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RURAL LABOR UNDERUTILIZATION

by Mervin J. Yetley

Observers of U.S. agriculture are well aware of the excess capacity of U.S. agriculture to produce food and fiber at politically acceptable prices. Dan Dvoskin, First Quarter 1987 CHOICES, estimated that in 1985 the excess capacity in U.S. agriculture was the "equivalent of 6 percent of potential total farm production."

There are many reasons for interest in the estimates of the excess productive capacity in U.S. agriculture. One reason is as an indication of the adjustments that would occur if agricultural resources were not constrained by public policies. This excess capacity also indicates the waste and inefficiencies associated with present farm programs and the stickiness of some resources—land, human, and capital—that continue to be used in farm production.

Much less attention has been given to non-farm resources in rural America. This is especially true of rural workers. Admittedly we know how many people live in rural areas, and we have an indication of how many are unemployed. But, we also know the unemployment statistic is a poor indicator of the extent to which rural workers are underutilized.

A New Estimator

Because of the inadequacy of the unemployment statistic for rural America and because of the importance of understanding the waste of human resources in rural America, USDA/ERS/ARED set about developing a method to estimate this underutilization. As a result, ERS estimates the equivalent of 9-12 percent of full-time rural workers are not now used to produce goods and services. Just as there is excess capacity in U.S. farm production, so it is with nonfarm human resources in rural America.

But even this large estimate is conservative. For example, no allowance is made for underemployment among farmers, even though we know many farmers are not fully occupied on their farms. However, estimates of underemployment among the self-employed, including farmers are not possible given existing data. Thus, any person declaring him/herself as "self-employed" was classified as working full time and thereby effectively removed from this analysis.

Five Categories

Although our primary interest is in rural America, estimates

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The terms "rural" and "urban" used in this article are more correctly described as nonmetro and metro. However, in this article, the more familiar terms are retained.

are derived from a national data set that includes information from numbers for both urban and rural areas. This made it possible to estimate wasted labor resources for the entire economy. More specifically, the data used in this study are from the March 1986 Current Population Survey (CPS). The CPS is conducted monthly by the Census Bureau and is used to estimate the official unemployment statistics. Much of the detail varies monthly, and the questions used in this analysis are included only in the March survey.

The CPS data permits classifying unemployed and underemployed workers into five categories of underutilization:

- Unemployed Workers. Defined as in the official statistics—these people are actively looking for work.
- Discouraged Persons. Those who have given up looking for work but who would work if appropriate opportunities were available.
- Part-Time Employed. Workers involuntarily employed part-time for lack of full-time work.
- Working Poor. Workers not earning more than a poverty-level income even though working full time.
- Occupationally Mismatched. Workers whose jobs fail to fully utilize their current skills.

Full-time workers, those voluntarily working part-time, and those in retirement and similar work-related situations are, of course, excluded from the above classification

scheme. Farmers and other self-employed people are presumed to be working full-time. In 1986, 8.6 million people in rural America were unemployed or underemployed. Nearly half, 3.9 million, were "working poor."

As Table 1 indicates, the unemployed represent about one quarter of all underutilized workers in the U.S. economy but they are not the largest category of labor underutilization. That distinction goes to the working poor who total over 40 percent. Rural and urban areas have almost the same relative amounts of unemployed and discouraged workers. Rural areas have more part-time and working poor. Mismatched workers are nearly twice as prevalent in urban as in rural areas.

Thus, the underutilization among the 8.6 million rural workers in the five categories is the equivalent of nearly one out of 10 (9.3 percent) workers in rural America being unemployed for the entire year.

The Amount of Waste

By extending the earlier work of Clogg and Lichter, it is possible to use the worker numbers of Table 1 to estimate the dollar value of labor underutilization, thereby enabling aggregation across the five categories.

Conceptually, lost earnings for an individual are the difference between that individual's reported earnings and what that individual could expect to earn if employed full time, given his/her education, skills, and other characteristics. The sum of these lost earnings for all workers is the measure of the amount of underutilization of human resources reported in this article. The classification and estimation procedure accounts

◆ Just as there is excess capacity in U.S. farm production, so it is with non-farm human resources in rural America. Underutilization as used here measures underemployment of employed people as well as the unemployed. And it reveals that underutilization in rural America is equivalent to nearly one out of 10 workers being unemployed for the entire year.

for all workers, avoids double counting, and permits estimating the number of underutilized workers and the sum of their lost earnings both within and across the five categories of unemployed and underemployed workers.

The lost earnings due to underutilization of labor in both rural and urban America has a combined value of \$205 billion, roughly 5 percent of all the goods and services produced in the United States (GDP) in 1986.

The distribution of these last earnings across the underutilized categories is shown in Table 3. Most striking is the importance of the four "under-employed" categories—Discouraged, Part-Time, Working Poor, and Mismatched Workers.

These four categories account for nearly two thirds of the total value of labor underutilization in the U.S. economy. In the rural economy this loss is slightly higher. "Unemployment" is not the major factor that limits total income in either rural America or in the U.S. economy as a whole. Indeed, in rural areas, the one category, "working poor," accounts for more lost earnings than do the unemployed.

There are several ways to view the underutilization of workers in our economy. If the rural workers' lost earnings were distributed across the rural workforce, the average would be \$1,885 per rural labor force participant. The same estimate for the urban sector would be \$1,735. The larger average loss experienced by rural workers holds even though rural areas have lower wage rates

Another way to consider the underutilization of workers is the "full-time worker equivalents" of the underutilized labor. Let's make a rather generous assumption that a typical full-time employed, rural worker earns \$10 per hour. The \$46 billion estimated value of underutilization associated with the 8.6 million rural workers is equivalent to 2.3 million full-time workers which is nearly 10 percent of the rural workforce. Lowering the average hourly wage used in the calculation would proportionately increase the estimate of full-time worker equivalents.



These categories follow the published work of Penn State Professors Clifford Clogg, who developed the basic approach, and Dan Lichter, who applied this categorization to rural workers. Details of the estimation procedure are available in ERS Staff Report No. AGES880722 by writing to the author Mervin J. Yetley.



Table 1.—Nearly 9 million people unemployed and underemployed in March 1986

	<u>Rural</u>	<u>Urban</u>	<u>Total</u>	<u>Rural</u>	<u>Urban</u>
	<i>Million workers</i>			<i>Percent in each category</i>	
Unemployed workers	2.2	6.5	8.7	26	27
Discouraged: persons	.4	1.1	1.5	4	5
Part-time workers	1.6	3.8	5.4	18	16
Working poor	3.8	9.8	13.6	45	40
Mismatched workers	<u>.6</u>	<u>3.0</u>	<u>3.5</u>	<u>7</u>	<u>12</u>
Total	8.6	24.2	32.8	100	100

Table 2.—Value of underutilization

	<u>Rural</u>	<u>Urban</u>	<u>Total</u>
Underutilization In billion dollar	\$46	\$159	\$205
As percent of GDP	1.1	3.8	4.9

Table 3.—Lost earnings by category

	<u>Rural</u>	<u>Urban</u>	<u>Total</u>
	<i>Million dollars</i>		
Unemployed workers	15.1	59.6	74.7
Discouraged persons	3.6	15.7	19.3
Part-time workers	7.8	28.3	36.2
Working poor	16.4	37.4	53.8
Mismatched workers	<u>3.6</u>	<u>17.6</u>	<u>21.1</u>
Total	46.5	158.7	205.1

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and procurement practices, and economic performance are among the topics covered. Copies are available from the Research Institute on Livestock Pricing, Department of Agricultural Economics, 324 Hutcheson, Virginia Tech, Blacksburg, VA 24061.