since become one of the richest cities in Russia.

Salekhard’s economy has always been more diverse than Vorkuta’s, which relied almost singlehandedly on coal mining. On top of its gas industry, Salekhard was also known for fishery, trading indigenous gods, transportation, and government administration.

While Salekhard’s diverse economy seems better equipped to survive the boom-bust cycle, it still shows signs of rapid overexpansion. The natural gas boom irrevocably altered the city’s economy.
Vorkuta shows how intensive expansion fueled by a resource boom can have long-term negative outcomes when infrastructure cannot be maintained. As its tax base shrunk, the city struggled to maintain public infrastructure and social services intended for a larger population.

In Salekhard, the natural gas boom and a small housing supply has driven up the cost of living for many residents.

Climate change also threatens the future economic and social stability of Salekhard, as rising temperatures warm the permafrost upon which many buildings are constructed.
Cities should plan for growth and decline. This will minimize wasteful development and maximize local benefits. A city’s economic, social, and environmental sustainability is ultimately more important than explosive short-term growth.

While Vorkuta was initially shocked by its intense decline, city officials have since developed a plan to manage decline. Many experts agree this is likely the best option for planned decline, focusing on flattening out population decline, maintaining the urban core, and restoring public services.