

Russia: Chapter 15, Section 3

Human-Environment Interaction

THE SHRINKING ARAL SEA

**Why has the Aral Sea lost
nearly all of its water since
1960?**

The lost Aral Sea:

- ◆ Government diverted water for crop irrigation
- ◆ Two major rivers that flowed INTO the Aral Sea have slowed to a trickle

The lost Aral Sea:

- ◆ <https://www.youtube.com/watch?v=YZippCiXS-w>
- ◆ <http://www.cnn.com/2014/09/30/world/asia/aral-sea-drying/>

What other environmental factors affect the area?

Pollution from pesticides and fertilizers have...

- ◆ Killed native fish (24 native species died out)
- ◆ Damaged the health of the people in the area
 - ◆ Dried pesticides, fertilizers, and salt blow around during windstorms
 - ◆ Diseases, throat cancer, lung disease, dysentery (chronic diarrhea), and high child death rates

What would need to happen in order to save the Aral Sea?

Stop diverting the water
from the two major rivers
for irrigation.

What would happen to the farmers if the rivers were no longer used for irrigation?

- ◆ Lots of hardship
- ◆ Loss of jobs
- ◆ Loss of income

**What would the people gain if
the Aral Sea returned?**

- ◆ Jobs in fishing
- ◆ Better health because the dried pesticides and fertilizer wouldn't blow around during windstorms.

Critical Thinking Questions

- ◆ Describe the Aral Sea disaster.
 - ◆ What is it?
 - ◆ Why did it happen?
- ◆ Who has benefited and how have they benefited?
- ◆ Who has seen their lives negatively affected, and how have their lives changed as a result?
- ◆ What can be done to reverse the affects?

THE RUSSIAN WINTER

**What problems do Siberia's
residents face during the
winter?**

Severe climate!!!

- ◆ Temperatures drop so much that basic human activities become painful (example: walking to get your mail) .

**What problems do the people
living in Siberia face in the
warmer months?**

- ◆ Melting ice and snow leave pools of water
 - ◆ Breeding grounds for insects
 - ◆ Enormous black clouds of insects attack

**How does Siberia's climate
affect construction of
buildings?**

- ◆ Heat from the buildings thaws the permafrost below

- ◆ As a result, buildings can...

- ◆ Sink

- ◆ Tilt

- ◆ Fall over

**How does Russia's climate act
as a defense from military
invasion?**

The winters are very cold
and stop invading armies

- ◆ 1800's = Napoleon. (French military)
- ◆ 1940's = Hitler during WWII.
(German military)

**CROSSING THE
“WILD EAST”**

**What made the building of the
Trans-Siberian Railroad an
enormous undertaking?**

- ◆ Bitter cold environment much of the time
- ◆ Undeveloped region with few people
- ◆ Vast distance (@ 6,000 miles ... 2,000 MORE miles than the distance across the U.S.A.

**Why did Russia want to build
the Trans-Siberian Railroad?**

- ◆ Speed up travel times between the cities of the Northern European Plain and Siberia
 - ◆ Military protection
 - ◆ Transport resources back to factories in western Russia
- ◆ Populate Siberia with workers so that natural resources could be extracted from the earth

How did the railroad affect the development of the region?

- ◆ Millions of settlers moved to the area.
- ◆ Resources such as coal and iron were extracted at great expense (lives, environment, and money)