

To: The Executive Net -- C778 Community Conference
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PROVOCATIONS -- #1

The United States Becomes a Grain Import Nation?

A provoking thought is the possibility that the United States will become a grain import nation by the middle of the next century. It's risky to project anything in the social, political or economic scene for forty or fifty years in advance. On the other hand, there are some geographical facts of nature that suggest this may not be so improbable a fate for world agriculture. My upcoming trip to the USSR heightens my interest in this topic.

The trigger for this change, if it occurs, will be the "greenhouse effect" of increased atmospheric carbon dioxide gas coming largely from fossil fuel burning, augmented by production of other "greenhouse gases." These gases, products of advancing civilization, have the property that they let the sunlight flow in, but partially block the escape of the the infra-red radiation that results from solar heating of the earth. Venus is hot as molten metal because its atmosphere contains 98% carbon dioxide, which gives a huge greenhouse effect. The Earth, with only 0.03% carbon dioxide, averages a comfortable 13 deg C (55 F).

A look at the map shows that the Russian grain belts are at very high latitudes, giving cold, dark winters and short growing seasons. The greenhouse effect could warm things materially. However, it is a reasonable speculation (though far from certain) that BOTH the US and USSR grain belts will be much drier from the greenhouse effect. But here's the "kicker."

The hotter climate will bring the Soviet grain belt far closer to the optimum for high production, and will take the US grain belt into a regime warmer than the optimum, thus reducing its production potential. Both regions will be drier--and that is adverse. However the USSR has huge North-flowing rivers (for example the Ob' and the Yenisei) that are geographically located (both in terms of altitude and location) to make it feasible to divert them to the South into potentially superb agricultural soil in Kazakhstan and Uzbekistan, in the even now aridifying drainage of the Aral Sea. The United States, on the other hand, does not have an irrigation potential at all comparable. Moreover, the U.S. is rapidly exhausting the Ogallala Aquifer, its best wheat belt underground water supply, and is losing agricultural topsoil at what some experts call an alarming rate to produce our huge grain production for domestic use and overseas sales.

Suppose the Soviets do build the massive multi-billion ruble water diversions, which will take decades to complete, and also develop their agriculture as the warming may enable them to do. Suppose, in addition, that we in the US do not improve our soil and water conservation. In this case our children and grand children may at times be eating bread from Russian grain--instead of knowing it only in Russian vodka.
