The Soviet Union’s Nuclear Legacy

BEFORE YOU READ
In the last section, you read about the struggle for economic reform in Russia and the Republics.

In this case study, you will learn about the political, economic, and environmental problems created by the Soviet Union’s use of nuclear energy.

AS YOU READ
Use this chart to help you take notes about this case study.

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<th>Causes</th>
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An Unwelcome Legacy (page 392)

Why was the world worried about the USSR?

Long before the USSR broke up, there was widespread concern about Soviet Union’s nuclear programs. They tested bombs near villages. They placed nuclear warheads on top of missiles. Their nuclear power plants were poorly constructed and badly maintained. They had numerous decaying nuclear waste dumps. All threatened the region’s people and environment.

The USSR collapsed in the early 1990s. World leaders were concerned about the region’s nuclear weapons. The Soviet Union was now divided into fifteen independent republics. The world wanted to know who was in control of the weapons. They worried about how well protected they were. And they wondered what would happen to the nuclear scientists who had worked on the weapon systems.

The weapons industry was just part of the problem. As the 1986 disaster at Chernobyl had shown, many of the region’s nuclear reactors were potentially dangerous. Observers worried that there would be another incident like the one at Chernobyl.

1. What besides weapon systems was of concern to world leaders?

The Consequences of Collapse (page 393)

Why is the lack of security a problem?

When the Communist government could no longer keep the USSR together, the security of the region’s nuclear material became uncertain. This has caused political tensions between this region and other nations, especially the United States.

In January 2000, a task force of former U.S. officials issued a report. The report said that there is a chance that Russian nuclear materials could be stolen or misused. It concluded that this is an urgent national security threat. The task force...
recommended a $30 billion program to help ensure the safety of Russia’s nuclear stockpile.

There is a connection between the Soviet Union’s nuclear legacy and the region’s economic health, too. For example, many regional leaders are reluctant to shut down old Soviet reactors. It is expensive to build new plants that run on alternative fuels, such as natural gas.

Some republics want the nuclear legacy to boost their economies. For example, Russian legislators recently drafted plans to make their country the world’s nuclear dump. In January 2001, the Russian legislature gave approval to a plan to import, store, and treat nuclear waste from other countries. Officials hope the project will earn Russia as much as $21 billion over the next ten years.

Plans for the disposal of this nuclear waste outraged Russian environmentalists. But other developments have given some hope that things might improve. In December 2000, the government of Ukraine finally shut down the last active reactor at Chernobyl. Officials there pledged to spend millions on a new protective dome for the site.

Help has also come from overseas. The United States funded a treatment plant near the White Sea. It opened in October 2000. The $17 million facility will treat radioactive waste from Russia’s fleet of nuclear submarines. Previously, the radioactive waste was just dumped in the sea.

2. What are two signs that things might improve?

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Leftovers (pages 394–395)
What is stored in Murmansk?
Political Cartoon: A cartoonist illustrates a frightening problem—the collapse of a country with a lot of nuclear weapons. He shows the word “Russia” composed of bricks topped by a vast array of nuclear missiles. The brick “Russia” is falling apart. The missiles are beginning to fall over. A person watching this just says “Uh, oh.”

News Report: A retired Russian supply ship sits moored at the Atomplot shipyard in Murmansk. The ship is loaded with a deadly cargo of warped nuclear reactor parts and spent fuel rods that would be sufficient to poison the world’s population. About 200 disused nuclear reactors and thousands of fuel rods are stored at bases around Murmansk. A catastrophe in Murmansk could affect the climate of all of Europe, perhaps for hundreds of years.

3. What affect could a catastrophe in Murmansk have?

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Some Economic Considerations
(pages 394–395)
What crisis does Ukraine face now?
Editorial Commentary: There is no longer any threat of Russia’s deliberately attacking the United States. But the nuclear bombs, nuclear ingredients, and biological and chemical weapons Russia still pose a different threat. This material is poorly stored and guarded. It could easily be stolen or sold to an aggressive country such as Iraq, North Korea, or Serbia. Also, the weapons scientists are unemployed. They could be hired by other governments. The United States once spent a lot to keep Russia from using these weapons. It would not take much more than $10 billion to eliminate most of the current risks from those weapons.

News Report: The shutdown of the last reactor at Chernobyl is only the beginning of a new chapter. The radioactive wastes must be guarded for decades. Ukraine faces an acute energy crisis. The country would like to complete two nuclear power plants started before the USSR collapsed. European banks are not offering lending terms the Ukraine can afford.

4. What threat do Russia’s weapons pose today?

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