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LABOR MANAGEMENT IN AGRICULTURE: A CRITICAL MANAGEMENT FUNCTION

By

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Human resources are critical in production agriculture, especially to the extensive operations found in the western United States. Farm and ranch owners, their family members and cooperating neighbors provide substantial labor to agricultural operations. However, hired employees provide most agricultural labor. While agricultural managers and operators readily acknowledge the importance of laborers in day-to-day operations, few have any formal training in the management of these critical resources. Furthermore, the ever-changing landscape of regulation and oversight by Federal and state agencies makes it critical that the resources be managed to comply with relevant standards.

Agricultural Labor Force

The agricultural labor force in the United States consists of more than one million workers. The vast majority of workers were hired directly by farm and ranch operators. The number of total farm workers has been on a steady decline since 1999. Similarly, the number of service workers on farms decreased from 1999 to 2003 with the exception of 2001 (Table 1).

Almost 44 percent (43.86%) of farm workers in July 2003 were hired by western farm and ranch operators (Table 2). California, alone, accounted for one-quarter of all hired farm workers. Western states include Arizona, California, Colorado, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming.

Table 1. Total U.S. Farm and Service Workers for Second Week in July. ¹						
<u>Year</u>	Total Farm Workers	Hired Workers ²	Service Workers on Farms			
	B thousands B					
2003	1,273	953	240			
2002	1,262	966	256			
2001	1,374	1,039	335			
2000	1,377	1,084	293			
1999	1,462	1,143	319			
¹ USDA/NASS, August "Farm Labor" Reports ² Sum of workers hired 150 days or more and 149 days or less.						

Most farm and ranch managers know the importance of labor costs in their operations. Labor is the third largest expense category for farmers and ranchers, exceeded only by purchases of feed and farm services (Table 3). Furthermore, labor costs as a percent of total farm expenditures steadily increased each year of the period 1997 to 2002. Over the same period feed costs decreased and expenditures for farm services increased as percentages of total farm expenditures.

There is a direct correlation between farm size and percent of total farm expenditures dedicated to hired labor. As farm size increases, labor expenses also increase, both in terms of total expenditures and percentage of the total (Table 4). The larger, more labor intensive operations common to California, Oregon and Washington expend a greater percentage of their total costs for hired labor. Work on smaller farms and ranches are typically performed by the operator, family members and non-paid helpers. Additionally, the more extensive type livestock operations found in the mountain states routinely pay a lower percentage of total expenditures for hired labor.

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Table 2. Number of Hired Workers by Selected Region and U.S., July 6 - 12, 2003. ¹					
	Hired Farm	Hired Farm Workers			
	<u>Number (1,000)</u>	Percent			
U.S.	953				
Western States	418	43.86			
Mountain I (Idaho, Montana, Wyoming)	31	3.25			
Mountain II (Colorado, Nevada, Utah)	24	2.52			
Mountain III (Arizona, New Mexico)	18	1.89			
Pacific (Oregon, Washington)	110	11.54			
California (California)	235	24.33			
¹ USDA/NASS, August "Farm Labor" Reports					

Table 3. Top Four Expenditures for Inputs as Percentages of Total Farm Expenditures for all U.S. Farms, 1997 - 2002. ¹							
	1997	1998	1999	2000	2001	2002	
	Percent						
Farm Services	13.5	13.7	14.0	13.4	13.8	14.0	
Feed	14.4	13.7	13.3	12.9	12.7	12.8	
Labor	10.0	10.4	10.7	10.9	11.1	11.2	
Rent	10.1	9.4	8.6	8.5	8.4	8.4	

¹ USDA/NASS, July 2002.

Pay and Performance

The importance of labor to western farms and ranches and competitive pressures from non-farm employers have magnified the need for agricultural employers to operate efficiently, make good use of valuable human resources, and minimize avoidable expenses. The decisions by which people are managed in agriculture affect business results, worker quality of life, commodity prices and quality, and even the social fabric of rural communities. Farmers and ranchers need to understand what motivates their employees in order to get the desired performance from the workers. The relationship between amount of wages paid and operational results on a farm or ranch are not necessarily a given. It is strongly shaped by how compensation is structured and administered.

Many options for employee compensation are available to help motivate desired employee performance. However, compensation should not be thought of solely as a cost, but also as a management tool for influencing the performance of employees on the job. Options are neither equal in their ability to motivate employee performance, nor in their consequences for the people involved. Tax consequences, consequences for employee social security benefits, additional record keeping requirements for the employer and other considerations must be taken into account when designing an

Region, 2000 and 2001.		itures Sp	ent for Hired Labor I	by Farm Size and	
Farm Size (Gross Sales)	2001	2002	Region	2001	2002
	Percent			Per	cent
\$1,000,000 + \$500,000 - \$999,999 \$250,000 - \$499,999 \$100,000 - \$249,999 \$ 50,000 - \$ 99,999 \$ 10,000 - \$ 49,999 \$<10,000	17.77 10.85 9.44 7.72 7.59 6.22 4.23	18.78 10.95 9.59 7.73 6.75 5.99 4.59	Northeastern Lake States Corn Belt Northern Plains Appalachian Southeastern Delta Southern Plains Mountain	13.4 9.0 4.1 4.2 9.1 16.0 6.9 7.6 11.2 26 2	13.8 9.0 4.1 4.2 9.4 16.4 6.9 7.5 12.0
Pacific26.326.61 USDA/NASS, July 2002.22 Northeast: CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT Corn Belt: IL, IN, IA, MO, OH Northern Plains: KS, NE, ND, SD Appalachian: KY, NC, TN, VA, WV Mountain: AZ, CO, ID, MT, NV, NM, UT, WYLake States: MI, MN, WI Southeastern: AL, FL, GA, SC Delta: AR, LA, MS S. Plains: OK, TX Pacific: CA, OR, WA					

Table 4 Percentage of Farm Expenditures Spent for Hired Labor by Farm Size and

employee compensation program. Managers should design a compensation system that results in the desired employee performance.

Cash wages usually make up the majority of an employee's compensation. They represent taxable income to the employee and are a tax-deductible expense to the employer. Cash wages are subject to social security taxes for the employer and the employee alike and are subject to income taxes for the employee. Agricultural producers frequently compensate their employees with benefits in addition to regular wages. Commodities, housing, personal use of business assets, clothing, etc. are all noncash, fringe benefits. Compensating employees with fringe benefits has potential tax advantages for the employer and the employee. Neither the employer nor the employee is obligated to pay social security taxes (FICA) on noncash wages.

Piecework

One way to directly tap employee motivation and to reward performance is "incentive pay." Incentive pay makes an employee's current pay somewhat contingent on production. Paying an employee according to the number of units (cartons, boxes, tons, bags) produced is clearly related to individual performance. As long as employees perform at least well enough to earn the statutory minimum wage, employers paying piece rates have the advantage of reasonable certainty about their unit costs for direct labor.

However, piecework is not without its disadvantages. The rush for quantity, which pays off for employees, can lead to neglect of quality. Piecework may also threaten the status hierarchy within the worker group. Older, more senior-level workers may not be able to work as fast as younger employees. In that case, there may be social pressure on the younger workers to produce below their capacity.

Please see Box 1 for an example of a case study, presented in a new labor resource available to Western agribusiness professionals. While defining the economics of the issue, the case also illustrates the complexities of labor management issues.

Employees may be induced to help achieve production goals by receiving some share of total production. Farm/ranch commodities, when paid as wages, are considered tax-deductible expenses for the employer and income for the employee. Income taxes are paid on the value of the commodities. Neither the employer nor the employee are responsible for paying social security taxes on wages paid in the form of commodities as long as certain conditions are met. Employees should understand that being paid with commodities may help to avoid paying social security taxes, but such compensation may jeopardize disability and retirement benefits to the employee.

Employee use of farm and ranch assets, such as housing, pasture, buildings and vehicles, can be a valuable part of a compensation package. If there is no cost to the employer, the use of business assets is not considered taxable income to the employee. Housing and utilities, given to an employee, must meet specific conditions to be considered a deductible business expense to the employer and not be considered taxable income to the employee. Liability aspects of the personal use of business assets should be discussed and formalized with employees.

Other noncash benefits include medical and life insurance, protective clothing and employee education. Protective clothing may increase employee productivity by reducing work-related accidents. Knowledgeable employees may have greater productivity and fewer work related injuries. Some education may be required under current labor laws, for example, working with pesticides. The cost of these benefits is usually tax deductible to the employer and is not taxable income to employees.

As this case study shows, employers need to carefully analyze the benefits and costs of introducing and/or modifying an incentive pay system. Piecework, output bonus, and sharing plans are better suited to specific work situations. Employers should recognize the problems with changing or not changing employee compensation. Some forms of compensation may benefit the employees but increase costs to management and vice versa. Also, it is important to look at both direct costs, such as increased payroll or reduced product quality, and indirect costs such as employee safety or greater discourse.

A New Resource For Labor Management in Agriculture

A recently written book may be of some help to managers of agricultural labor by providing examples and case studies of how managers have addressed various employment issues. The resource, titled *Ag Help Wanted: Guidelines for Managing Agricultural Labor,* was written by a group of Cooperative Extension specialists from across the west--Arizona, California, Colorado, Washington, Wyoming and British Columbia Canada--and published by the Western Farm Management Extension Committee. The full-color, 242-page handbook is divided into six chapters covering the gamut of labor management issues: Roles and Responsibilities of an Agricultural Employer, Organizational Planning, Staffing the Farm Business, Supervising Agricultural Work, Managing Employee Performance, Communication and Problem Solving.

The book introduction acknowledges just how essential labor is to agricultural production.

"Amidst concerns of competition from domestic and offshore producers, scrutiny of cautious lenders, services for sale from various vendors, tastes and preferences of discriminating consumers, and requirements of voluminous laws, farmers and ranchers are running businesses. Virtually all of them need to procure and manage labor. Of course, other resources--land, plants, animals, water, machinery, tools, and chemicals--are also important, but without the abilities and efforts of people in the industry, agriculture would not yield food or fiber."

Box 1. "Pruning Pay For Piece Rate or Hours?"

Ray Thompson runs the 1,100-acre farm that accounts for all of Multi Farms' wine grape production. He has a year-round staff of about 70, who have been joined in recent years by up to 20 seasonal employees during pruning and harvest times. The need for seasonal employees during harvest has declined in recent years with increased use of harvesting machines. In late fall, shortly before pruning was scheduled to get underway, Ray was approached by several of the regular employees who asked to be put on a piece rate system for the pruning season. They had learned that workers at two nearby vineyards, one of which operates under a union contract, had averaged more that \$10 per hour on a piece rate system the previous year, and they wanted the opportunity to make as much.

While the employees who approached him were good workers and did not represent any fringe element of the work force, a few of the older employees had usually be the ones to bring such matters of general concern to him. Ray wanted to see how strong the sentiment for piece rate pruning really was. Over the next couple of days he spoke with a large majority of the employees in various parts of the vineyard. He learned that most (at least 75 percent) of the men indeed preferred a piece rate system to the straight \$7.80 per hour (up from \$7.50 the previous year) that they were scheduled to receive. The others, mostly older employees with many years of service on the farm, seemed to prefer an hourly rate but said that they would go along with what the majority wanted.

Ray had long taken pride in the harmonious employee relations in his operation. His employees had never sought representation by a union, and he had no fundamental objection to piece rate pay. In fact, the vineyard normally put employees on a piece rate for hand harvesting some of the grape varieties. Ray wanted to be fair to all employees while not over-running his pruning budget or making any changes that he would later regret.

The word "guidelines" in the title refers to the many practical illustrations, descriptions of managers' experience, research-based principles and analytical concepts included. Examples throughout the book illustrate management concepts, suggest ways for avoiding or dealing with common problems and provide points of comparison for readers reviewing their own operations and practices. A separate section of "Ideas in Practice" tells the stories of several farm and ranch employers that have improved operational results, reduced risks, or both through better labor management.

In addition, the text includes innumerable references to various agencies and resources available on the World Wide Web to assist the agricultural manager. These references and accompanying links are housed in the companion web site http://www.AgHelpWanted.org. These web pages go beyond simply supporting the text. They provide links for direct access to various Federal agencies, western state departments of labor and associated regulations and a host of other links to commodity organizations, educational resources and professional associations. This site is organized to make the one-stop resource for agricultural labor management information a quick reference and easy to use.

The book is also available on a CD ROM for portability. The CD-version allows the user to search for key phrases or words within each chapter, using this native feature of the free reader program Adobe Acrobat. A second CD supplements material discussed in Chapter 6 with nine sets of brief vignettes that illustrate approaches to one-on-one communication in problem situations. Each set includes one scene showing an apparent personnel problem and three scenes showing different supervisory responses to it. These videos help the manager to consider which management response may be best in a given situation.

Summary

In spite of strides to improve and increase technologies in agricultural and horticultural production, the success of individual producers still relies heavily on the productivity of their human resources. Effective management of employees translates directly into dollar returns. The management of human resources in agriculture is complex and offers some unique aspects when compared to human resource management in other industries. Furthermore, this responsibility is often assumed by people with little formal training.

Ag Help Wanted: Guidelines for Managing Agricultural Labor is a recently published book for the proactive agricultural manager addressing the waterfront of agricultural labor management issues. The companion website at AgHelpWanted.org provides references to many online resources, as well as access to book content, problem work situation videos and industry links. While Ag Help Wanted may not make the task of managing agricultural laborers easier, it can boost the reader's confidence in understanding the issues and options available.

References

- Rosenberg, H.R., R. Carkner, J.P. Hewlett, L. Owen, T. Teegerstrom, J.E. Tranel, and R.R. Weigel. *Ag Help Wanted: Guidelines for Managing Agricultural Labor*. Western Farm Management Extension Committee, 2002.
- United States Department of Labor. "Minimum Length of Meal Period Required Under State Law For Adult Employees in Private Sector - January 1, 2003," Employment Standards Administration Wage and Hour Division, available online at <u>http://www.dol.gov/esa/programs/whd/state/meal.htm</u>.
- United States Department of Labor. "Minimum Paid Rest Period Requirements Under State Law for Adult Employees in Private Sector January 1, 2003," Employment Standards Administration Wage and Hour Division, available online at <u>http://www.dol.gov/esa/programs/whd/state/rest.htm</u>.
- United States Department of Agriculture, National Agricultural Statistics Service. "Farm Labor," August 2002. Available on line at <u>http://www.usda.gov/nass</u>.
- United States Department of Agriculture, National Agricultural Statistics Service. "Farm Production Expenditures, 2001 Summary," July 2002. Available on line at http://www.usda.gov/nass.
- United States Environmental Protection Agency. "Pesticides: Health and Safety, Worker Protection Standard," available online at http://www.epa.gov/pesticides/safety/workers/workers.htm.