

New Independent States (NIS)

Food gaps in the region are

relatively small in 2002 as grain harvests are up in most NIS countries. In the coming decade, the number of people who do not meet nutritional food requirements is expected to decline from about 13 million to 7 million. Production volatility for the NIS region is the second highest of all regions covered in this report (after North Africa). Kyrgyzstan and Turkmenistan generally are not food insecure but could face food security problems if subjected to production shocks equal to the largest shocks encountered by each country in recent decades. [Michael Trueblood]

In this year's report, three new countries have been added to the NIS regional coverage: Kazakhstan, Turkmenistan, and Uzbekistan.¹ For the region as a whole, the number of people who do not meet nutritional food requirements is expected to decline almost 50 percent over the next decade, from about 13 million in 2002 to 7 million people in 2012. Most of the reductions are expected to occur in Georgia, Tajikistan, Turkmenistan, and Uzbekistan. In Tajikistan, however, access to food will continue to be a problem for the lower income groups.

The 2002 grain harvests are estimated to be more than adequate in most of the NIS countries. Only Georgia will have harvests that are down from recent production levels. Tajikistan's production rose 30 percent from 2001, but the country still shows a modest nutritional food gap (6 percent below requirements). Unlike reports in earlier years, this report projects food aid donations based upon recent historical averages and then estimates the remaining food gaps. Recent food aid levels in Tajikistan are proportionally large and are accounted for in the reported food gaps. Therefore, if food aid is reduced from these historically high levels, the gaps would widen. Over the next decade, Armenia and Tajikistan are projected to have modest distribution gaps—the amount of food required to bring all income groups within a country up to nutritional requirements.

The region continues to undergo major structural economic changes stemming from income changes that have affected production, trade, and consumption patterns. Various economic reforms, such as price and trade liberalization, led to sharp initial declines in per capita incomes. Incomes in several countries

¹ The other five countries covered are Armenia, Azerbaijan, Georgia, Kyrgyzstan, and Tajikistan.

(Azerbaijan, Georgia, Kazakhstan, and Kyrgyzstan) have stabilized and even grown since 1996, while incomes in other countries (Tajikistan, Turkmenistan, and Uzbekistan) have continued to decline. Despite this recent income growth, the absolute declines in per capita incomes from 1992 to 2000 have ranged from 31 percent in Azerbaijan to 65 percent in Tajikistan. Armenia is an exception in this region and had strong income growth, rising 41 percent during the last decade.

As the region's incomes fell and producer and consumer food subsidies were removed, meat consumption decreased and consumers modified their diets to include less costly foods. This pattern has led to sharp reductions in feed grain demand (usually in the form of imports), although food grain demand has been mostly stable. In Kazakhstan, for example, per capita incomes declined 34 percent from 1992 to 2000. Per capita food grain use declined only 4 percent per year in the 1990s whereas per capita feed grain use declined an average of 18 percent per year (most of the sharp decline occurred in the first years of reform in the early 1990s).

In many NIS countries, as imports contracted sharply, countries have tried to expand production to compensate for the loss in food supplies, often by expanding area sown. Yields have typically fallen as fertilizer supplies from the old Soviet system have been disrupted. While most NIS countries have not been very successful in stabilizing food supplies through self-sufficiency, Turkmenistan and Uzbekistan have achieved success, albeit through different routes. Turkmenistan nearly quadrupled its grain area sown within a decade (185,000 hectares in 1990 to 760,000 hectares in 2000). Uzbekistan reduced its cotton area by 300,000 hectares—the country is the world's second largest cotton exporter—and instead expanded its grain area by the same amount. Within grains, the

area was shifted in favor of wheat (up 600,000 hectares) instead of rice, barley, and millet (300,000 hectares combined). The country also was able to raise grain yields substantially, an anomaly for the region, in part by keeping fertilizer use steady.

Production volatility for the NIS region is the second highest of all regions covered in this report (after North Africa) and poses a threat to food security. The regional average coefficient of variation is 25 percent. Countries with the highest coefficients of variation include Kazakhstan (42 percent), Tajikistan (36 percent), and Georgia and Turkmenistan (each 27 percent). This relatively high production variation reflects both agro-ecological conditions in some regions as well as the major political and economic changes that have occurred in the past decade.

To explore the effects of hypothetical production shocks in the future, scenarios were run for 2003 that considered the impacts of production shocks based on the largest shortfalls in each country in recent decades. The largest historical production shortfall from trend in a single year ranged from 24 percent (Uzbekistan in

1993) to 49 percent (Turkmenistan in 1996); the region's average high shortfall was 37 percent.

Of the eight NIS countries examined here, two countries (Kyrgyzstan and Turkmenistan) might have potentially serious food security problems if they face such shocks again. Kazakhstan and Uzbekistan would encounter food gaps also, but both countries have the stock capacity to eliminate such deficits. If Kyrgyzstan faced a 34-percent shock as in 1995 and drew down stocks at the same rate as it did historically, the country would face a status quo food gap of about 210,000 tons over and above recent food aid levels. This gap is larger than the highest food aid Kyrgyzstan has received in the past (160,000 tons), but the country appears to have some capacity to close at least some of the gap by importing food commercially. Similarly, if Turkmenistan faced a 49-percent shock in 2003 as it did in 1996 and drew down its stocks at an historic peak rate, it would still confront a status quo food gap of almost 190,000 tons. It is unclear if the country would be able to make up this deficit with commercial imports.

Table 6—Food availability and food gaps for New Independent States (NIS)

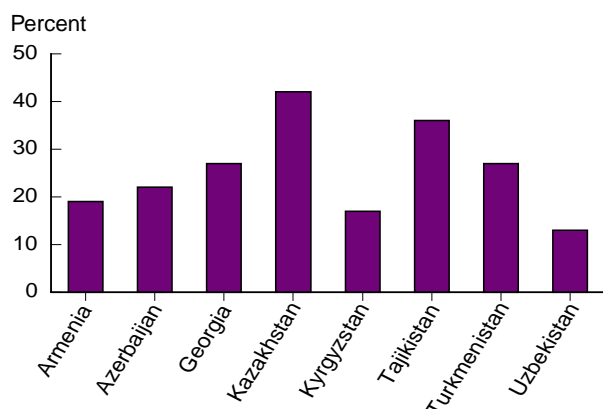
Year	Grain production	Root production (grain equiv.)	Commercial imports (grains)	Food aid receipts (grains)	Aggregate availability of all food
			1,000 tons		
1993	27,620	---	---	---	---
1994	22,462	---	5,411	---	---
1995	16,458	712	2,861	1,190	20,254
1996	18,788	735	4,508	381	20,849
1997	21,061	761	2,645	579	20,903
1998	15,752	782	2,757	163	20,577
1999	23,595	937	2,605	340	24,171
2000	20,356	943	3,308	439	19,604
2001	25,860	991	2,489	455	21,886
Projections					
				Food gap	
				SQ	NR
2002	26,696	1,000	2,785	0	110
2007	23,860	1,091	3,069	0	13
2012	25,331	1,189	3,246	0	6

NIS
(27 million people)

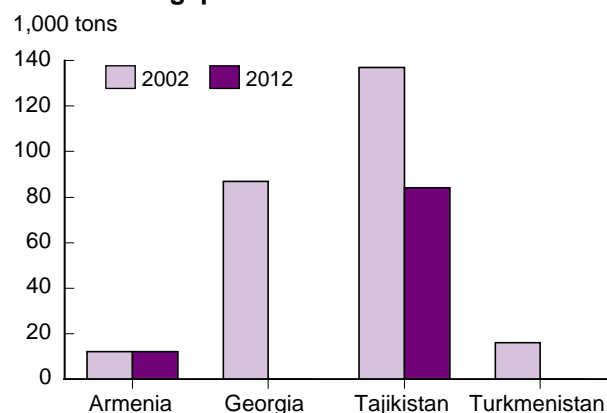
There are relatively small food gaps in 2002 as grain harvests are up in most NIS countries. Supplies will be tight in Georgia and Tajikistan, though.

In the coming decade, the number of people who do not meet nutritional food requirements is expected to decline from about 13 million people to 7 million. Most of the reductions are expected to occur in Georgia, Tajikistan, Turkmenistan, and Uzbekistan. However, access to food will continue to be a problem for the lower income groups in Tajikistan.

Coefficients of variation for grain production, 1990-2000



Distribution gaps in NIS in 2002 and 2012



New Independent States: Food aid

	Total food aid received		Food aid per capita		Highest food aid amount received		Food aid as % of imports	
	1980-90	1991-2000	1980-90	1991-2000	1,000 tons	Year	1980-90	1991-2000
	1,000 tons		Kg				Percent	
NIS	--	6,918	--	17	--	--	--	12
Armenia	--	1,509	--	35	367	1994	--	37
Azerbaijan	--	849	--	16	424	1994	--	10
Georgia	--	2,372	--	103	585	1993	--	40
Kyrgyzstan	--	747	--	31	156	1993	--	15
Tajikistan	--	1,120	--	19	168	1995	--	17

-- = Not applicable.

Source: FAOSTAT, ERS calculation.