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Reducing Food Insecurity in the United States: Assessing Progress Toward a National Objective

Mark Nord and Margaret Andrews

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Issue: The U.S. Government set an objective of reducing the rate of food insecurity of the Nation's households to half of its 1995 level by 2010. Is progress through 2000 on track to reaching this target? What factors will affect success in achieving it?

Background: At the World Food Summit in 1996, the United States, along with 185 other countries, adopted the "Rome Declaration," which begins with this commitment:

We pledge our political will and our common and national commitment to achieving food security for all and to an ongoing effort to eradicate hunger in all countries, with an immediate view to reducing the number of undernourished people to half their present level no later than 2015.

U.S. planning and commitments toward reducing the global incidence of undernutrition have focused primarily on improving food security in low-income countries, where the vast majority of the world's undernourished people live. However, the U.S. Government also committed itself to reducing food insecurity at home. Undernourishment as a result of poverty is rare within the United States, but food security—assured access by all people at all times to enough food for active healthy lives—has not yet been achieved. A nationally representative food security survey conducted in 1995, before the World Food Summit, indicated that about 12 percent of U.S. households were food insecure, including 4 percent in which one or more household members were hungry at times during the year because of the households' food insecurity.

The U.S. Government, as a part of its response to the World Food Summit, set an objective of reducing the

prevalence rate of food insecurity in the Nation by half—to 6 percent—by 2010.

The objective, adopted as part of the Department of Health and Human Services' Healthy People 2010 initiative, sets a more stringent standard for the United States than that of the Rome Declaration. First, the condition it addresses, food insecurity, is a less severe condition than undernourishment, the condition addressed by the specific objective of the Rome Declaration. Second, the target date for achieving this objective is 2010, which is 5 years before the World Food Summit target.

Findings: In this issues brief, we assess progress toward the objective of reducing by half the prevalence rate of food insecurity among U.S. households. We first describe the methods used to measure and monitor the food security of the Nation's households. Then, drawing on data from the annual USDA-sponsored food security surveys, we track prevalence rates of food insecurity and hunger from 1995 through 2000. We compare these statistics to the Healthy People 2010 targets, and explore the extent to which the strong economic growth during the period may have been responsible for the improvements in food security. Finally, we describe characteristics of food-insecure households to identify population groups that will need to be given more attention in order for the United States to achieve the Healthy People 2010 objective.

Measuring and Monitoring Food Security

USDA monitors the food security of the Nation's households through an annual, nationally representative food security survey. The survey is conducted for USDA by the U.S. Census Bureau as an annual supplement to its

monthly Current Population Survey (CPS)—the same survey that provides data for the Nation’s monthly unemployment statistics and annual poverty rates. A nationally representative sample of about 40,000 households responds to questions about food expenditures, use of Federal and community food programs, and whether they are able to consistently meet their food needs.

Each household’s food security status is assessed by a series of 18 questions that ask about behaviors and experiences known to characterize households that are having difficulty meeting their food needs. The questions cover a wide range of severity of food insecurity. For example, the questions about the least severe levels of food insecurity ask whether respondents worried that their food would run out before they got money to buy more and whether they could afford to eat balanced meals. At midrange are questions on reducing food intake, such as whether adults in the household cut the size of meals or skipped meals because there was not enough money for food. Questions about the more severe levels of food insecurity ask whether children skipped meals because there was not enough money for food, and whether adults did not eat for a whole day because there was not enough money for food. Each question asks whether the condition or behavior occurred during the previous 12 months and specifies a lack of money or other resources to obtain food as the reason for the condition or behavior. Voluntary fasting or dieting to lose weight are thereby excluded from the measure.

Interviewed households are classified into one of three categories—food secure, food insecure without hunger, food insecure with hunger—based on the households’ responses to all items. Households whose members answer “Yes” to 3 or more of the 18 food security questions are classified as food insecure. At a minimum, food-insecure households have affirmed all of the following three items or else items indicating more severe conditions:

- They worried whether their food would run out before they got money to buy more.
- The food they bought did not last, and they did not have money to get more.
- They could not afford to eat balanced meals.

Households classified as food insecure with hunger have affirmed, in addition to the previous three items, both of the following items or else items indicating more severe conditions:

- Adults ate less than they felt they should.

- Adults cut the size of meals or skipped meals in 3 or more months.

The Baseline: 1995

Based on the first food security survey, conducted in April 1995, USDA estimated that 12 percent of U.S. households (11.8 million households) were food insecure, including 4 percent (4.2 million) classified as food insecure with hunger. The general food security objective adopted by Healthy People 2010 is to “increase food security among U.S. households and in so doing reduce hunger.” The specific food security objective is to reduce the prevalence rate of food insecurity by half, to 6 percent, by 2010.¹ Although no specific target was set for reducing the prevalence of hunger, the general objective implies a commensurate reduction in hunger. In this issues brief, we track progress on both statistics, assuming a target of reducing the prevalence rate of hunger to 2 percent by 2010.

Progress: 1995-2000

Food insecurity and hunger declined from 1995 through 2000 (fig. 1).² The year-to-year deviations from a consistent downward trend included a substantial 2-year cycle that is believed to result from a seasonal influence on the measurement of food security prevalence rates. The CPS food security surveys over this period were conducted in April in odd-numbered years and August or September in even-numbered years. The measured prevalence of food insecurity was consistently higher in the August/September

¹The Healthy People 2010 objective is actually worded in terms of food security—to increase food security from 88 percent to 94 percent of households. A note clarifies that this target represents a “6 percentage point improvement (50 percent decrease in food insecurity; consistent with the U.S. pledge to the 1996 World Food Summit).”

²Because of changes in screening procedures used to reduce respondent burden in the food security surveys, prevalence rates from 1995 to 1997 are not directly comparable with those from 1998 to 2000. In other USDA reports, prevalence rates have been made comparable across years by editing data for all years in accordance with a common screen, more stringent than that actually in use in any year. Here, however, a different approach has been used. Since the Healthy People 2010 objective uses as a baseline the unadjusted 1995 prevalence rate, we use unadjusted statistics for 1995 and for 1998-2000. Fortunately, changes in screening caused only negligible differences in prevalence estimates at the national level for 1995 compared with 1998-2000. Prevalence rates for 1996 and 1997, however, did require adjustment to be comparable. These were adjusted from the “common screen” prevalence rates by multiplying them by the average ratio of unadjusted-to-adjusted prevalence rates for 1998-2000. Analyses were replicated using common-screen-based prevalence rates for all years to assure that findings were not affected by use of this approach.

What does it mean to be food secure? Food insecure? Food insecure with hunger?

Food security for a household means access by all members at all times to enough food for an active, healthy life. Food security includes at a minimum (1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing, or other coping strategies).

Food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

Hunger is the uneasy or painful sensation caused by a lack of food. [Or] the recurrent and involuntary lack of access to food.

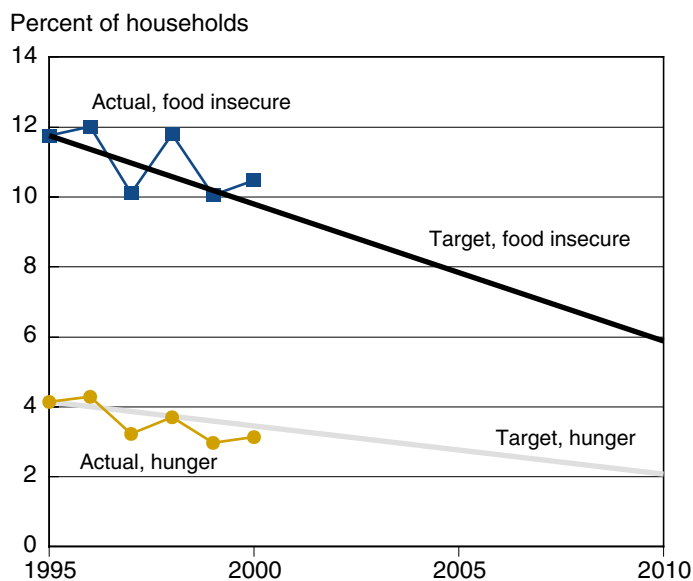
Definitions are from the American Institute of Nutrition, Life Sciences Research Office (Andersen, 1990).

Hunger, as measured in the U.S. food security survey and described in this issues brief, refers only to involuntary hunger that results from not being able to afford enough food. People are not counted as “hungry” for these statistics if they were hungry only because they were dieting to lose weight, fasting for religious reasons, or just too busy to eat.

collections, suggesting a seasonal response effect.³ To avoid any possible bias arising from this seasonal effect, we assess progress from April 1995 to April 1999 rather than to September 2000 (the most recent data available). Food insecurity declined from 11.75 percent in 1995 to 10.06 percent in 1999, a decline of 1.69 percentage points. This amounted to 0.4 percentage points per year, which is just the annual reduction required to achieve the Healthy People 2010 objective. Over the same 4-year period, the hunger rate fell from 4.15 percent to 2.97 percent, a decline of 1.18 percentage points, or almost 0.3 percentage points per year. This rate of decline (in percentage points) would result in reducing the rate of hunger to half of the 1995 level several years before 2010. To assess these changes more rigorously, statistical methods (regression analysis) were used to adjust for the seasonal variation. These analyses confirmed that

³Beginning in 2001, data are being collected in early December of every year, which will avoid further problems of seasonality effects in interpreting annual changes.

Figure 1—Prevalence rates of food insecurity and hunger compared with Healthy People 2010 objectives



Note: Prevalence rates for 1996 and 1997 were adjusted for screening differences in order to be comparable to the unadjusted rates for 1995 and 1998-2000.

Source: Calculated by ERS based on data from Current Population Survey Food Security Supplements.

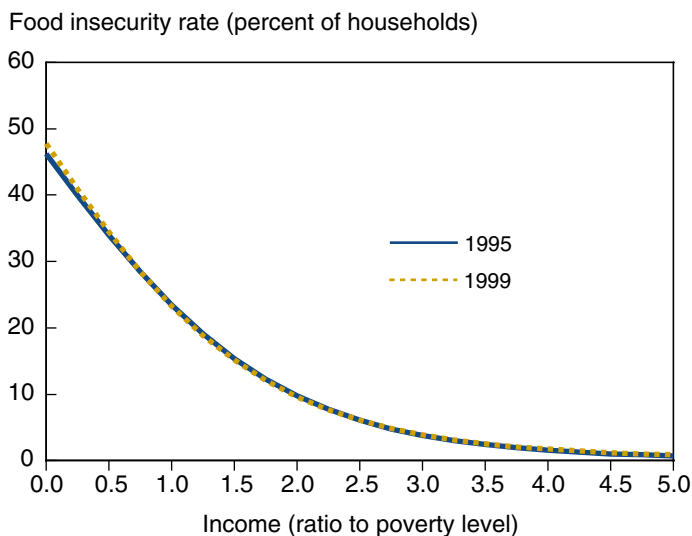
progress on reducing the rate of food insecurity was on target through 2000, and progress on reducing the rate of hunger was somewhat ahead of target.

The declines in food insecurity and hunger from 1995 through 2000 were widespread and general, affecting almost all regions and types of households. The declines were largest for some of the most economically disadvantaged groups, especially for single women with children and for Blacks and Hispanics.

Although this preliminary analysis is encouraging, the improvements in food security from 1995 through 2000 are not likely to continue without a break into the following decade. Most—perhaps all—of the reduction in food insecurity from 1995 through 2000 and about half of the reduction in hunger can be accounted for by rising incomes over the period. These rising incomes, resulting primarily from the strong economic growth of the late 1990s, are likely to have stagnated or declined as a result of the recession of 2001.

The association of food insecurity with income remained almost unchanged in 1999 compared with 1995 (fig. 2; comparison is made with 1999 rather than with 2000 to avoid possible seasonality bias). In both years, the rate of

Figure 2—Prevalence rates of food insecurity by income, 1995 versus 1999



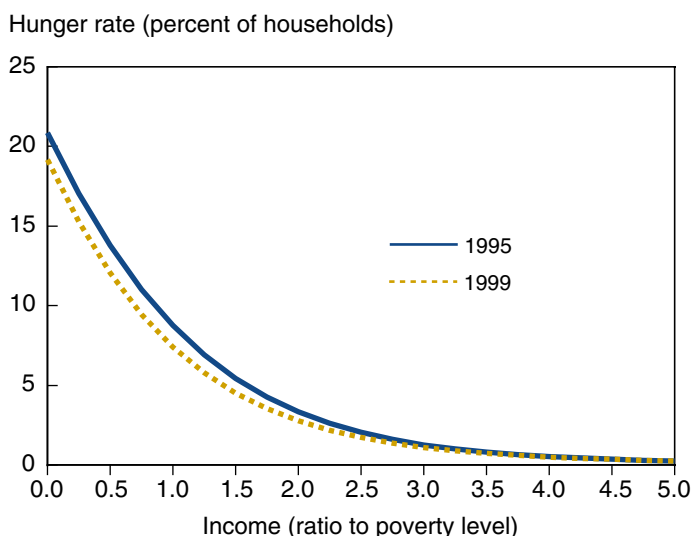
Note: Predicted prevalence rates are based on logistic regressions of food insecurity on household cash income as a ratio to the Federal poverty line (entered as a third-order polynomial). Regression analyses were conducted separately for 1995 and 1999.

Source: Calculated by ERS based on data from Current Population Survey Food Security Supplements, April 1995 and April 1999.

food insecurity was around 45 percent for households with the lowest incomes, fell to about 23 percent for households with incomes around the poverty line, fell to below 10 percent for households with incomes twice the poverty line, and fell to near zero for households with incomes around 4 times the poverty line. In both years, there was a great deal of variation (not depicted in fig. 2) in the food security of households with the same income. Many households with low incomes remained food secure, while a few households with relatively high annual incomes experienced periods of food insecurity. On average, however, households at the same income level (adjusted for household size and inflation) were equally likely to be food insecure in 1995 and in 1999. The lowest income households may even have been slightly more food insecure in 1999 than in 1995.

Rising income was also a major factor in reducing the hunger rate from 1995 to 2000. However, the hunger rate fell more rapidly during this period than can be accounted for by rising incomes alone. Across the entire low-income range, households with similar incomes (adjusted for household size and inflation) had lower rates of hunger in 1999 than in 1995 (fig. 3). Analysis not shown here suggests that about half of the reduction in the hunger rate from 1995 to 2000 can be accounted for by improved incomes. Further research is needed to understand the

Figure 3—Prevalence rates of hunger by income, 1995 versus 1999



Note: Predicted prevalence rates are based on logistic regressions of hunger on household cash income as a ratio to the Federal poverty line (entered as a third-order polynomial). Regression analyses were conducted separately for 1995 and 1999.

Source: Calculated by ERS based on data from Current Population Survey Food Security Supplements, April 1995 and April 1999.

other reasons for the decline in the hunger rate. Important contributors may include other economic factors such as increased labor-force participation, improved job availability and employment stability, and public assistance program factors such as employment-focused cash welfare, increased receipt of earned-income tax credits, and increased outreach in food assistance programs. Economic factors are likely to have been adversely affected by the recession in 2001, whereas improvements due to program factors are more likely to persist.

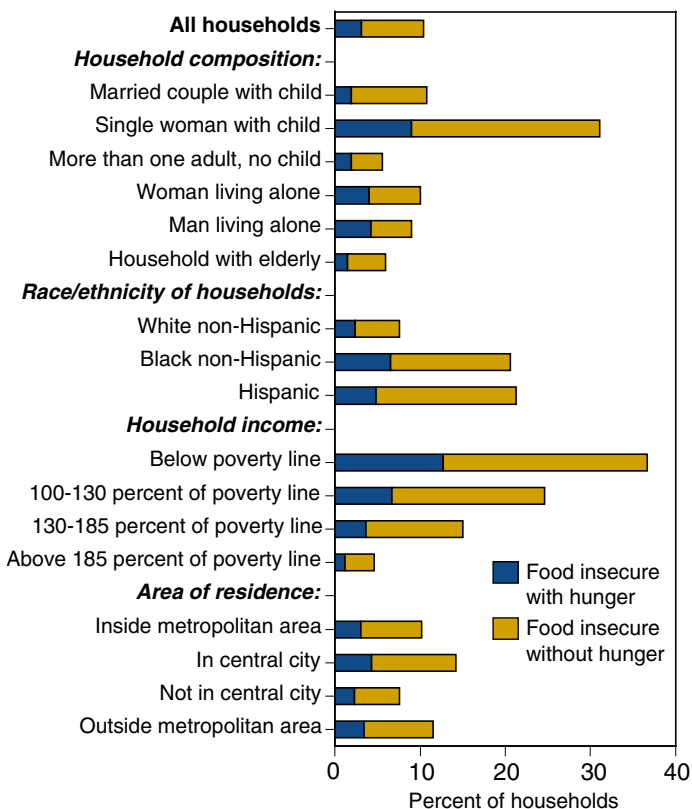
Prospects: 2000-2010

Achieving the targeted improvements in food security by 2010 will require:

- Renewed economic growth—especially improved employment and income opportunities for less skilled workers.
- Improved employment opportunities and increased income of single mothers with children.
- Maintenance of a strong nutrition safety net.

Economic growth, with its improvements in employment and income, is essential to improving food security. The recession of 2001 will likely have resulted in rising rates

Figure 4—Prevalence rates of food insecurity and hunger by selected household characteristics, 2000



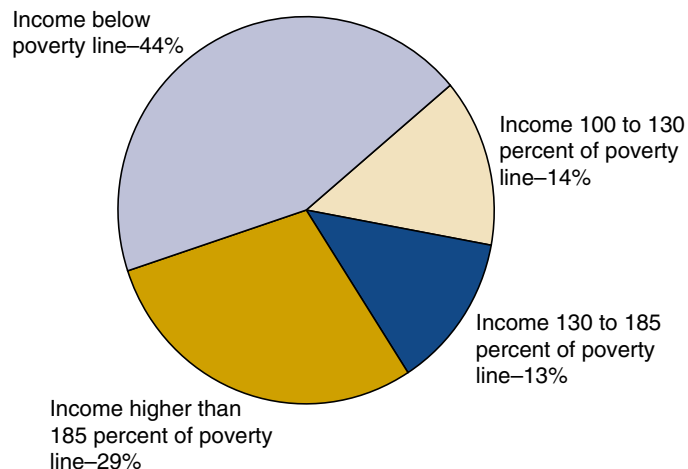
Source: Calculated by ERS based on data from Current Population Survey Food Security Supplement, September 2000.

of food insecurity and hunger in 2001,⁴ and renewed economic growth will be essential in order to achieve the Healthy People 2010 objectives. Food insecurity and hunger are heavily concentrated among low-income households (figs. 4 and 5). Aspects of economic growth that improve employment and income opportunities for less skilled workers—who are disproportionately represented in low-income households—are especially important for improving food security.

Single women with children have the highest rates of food insecurity and hunger of all household types. In 2000, 31 percent of such households were food insecure, and they comprised 25 percent of all food-insecure households (figs. 4 and 6). Bringing the rate of food insecurity of these households down to the national average would, by itself, achieve 40 percent of the remaining reduction in food insecurity required to meet the Healthy People 2010 objective. Reducing food insecurity among these families will require

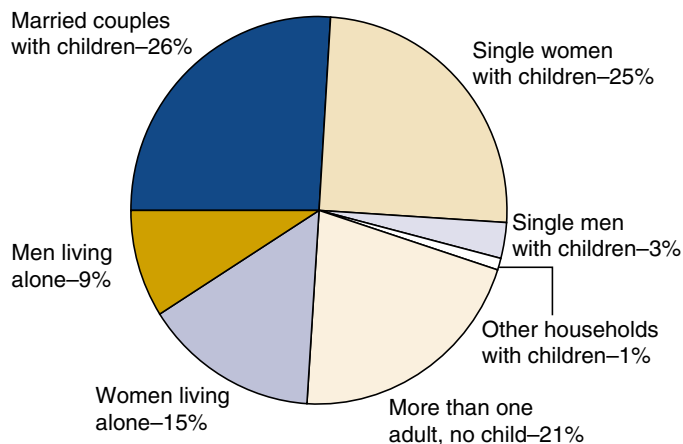
⁴The CPS Food Security Survey was conducted in December 2001. ERS will report results in late October 2002.

Figure 5—Income of food-insecure households, 2000



Source: Calculated by ERS based on data from Current Population Survey Food Security Supplement, September 2000.

Figure 6—Household composition of food-insecure households, 2000



Source: Calculated by ERS based on data from Current Population Survey Food Security Supplement, September 2000.

attention to factors that affect their income, such as barriers to employment, access to good-quality child care, and income support, while avoiding policies that create disincentives or barriers to marriage.

The nutrition safety net maintained by USDA also plays an important role in achieving the food security objectives of Healthy People 2010. Even in a strong economy, job transitions, layoffs, and family disruptions can result in temporary periods of low income and vulnerability to food insecurity. Furthermore, the incomes earned by some workers are not sufficient to meet the food needs of

all household members. USDA's food assistance programs—including the Food Stamp Program, the National School Lunch and School Breakfast Programs, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)—help meet these transitional and supplemental food needs. To maximize the contribution of these programs in reducing food insecurity and hunger, it is important to assure that eligibility criteria and benefit levels are appropriate and that households qualifying for the programs know they are eligible, can readily access the programs, and are not embarrassed to apply for them.

Summary: Through 2000, the United States made encouraging progress in reducing the rate of domestic food insecurity—progress that, if continued, would achieve the objective of reducing food insecurity by half from 1995 to 2010. The prevalence of hunger fell at a rate more rapid than that required to achieve an equivalent target. However, both of these gains were largely the result of improvements in income associated with the strong economic growth of the late 1990s. To achieve the targeted reductions in food insecurity and hunger will require renewed economic growth along with particular attention of policies and programs that affect employment and earnings opportunities of households that are most vulnerable to food insecurity—especially those with less

skilled or less educated workers and those headed by single women with children.

Information Sources:

Andersen, S.A. (ed.), “Core Indicators of Nutritional State for Difficult to Sample Populations,” *Journal of Nutrition* 120(11S):1557-1600. Life Sciences Research Office, Federation of the American Societies for Experimental Biology, for the American Institute of Nutrition, 1990.

Economic Research Service Website, *Food Security in the United States*, <http://www.ers.usda.gov/briefing/food-security>

Food and Nutrition Service Website, <http://www.fns.usda.gov/fns> for information on USDA's food assistance programs, and <http://www.fns.usda.gov/fsec> for resources communities can use to improve food security.

Nord, Mark, Nader Kabbani, Laura Tiehen, Margaret Andrews, Gary Bickel, and Steven Carlson. *Household Food Security in the United States, 2000*. FANRR-21, U.S. Department of Agriculture, Economic Research Service, 2002. <http://www.ers.usda.gov/publications/fanrr21>

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