Migrant Worker Contributions to the Minnesota Economy.

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Introduction.

Migrant workers come to Minnesota each spring to participate in the seasonal efforts of the State's agricultural industries. They work in sugarbeet fields, canneries, nurseries, orchards, and a variety of other temporary hand labors -- jobs that few workers in the local economy are willing or able to do. If not for migrant labor, the industries they serve would suffer, and the State as a whole would be less productive. Complicating the economic picture, is the fact that most migrants are poor.[1] Some are eligible for federal social programs, and most benefit from programs specifically targeting the migrant population. Too often, the negative conditions of their poverty overshadow the positive contributions their labor makes to the State and local economy. Unfortunately, there is very little economic data about migrant workers in Minnesota. This paper examines their contributions to the Minnesota economy as workers and consumers, and considers the flow of federal funds associated with migrant aid. Absent solid empirical data, however, this report can only feel around the edges of the migrants' contribution, and by design will raise more questions than it answers.

Defining the Migrant Worker.

Asking the most basic question about migrants, "How many come to Minnesota?", illustrates the dearth of information. No census is made of their number, nor is there a generally accepted definition of their population. The Office of the State Demographer makes no specific estimates of the number of migrants coming to Minnesota. The Minnesota Department of Agriculture keeps no records, nor does the Department of Economic Security. Each agency can describe a larger population, that may include migrants, such as the number of poor families in the State or workers in a particular job class. Social programs, like Food Stamps, do track the number of migrant applicants, but that subset only represents a portion of the total migrant population. To properly analyze the migrant's economic contributions to the State, a minimum set of

empirical information is needed. There first must be an accurate count of the migrant population. Worker and family characteristics could then be gathered using appropriate survey techniques.

Lacking such information, one approach to estimating the economic contribution of migrant labor is to use job classification data as a proxy for knowledge about the actual migrant labor force. This method requires that all workers in a job class be counted, and that we know what portion of these workers are migrants. We risk over-estimating the migrant impact if we wrongly assume that all the workers in a particular job class are migrants. For instance, farm labor as a class can include students, family members, other local residents, as well as migrants. Conversely, we will under-estimate migrant contributions if we fail to consider all the jobs they perform. Migrant workers do a variety of seasonal work in Minnesota, although sugarbeet fieldwork and vegetable processing are thought to be their main source of employment. This report focuses on these two industries to estimate the potential migrant contribution and to examine the dynamics of the labor market these workers face.

Farmworkers.

Because the term "farmworker" is so often used to describe migrants, this topic is also worth some brief discussion. According to the Department of Labor, there were 13,440 farmworker jobs in Minnesota in 1993 -- including sugarbeet workers. The Department further estimates that through the year 2001, farmworker employment will drop by 14 percent, to 11,620 workers. New openings each year, to replace workers and account for industry growth, will fall from 3,190 to 1,380 jobs. By contrast, total Minnesota employment is forecast to grow by 13 percent, to nearly 2.8 million jobs.

These estimates provide a useful long-term perspective, but offer no insight on the intra-year nature of the farm labor market. The Department of Agriculture conducts a quarterly survey of Minnesota farm labor employment, however, that does illustrate

the seasonal dynamic of hired labor.[2] According to it, the number of hired workers in 1995 increased between April and July by 13,000 workers -- nearly doubling the hired farm workforce to 24,000 jobs. Meanwhile, the average hourly wage fell from $7.65 to $6.19, and the average number of hours worked increased from 37.5 to 39.6. By October 1995, total hired farm labor had fallen to 18,000 workers, wage rates had jumped to $7.53 an hour, and the average work-week was 45.7 hours. Just 9,000 farmworkers were still employed in January 1996, making an average of $8.15 an hour, working 30.8 hours a week.

If we assume that the 13,000 new workers in the second quarter, worked average hours for average wages, and that half as many did the same for the third quarter. Their combined wage earnings would be about $70 million. By way of comparison, Minnesota has a total of 2.5 million workers, with combined annual earning in excess of $80 billion. While it may be reasonable to assume that a substantial portion of the $70 million in farm labor was earned by migrants, such a claim cannot be substantiated given the lack of data about migrants. It does, however, provide a yardstick for comparing other estimates of migrant potential earnings.

Fieldwork and the Sugarbeet Industry.

Sugarbeets are an important crop to Minnesota, and migrant workers play a material role in the crop's economic value. Sugarbeets are the only major crop in which Minnesota ranks number one in the nation in value of production. In 1994, the Minnesota sugarbeet crop was valued at $346 million, up from $218 million in 1993. Minnesota farmers planted 444,000 acres to sugarbeets in 1996, and are expected to increase acreage in 1997. While this may increase the demand for migrant field workers in the short run, it could also signal a further erosion in the demand for field labor, should industry growth come from bigger, less labor-intensive operations.

Sugarbeet growers in the Red River Valley, which includes the North Dakota and Minnesota crop regions, were the nation's lowest cost producers in 1994.[3] The gross value of their production averaged $838 per acre. Total cash expenses (including hired labor) averaged $410 per acre. After including all economic costs, the residual returns to management and risk were $205 per acre. In 1993, however, residual returns averaged just $9 per acre, when the region's growers suffered a one-third lower yield due to heavy rains. Hired labor expenses in that year were still reported at $68.50 per acre, slightly higher than the 1994 average of $66.12 per acre. Extrapolating across the 1994 Minnesota sugarbeet base, the total cost of hired labor could exceed $24 million. This figure represents the employer's total hired labor costs, not just wages. Again, lacking good population data, we cannot be certain what portion went to migrant workers.

Migrants provide two basic services to sugarbeet farmers: thinning and weeding. Thinning occurs early in the growing season, when the emerging, over-seeded fields are culled to achieve higher yields. Two developments have reduced the demand for hand thinning to about a third of planted acres.[4] The first is improvements in plant genetics, such as "plant-to-stand" varieties, which allow for lower initial seeding rates, and thereby less need for thinning later. Equally significant is the mechanization of thinning. In a process echoed throughout agriculture, growers are "vertically integrating," replacing the hired hand labor of others with machinery of their own. [5]

Hand weeding is still by far more common than hand thinning, but this practice too is under pressure from more effective pesticides, hardier plant varieties, and better farm management practices. Most market conditions provide strong financial incentives for farmers to minimize yield loss from weeds. In some field situations though, farmers may rightly calculate that the cost of hired labor, exceeds the value of the yield loss from not weeding. The farmer may get fewer sugarbeets, but still earns a higher profit by avoiding the hired labor expense. Equipment and pesticides are also

competing for the migrants' job of enhancing yield, and growers will quickly respond to price differentials, as they do with other changes in input costs.

The declining significance of sugarbeet hand labor was demonstrated last season in Minnesota. Wet field conditions in 1996 delayed sugarbeet planting, and it became common knowledge in the migrant community that there were few sugarbeet jobs in Minnesota.[6] Only half the normal number of migrant families showed up, yet the farm job market remained soft throughout the summer. Some speculated that a labor shortage would develop at harvest, but 1996 saw the second best crop for both yield and sugar content on record.

Sugarbeet processing is a direct extension of sugarbeet farming, and Minnesota sugarbeet growers, operating through cooperatives, add value to their crop production by processing the beets into refined sugar. Migrants play a role in the success of this industry as plant workers, but more importantly as factors in the original crop's success. If not for the high yields attained in part by hand labor, there would be fewer beets to process, and ultimately lower coop earnings. With global demand for sweeteners, including sugar, outpacing supplies, the region's sugar cooperatives are generating record earnings. They are also reinvesting heavily in new plant and equipment. The Minn-Dak Farmers Coop, for instance, spent nearly $32 million on capital improvements last year, and plans to spend another $30 million in 1997.[7]

Producers may be optimistic on the outlook for sugar, but viewing the situation from the level of national sugar policy, the industry appears heavily dependent on a system of international trade quotas and tariffs. These barriers raise the domestic price of sugar to nearly twice the world price. Without this pricing advantage, some Minnesota sugarbeet grower would likely switch to producing more traditional row crops, like corn and soybeans -- sectors where migrants find little or no employment opportunities. This suggests, from a job security standpoint, that migrants and their national political representatives would probably favor maintaining U.S. sugar policy.

Seasonal Cannery Work.

Vegetable canning is also an important industry to the Minnesota economy, and here, too, migrant labor makes a significant contribution. Cannery work begins in late June for green peas, and continues into September with sweet corn -- both last as long as there is product to process. Plants typically run around the clock, making weekend and overtime work common. Workers cut and wash the vegetables, as well as operate the filling machines.

The average cannery worker earned $5.05 an hour in 1994, putting them at the bottom of the Department of Labor's wage and salary survey. Workers can earn pay differentials for second and third shifts, of approximately 15- and 25-cents per hour, respectively. Some plants pay bonuses, as much as $300, for perfect attendance during the packing period. Some workers are also paid bonuses for returning to work the following year. According to the Office of Occupational Employment Statistics there were 2,480 cannery jobs in Minnesota in 1993. The same number of jobs are projected to be available in the year 2001, indicating a stagnant job market.

Given some knowledge about the number of workers and their pay scale, we can estimate their potential total wages. Consider a scenario where packing industry plants operate continuously for 10 weeks, running two 12-hour shifts of 1,240 workers. Gross labor earning would be about $10.8 million, with each worker making $4,370, plus any bonus or wage-in-kind, such as housing. This workforce would earn more than $1 million a week, making the duration of the packing activity a significant factor in worker earnings.

The demand for cannery workers is derived from the success of the crop to be processed, and this may vary considerably from year to year. Minnesota farmers planted 92,900 acres to green peas (for processing) in 1995, and harvested 107,600 tons of product. Planted acres were 10 percent higher than in 1994, but the harvest

was 8 percent lower. Despite a lower yield, the farm value of green peas totaled $32.8 million in 1995, an increase of $2.3 million over 1994. Sweet corn (for processing) was planted on 133,900 acres in 1995, creating a harvest of 671,630 tons. Farmers planted 7 percent fewer acres than in 1994, but ended up with 23 percent less product. The farm value of production fell to $48.4 million in 1995, from $52.8 million the prior year.

Consumer Spending Impacts.

Like year-round residents, migrants need to eat, get around, and have a place to sleep. But their consumption may not match our own individual consumption, and would most surely differ when measured in relation to income.[8] Migrants come to Minnesota primarily to work, not consume, and on average we can expect they will strive to save their earnings, to support themselves and their family members later at home. What spending they do make, could be significantly important for some merchants. The question to examine at the local level, is whether, for any individual merchant, the migrant trade is significant enough to justify hiring a new clerk or to extend the hours of the normal clerk. To the extent this occurs, migrants generate additional economic activity in the areas they visit, common referred to as a multiplier effect.

At the regional level, the migrant trade impact can be measured by analyzing retail sales data. Migrant workers are not evenly dispersed in Minnesota during the crop season, but are drawn to distinct agricultural areas. If migrant trade has an impact on the regional sales economy, we would expect it to occur in these areas. One approach is to compare retail sales in a county with migrants, to a similar county, without migrants. This analysis would consist of examining a seasonally adjusted time series of quarterly data, for differences in third quarter sales (June, July, and August), the most active migrant period. The potential outcome of such an analysis is to state that for each dollar of retail sales in the county, some portion resulted because there were migrant workers in the area. Spread across the counties where migrants work in sugarbeets and canning, this spending could represent a significant sum of money. It is

not reasonable, however, to expect that migrants will spend more in Minnesota than they earn, although from year to year that is not a certainty.

In the end, it is difficult to quantify the consumer impact of migrants. First, little is known about them, or their intrinsic spending patterns. Second, their most basic needs are likely to be non-taxable, such as housing and food. Third, they may conduct a portion of their trade in barter, or some other unrecorded transaction, such as garage sales. To the extent that migrants are eligible for programs like food stamps, these benefits extend their purchasing power beyond wage earnings, and could provide a way for measuring part of their food consumption.

Migrant housing is one consumption issue that deserves special analytical attention. For most households, housing is their largest expense, and this may be true for migrants as well. However, some workers earn their housing as a wage-in-kind, while others stay "free" with relatives. Assessing a cost or value in these situations will add a layer of complexity to any analysis. The lack of adequate housing seems to be adding a hidden cost to everyone's overhead -- migrants are arriving increasingly sooner than needed, to assure themselves and their families decent accommodations. If we accurately knew how many migrant workers and family members traveled to the State, we could assess their housing needs, and compare it to the available housing stock.

Federal Support Assistance

A complete accounting of migrant economic contributions has to include the economic impact of federal spending related to migrant farmworker assistance. Federal programs benefit migrants by providing health, education, and job services, but they also benefit the local economy by paying the salaries of those who deliver migrant services. In 1995, Minnesota received $6.34 million in federal funding for three migrant-specific programs alone. This included $2.77 million for the Department of Labor's

Migrant and Other Seasonally Employed Farmworkers program[9]. This program provides migrant workers with employment assistance, such as job training, placement, and other services. Another $2.40 million from the U.S. Department of Education's *Migrant Education program* went to local school districts to ensure that migratory children had access to educational instruction during the summer months. Finally, the U.S. Department of Health and Human Services' *Migrant Health Centers program* spent $1.17 million on a variety of health related services, primarily through local healthcare providers.

Such programs are directed specifically at migrant populations, but the State also benefits from federal programs designed to assist the poor. The children of migrant workers, for example, may attend Head Start, the program for improving the skills of disadvantaged children. Minnesota received $47.9 million in F.Y.95 for Head Start programs, and $3.25 million of that was spent on migrant education. These funds do not go to the migrants, or to Saint Paul, but go into the host communities to help pay teacher salaries. Some federal support does go directly to migrants -- not because they are migrants, but because they are poor. Food Stamps, which are supported entirely by federal aid, increase the migrants' spending power in the local community. Budget cuts in these program areas do not only have serious implications for the migrants, but carry important consequences for the local economy as well. Minnesota policymakers would benefit greatly from a full assessment of federal migrant related spending, before federal budget reductions occur, and program responsibilities are passed down to the State and local level.

Other Migrant Issues.

There are a variety of other migrant worker issues that are acknowledged here only briefly. Income volatility, for instance, is all the more significant when you are poor. For most U.S. workers the demand for their labor, if not their compensation, is steady year long. It is difficult to quantify the impact that changes in labor demand have on

migrant incomes, but the nature of the market they sell into, suggests that large income swings, even losses, are possible. Another set of questions surrounds the taxes paid by migrants, and the States' potential gain if they do not file returns. Migrant workers, by definition, live somewhere other than Minnesota, and therefore file their federal income taxes elsewhere. In cases where Minnesota taxes are withheld, most migrants would no doubt qualify for a full refund -- provided they submit a Minnesota tax return. The State benefits if they default. The amount of withholding left unclaimed, however, is likely to be small, since migrant worker earnings are relatively low.

No economic discussion of migrant labor can ignore the question of alternatives, or opportunity costs, for both workers and employers. Farm and cannery operators incur labor costs, beyond the total cost of wages. These can include social security taxes, unemployment and worker compensation insurance, plus regulatory costs, such as field showers and toilets, or standards for housing. We do not need to judge the merits of these items, in order to recognize that they show up on financial spreadsheets, and become part of the operator's investment calculus.

Migrant workers, on the other hand, often have little or no economic opportunities in their home areas, and are motivated by this poverty to travel, sometimes long distances, to fill temporary labor demands. They epitomize what is called the secondary labor market, performing low-skill, low-wage jobs for long hours under unpleasant conditions.[10] Despite these drawbacks, workers pursue such jobs with the expectation that, on average, the experience will prove more profitable than having elected to stay at home. If it was not more profitable, on average, workers would stop migrating. Perhaps what is most disturbing about this phenomenon, is how low the threshold appears to be.

Finally, a complete analysis of migrant benefits must incorporate the economic activity generated by migrant support and advocacy groups. Religious and other socially conscious groups provide services to migrants, such as food shelves. Many of

their actions can not be priced, but their impact on the migrants and the local communities, should not be ignored. As a general rule, any activity that exists for the expressed purpose of benefiting migrants, should be added to the study list of migrant economic contributions.

Outlook and Conclusions.

Migrant workers contribute to the economic success of Minnesota's agricultural sector, by providing hand labor at critical times on a temporary or seasonal basis. Their efforts contribute to higher sugarbeet crop yields, and subsequently higher farm incomes. Their labor in the cannery facilitates the economic growth of Minnesota's specialty crop sector. But these workers have competition for their jobs from technology and mechanization. Consolidation in farming and vegetable processing will increase the labor efficiency of these operations. These forces will reduce the demand for seasonal hand labor. Workers in the future will need to perform more complex tasks, and will have to communicate effectively in English. Demand for the latter, is already evident in some sugar processing facilities, where language skills are a job requirement. Migrant education programs, therefore, may not only represent a way up the economic ladder, but could prove a necessity to maintaining migrant employability.

The next step to developing a better understanding of the migrant contribution to Minnesota's economy, will require gathering additional information. A comprehensive assessment is needed of the migrant community's size and demographic characteristics. A baseline of knowledge should be developed about migrant jobs, and the industries that employ them. This information will help policymakers, as well as advocates and service providers. Understanding today's migrant situation, is a pre-requisite to formulating cogent responses to the migrant needs of tomorrow. Regardless of how the federal devolution of social programs proceeds, generating political support for migrant aid will still rely on accurate and compelling empirical evidence.

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