

## Dairy Farm Labor Issues

Philip Martin: [plmartin@ucdavis.edu](mailto:plmartin@ucdavis.edu)

January 29, 2017

1. There has been a slowdown in the arrival of newcomers from rural Mexico, contributing to the aging and settlement of the US hired farm work force, which is comprised mostly of unauthorized Mexicans. Most farm workers live in families that often include US-born children, own or rent homes within 25 miles of the farm where they work, and often commute to work in car or van pools.

Farm work traditionally has been a 10-year job rather than a career. With fewer newcomers, and because the average education level is eighth grade, crop workers are getting older at the rate of almost one year each year; they currently are an average 38, versus a median 42 for all US workers. Crop workers have an average 16 years experience.

Farm employers are responding to fewer unauthorized newcomers with 4-S strategies, viz, satisfy current workers to retain them, stretch them with training, mechanical aids, and management changes that raise productivity, substitute machines for workers or switch to less labor-intensive crops, and supplement the current farm workforce with H-2A guest workers, who are most of the new youthful entrants to the farm work force.

2. Five of the 15 NAICS agricultural codes account for over 90 percent of farm worker wages: fruits and nuts, vegetables and melons, horticultural specialties that include flowers, nursery commodities and mushrooms, dairies, and support activities for crop production (mostly FLCs).

The Big 4 dairy states, CA, WI, NY, and ID, account for almost half of the 9.2 million US dairy cows. Some 7,100 US dairies employed an average 103,000 workers at an average wage of \$615 a week in 2015, according to UI data that cover 86 percent of agricultural employment. California accounted for 17 percent of UI-covered dairy employment, Wisconsin 14 percent, New York 7.5 percent, and Idaho 6.6 percent.

Between 2006 and 2016, the number of UI-covered US dairy establishments rose by nine percent to 7,056, employment rose 31 percent to 103,300, and wages paid rose 71 percent to \$3.3 billion.

There were differences among the Big 4 states. In CA, establishments fell by 25 percent, employment was stable, and UI-covered wages rose by 34 percent. In WI, establishments rose by 58 percent, employment rose by 81 percent, and UI-covered wages rose by 145 percent, suggesting an increase in larger dairies subject to UI. In NY, establishments rose 25 percent, employment rose 42 percent, and total wages were up 88 percent, while in ID there was no change in establishments, but employment rose by 23 percent and total wages by 60 percent.

These data mean that some CA dairies covered by UI went out of business over the past decade, the number of UI-covered dairies rose rapidly in WI and slower in NY, and existing UI-covered dairies got larger and hired more workers in ID. Average weekly wages were \$617 in US dairies in 2015, and ranged from a high of \$675 in CA to a low of \$582 in WI; the increase in nominal weekly wages over the past decade was 30 to 35 percent.

In New Mexico, the number of UI-covered dairy establishments fell 13 percent while dairy employment fell only two percent, suggesting fewer and larger dairies. Compared to the Big 4 dairy states, New Mexico has the lowest average weekly dairy wages, \$570 in 2015, and the slowest growth in dairy wages over the past decade.

For all private sector workers, establishments rose nine percent, employment rose nine percent, wages rose 31 percent, and average weekly wages rose 25 percent, that is, UI-covered dairy employment, total wages, and average weekly wages rose more in dairy, 30 percent, than for all US private sector workers, 25 percent. The average dairy wage of \$617 a week was 61 percent of the average \$1,017 of all private-sector workers.

3. If the immigration status quo persists, most US farm workers of tomorrow are growing up today outside the US. How many foreign workers will be needed in US agriculture, and how will US farm employers gain access to them?

Current workers can be satisfied and retained by improving supervision and training, raising wages and improving benefits, or offering bonuses. Stretching workers means raising their productivity, often with mechanical aids or training. The “low-hanging fruit” on stretching mechanisms may already be in place after five years of fewer newcomers and rising minimum wages.

Substituting machines for workers can be complex, especially if a systems approach that involves major changes in production practices is required of all farmers simultaneously, as when all farmers must switch from delivering milk in cans to storing milk in bulk tanks for pick up. At such critical junctures, smaller producers must decide whether to “get big or get out” of a particular commodity because of the additional investment required. Adopting robotic milking systems is an example of such a critical juncture that could arise from rising labor costs.

Supplementing the dairy workforce with legal guest workers could largely preserve the status quo, albeit with potential differences in worker country of origin, as with the Indians in Italian dairies and Filipinos in NZ dairies. The current H-2A program normally restricts guest worker employment to seasonal farm jobs lasting less than 10 months, with the exception of sheepherding, which permits three-year H-2A visas. Allowing dairies that

offer year-round jobs to employ H-2A workers could shift the focus of recruitment away from Mexico.

### Questions

1. Unlike much of crop ag, where the demand for hired labor has been rising in berries and other commodities even as the supply of new workers shrank, the number of milk cows in the US has been relatively stable at 9.2 million. Does the increase in dairy employment reflect fewer and larger dairies that rely more on hired workers, as in WI and NM?
2. What is an average ratio of cows to workers (reports suggest a 50 to 79 cows per worker, so that a 1,000 cow dairy would have 15 to 20 employees)? What are the risks to producers who expand their herds and rely more on hired workers at a time of low milk prices? Can these dairies attract seasonal farm workers with year-round work and housing on the farm? If labor costs for dairies rise, can higher labor costs be offset with improved productivity or other changes to production practices?
3. Some 165,700 farm jobs were certified to be filled with H-2A workers in FY16, almost three times more than the 59,100 certified in FY06. Jobs filled by H-2A workers must be seasonal, generally lasting for less than 10 months, with an exception for sheepherders who can stay three years. If the H-2A program were changed to allow dairies to employ guest workers for three years, would farm employers ask supervisors and current workers to refer friends and relatives at home who are good workers to fill vacant jobs, or would they encourage current unauthorized to go home and return as H-2A workers? Would current workers want to take the risk of being denied re-entry?
4. If immigration enforcement were increased, there would likely be more audits of the I-9 forms completed by newly hired workers and their employers, and perhaps a requirement to use the E-Verify system to check the legal status of new hires, but employers may not have to use E-Verify to check current employees. How would E-Verify affect dairy employers, that is, how much turnover and new hiring is there?
5. How different is dairy from other ag? The number of H-2A guest workers in sheepherding is small, under 5,000, even the largest sheep employers rarely have more than 10 guest workers, and there is relatively little coming and going of workers. Crop farms, by contrast, may have several thousand H-2A workers, with new arrivals weekly until a peak period of employment. What are likely patterns of guest worker employment on mega- and smaller dairies?

### US Dairy Establishments, Employment, and Wages (NAICS 11212)

	ALL US Private Sector			
	Establishments	Employment	Wages(\$tril)	Average weekly
2006				
2007	8,505,496	112,718,858	4.8	816
2008	8,681,001	114,012,221	5.1	853
2009	8,789,360	113,188,643	5.1	873
2010	8,709,115	106,947,104	4.8	868

2011	8,695,598	106,201,232	4.9	893	
2012	8,775,657	108,184,795	5.2	920	
2013	8,826,016	110,645,869	5.4	946	
2014	8,912,174	112,958,334	5.6	956	
2015	9,067,209	115,568,686	5.9	986	
Change	9,224,336	118,307,717	6.3	1017	
	8%	5%	31%	25%	
	US dairy Establishments	US dairy Employment	US dairy Wages(\$bil)	US dairy Average weekly	Dairy/ALL
2006	6,477	78,618	1.9	473	58%
2007	6,606	82,482	2.1	496	58%
2008	6,708	87,510	2.4	518	59%
2009	6,709	86,161	2.3	521	60%
2010	6,700	87,289	2.4	528	59%
2011	6,733	91,133	2.6	540	59%
2012	6,813	94,327	2.7	554	59%
2013	6,862	95,515	2.8	569	60%
2014	6,882	98,966	3.1	596	60%
2015	7,056	103,294	3.3	617	61%
Change	9%	31%	71%	30%	

	CA dairy Establishments	CA dairy Employment	CA dairy Wages(\$mil)	CA dairy Average weekly	CA dairy share of US Employment
2006	1,578	17,601	474	518	22%
2007	1,550	18,002	510	545	22%
2008	1,504	18,566	549	569	21%
2009	1,441	17,711	531	577	21%
2010	1,395	17,592	535	585	20%
2011	1,350	18,190	565	597	20%
2012	1,307	18,127	571	606	19%
2013	1,244	17,535	566	621	18%
2014	1,202	17,621	590	644	18%
2015	1,187	18,057	634	675	17%
Change	-25%	3%	34%	30%	

	WI dairy Establishments	WI dairy Employment	WI dairy Wages(\$mil)	WI-share of US Employment	WI-Average weekly
2006	692	7,568	169	10%	430
2007	758	8,332	195	10%	451
2008	830	9,353	229	11%	472

2009	874	9,879	242	11%	470
2010	908	10,480	259	12%	475
2011	931	11,052	280	12%	488
2012	979	11,706	311	12%	510
2013	1,008	12,236	337	13%	530
2014	1,012	12,791	372	13%	559
2015	1,092	13,700	414	13%	582

Change 58% 81% 145% 35%

	NY dairy Establishments	NY dairy Employment	NY dairy Wages(\$mil)	NY-share of US Employment	Average weekly
2006	505	5,418	134	6.9%	477
2007	523	5,553	146	6.7%	506
2008	534	5,901	160	6.7%	522
2009	544	6,110	167	7.1%	525
2010	546	6,218	174	7.1%	538
2011	563	6,568	190	7.2%	555
2012	581	6,866	202	7.3%	567
2013	599	7,116	216	7.5%	583
2014	614	7,517	237	7.6%	608
2015	630	7,709	252	7.5%	629

Change 25% 42% 88% 32%

	ID dairy Establishments	ID dairy Employment	ID dairy Wages(\$mil)	ID-share of US Employment	Average weekly
2006	269	5,587	137	7.1%	470
2007	274	5,727	149	6.9%	502
2008	273	6,049	165	6.9%	525
2009	267	5,896	160	6.8%	522
2010	263	5,885	161	6.7%	526
2011	266	6,125	170	6.7%	534
2012	263	6,383	181	6.8%	545
2013	266	6,477	190	6.8%	564
2014	270	6,718	205	6.8%	587
2015	270	6,856	219	6.6%	613

Change 0% 23% 60% 30%

	NM dairy Establishments	NM dairy Employment	NM dairy Wages(\$mil)	NM-share of US Employment	Average weekly
2006	147	4,430	106,456	5.6%	462
2007	145	4,501	113,742	5.5%	486
2008	144	4,626	121,629	5.3%	506

2009	141	4,319	119,198	5.0%	531
2010	146	4,288	119,379	4.9%	535
2011	144	4,238	120,610	4.7%	547
2012	140	4,301	120,258	4.6%	538
2013	130	4,179	114,550	4.4%	527
2014	127	4,105	118,239	4.1%	554
2015	128	4,348	128,596	4.2%	569
Change	-13%	-2%	21%		23%