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Human Resource Management Risks: Sources and Control Strategies Based on Dairy Farmer Focus Groups

Vera Bitsch, Getachew Abate Kassa, Stephen B. Harsh, and Amin W. Mugera

Human resource management in agriculture and associated risks are under-researched topics. To identify the sources of human resource management risks confronting dairy farms, gain insights into how dairy farmers perceive the impacts of these risks, and identify control strategies, four focus group discussions were held with dairy farm managers. Managers' perceptions served to develop a framework for the analysis of human resource management risks in agriculture and derive recommendations for reducing these risks. Results of this study have been used to tailor educational programs for farmers and suggest strategies for future research.

Key Words: focus group discussion, labor management, personnel management, qualitative research, risk management, risk perception

JEL Classifications: B49, M12, M50, M52, M53, M54, M59, Q12, Q19

The role and impact of human resource management (HRM) practices, strategies, and policies have been widely researched in businesses and organizations, mostly in large entities (Heneman and Tansky). Researchers have developed and applied different HRM frameworks and models to analyze and evaluate the effect of HRM practices on firm performance (for empirical examples, see Arthur; Becker and Gerhardt; for a conceptual example, see Delery and Doty). A common assumption of these approaches is the existence of a relationship between HRM practices and firm performance.

With rapidly changing economic conditions, characterized by increasing competition, market deregulation, and globalization, and growing farm sizes with greater numbers of hired employees (for the dairy industry, see Hadley, Harsh, and Wolf; Tauer and Mishra), HRM is increasingly viewed as a means for agricultural firms to become more efficient and competitive. Although HRM is not new as a research topic in agriculture, few studies have been conducted on HRM practices and strategies of agribusinesses and farms. HRM-related programs in agriculture have mainly focused on farmer education, including providing information on training, management, and related legal and policy issues. Knowledge

Vera Bitsch is assistant professor, Getachew Abate Kassa is visiting assistant professor, Stephen B. Harsh is professor, and Amin W. Mugera was a graduate student in the Department of Agricultural Economics, Michigan State University, East Lansing, MI.

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regarding the specific HRM challenges farms are currently facing, and even their specific HRM practices and strategies, is limited.

One area that demands research is the risk associated with HRM practices. According to Bitsch and Harsh, the agricultural economics literature treats HRM risks as one of the five major sources of risk: (1) production and yield risk; (2) price and market risk; (3) financial risk; (4) human resource risk; and (5) institutional, legal, and environmental risk. Most risk studies in agriculture have dealt with production, market, and financial risks. In June 2004, the national agricultural risk education library (www.agrisk.umn.edu/library) listed 386 documents on production risk, 487 documents on price risk, 459 documents on financial risk, 288 documents on legal risk, and 214 documents on human risk. The category human risk included documents on safety (115), family issues (33), and health (32). Only 57 documents addressed personnel management, which is understood as HRM in the management literature. One of the documents listed described focus group discussions in Texas and Kansas during which farmers, other agribusiness firms, and lenders ranked risk sources on farms. Availability of skilled labor was one of the top 10 risks farmers faced (Texas and Kansas Risk Management Education Teams).

Addressing risk management for businesses in general, Jeynes listed a number of risk factors associated with HRM practices, such as employee skills and expertise for current or future work, supervision and management of workers, work group organization, training, organizational culture, careers and development (motivation, commitment), and legislative factors. Aside from a recent study by Bitsch and Harsh of horticultural managers' labor risk perceptions, risks that result from these factors have not been studied in agriculture.

Two approaches to structuring agricultural labor risks have been suggested. The first approach, introduced by Rosenberg, is outcome oriented, focusing on the outcomes of labor risks (tasks not or inadequately completed, high indirect labor expenses, conflict with employees, fines and penalties for violations of laws and regulations, cost of proving compliance). The second approach introduced by Baquet, Hambleton, and Jose models labor risk along the HRM process (job analysis and description, hiring, orientation and training, employer/employee interaction, performance appraisal, compensation, discipline). Bitsch and Harsh showed that horticultural managers frame their HRM risks along the management process as introduced by Baquet, Hambleton, and Jose. Based on managers' perceptions, Bitsch and Harsh suggested the following categories: (1) recruitment and selection, (2) training and development, (3) performance evaluation and discipline, (4) careers and relationships, (5) compensation packages, (6) immigrant employees, and (7) labor laws and regulations.

This study seeks to replicate Bitsch and Harsh's study in animal agriculture. Because both are agricultural industries, horticulture and animal agriculture are expected to be similar in many of their labor-related risks but also to differ, because of the higher degree of seasonal employment in horticulture. Contrasting both studies should provide additional insights into agricultural HRM risks. Dairy farmers were selected as a suitable subgroup of animal agriculture because the industry is facing a process of rapid consolidation and nationwide dairy farms spent about $2.4 billion on hired and contract labor (U.S. Department of Agriculture), which makes labor an essential input of dairy farming.

Identifying and structuring HRM practices and related risks in animal agriculture are important to help frame questions and provide empirical grounding for future in-depth research of agricultural HRM. Analyzing farmers' perceptions will enable educators to better tailor programs to farmers' needs and attract program participants. Furthermore, specific insights into HRM practices of dairy farms will serve to support farmers, particularly during consolidation processes, in developing and implementing effective HRM management systems that will improve their ability to control labor-related losses and increase performance. Accordingly, the study addresses the following objectives: (1) identify and analyze dairy

farmers' HRM risk perceptions, (2) identify their strategies to manage HRM risks, and (3) further develop and refine the HRM risk categories proposed by Bitsch and Harsh for HRM risk studies to guide educational endeavors in agriculture through (1) exploring the applicability of their categories to HRM risks in animal agriculture, (2) comparing and contrasting horticultural managers' and dairy farmers' risk perceptions, and (3) suggesting a framework to conceptualize the interaction of the sources of risks (inadequate HRM practices) and the farm level risk outcomes.

Methodology

The empirical study was conducted June through August 2002 in Michigan, where agriculture is one of the three largest income-producing sectors along with manufacturing and tourism. Dairy production contributes about a quarter of the overall agricultural revenue. With almost 6,000,000 lbs. of milk in 2002, Michigan ranked eighth in the United States and milk was the state's leading agricultural commodity in cash receipts (MASS).

Considering the paucity of empirical studies addressing HRM risks in agriculture, an exploratory research method was deemed appropriate to identify farmers' perceptions of these risks. Methods suggested in the social sciences for studying similar research topics are participant observation, in-depth interview, and focus group discussion. For this study, focus group discussion was deemed the appropriate tool. Ethnographic research using participant observation is appropriate for exploring broad cultural issues. Focus groups are better suited for gathering information on attitudes and experiences around a specific topic. In-depth interviews yield greater detail on individual decisions and perspectives. Focus groups allow involving more respondents in a shorter time. Focus groups are particularly useful in exploratory, formative, and process evaluation research; in generating and formulating hypotheses; and in exploring beliefs, experiences, opinions, understandings, values, and concerns of research participants on their own terms and in their own vocabularies (Krueger and Casey; Kitzinger and Barbour; Millward).

Although focus groups are a useful research tool in different situations, they also have limitations. When statistical data are needed to allow generalization of results to a larger population, focus groups are inadequate because participants are typically not randomly selected, the number of participants is relatively small, and participants' responses are not independent of each other. Many researchers employing focus groups avoid the presentation of numbers in reports to avert the misunderstanding that these data represent a larger population (Asbury; Krueger; Morgan 1998).

The purpose of focus groups normally defies random selection of participants in favor of purposive sampling, that is, selecting participants with a personal interest in the research question and/or based on theoretical considerations (Morgan 1997). The objective of the sampling strategy is to gain insights and in-depth knowledge by facilitating a productive discussion in the groups. For this study, dairy farmers or farm managers were invited to the meetings by regional extension educators.

This study follows the focus group procedures outlined by Bitsch and Harsh. After the first focus group discussion, which included nine dairy managers, the moderator pointed out that the discussions were not as broad and open as expected. Because the degree of participation fostered is inversely related to group size, later meetings were reduced in size. The average group size was 5.5 participants. Four focus groups were convened in different production regions. A moderator and an assistant moderator facilitated each discussion. Three of the four discussions included an additional researcher as observer. Discussions lasted on average 2 hours.

All focus group discussions were tape recorded, and additional notes were taken by the assistant moderator and/or observer. After each discussion, participants were asked to fill out a one-page questionnaire, providing herd sizes, manager characteristics, and experience levels. Analysis of the focus group discussions

was based on the transcripts and observation notes, as suggested by Krueger. Careful documentation and structured analysis of focus group discussions are paramount to reduce potential bias. Similar to other qualitative research approaches, analysis procedures are set up to ensure credibility (internal validity) and confirmability (objectivity) (for a detailed discussion of evaluation criteria for qualitative research, see Bitsch). After the initial debriefing with the moderator, the assistant moderator and the observer coded the transcripts in several steps, as described by Bitsch and Harsh. Coding was reviewed by and details were discussed with an outside researcher not previously involved in the project. Eventually, with input from the moderator, this process was followed by the aggregation of results across groups by the outside researcher and the principal investigator, who was also the assistant moderator of three of the four discussions.

Across focus groups, the data were aggregated using "group-to-group validation" (Morgan 1997, p. 63). In this process, researchers compare themes discussed in each group to all other groups. Although topics discussed by only one group can serve as examples to illustrate a labor-related risk, a theme needs to come up in two or more groups to prevail. In addition to the number of groups, in which a theme was discussed, intensity of discussion and number of participants involved also play a role. However, decisions are based on researchers' discussions, consensus, and judgment, not on a formula.

Results and Discussion

The operations represented at the focus group meetings were predominantly family businesses. Several farms were organized as partnerships between family members; some of the largest operations had evolved into family corporations. The majority of the 22 focus group participants were male. Their ages ranged from the late 20s to the mid 60s. More than three-quarters of the participants were owners or co-owners of their operation; the rest were hired managers. The average focus group participant had held the current position for 18 years (minimum 6 years, maximum 40 years). Of 19 dairy managers who completed the questionnaire, 47% had a high school diploma or less, 32% took some college courses, and 21% had a college degree or studied for an advanced degree. Compared with horticultural managers who participated in the Bitsch and Harsh study, dairy participants were less educated and more likely to be owners or co-owners.

The group meetings brought together a broad cross-section of the dairy industry, ranging from less than $400,000 to more than $10 million in annual milk sales. The largest farm in the group employed 55 people who took care of 5,000 cows. The smallest farm milked 125 cows and employed four people, but none full time except for the owner. Meeting participants employed a diverse workforce: full time and part time, adults and youth, male and female, and different ethnicities. The supply of local labor had decreased over the last decade, and the share of Hispanic employees had increased during the same period.

Sources of HRM-Related Risks

This section discusses the sources of HRM risks based on dairy farmers' perceptions. These perceptions are filtered through the researchers' concept of what sources of risks are and what outcomes are. In addition, dairy farmers' perceptions are contrasted with horticultural managers' perceptions (risk-increasing attributes) described by Bitsch and Harsh.

Along with a number of details within categories, the following categories showed major differences between dairy farmers and horticultural managers: (1) labor laws and regulations were not perceived as a major risk source by dairy farmers; (2) discipline was put in a separate category, because dairy farmers were more concerned about discipline issues than were horticultural managers; and (3) the career and relationships category (working conditions and relationships at the workplace) differed considerably, primarily reflecting a greater likelihood of work-related conflicts on dairy farms and less seasonality-related prob-

Recruitment and selection

- Lack of experienced workforce (3)
- Declining interest to work on farms (4)
- Better wages, benefits of competitors (4)
- Strong within industry competition (3)
- Managers' lack of skills in recruiting and selection (4)
- Managers not investing time (2)

Training and development

- Managers not involved in training (3)
- Employees quit after training (2)

Performance evaluation

- Lack of evaluation procedures (4)
- Wage expectations after evaluations (4)

Discipline

- Lack of discipline process (4)
- Employees disregard sanitation, safety regulations (3)
- Employees inept with procedures (3)
- Managers not willing to terminate (3)

Working conditions and relationships

- Long hours in the milk parlor (2)
- Teaming "difficult" employees (3)
- Managers lack skills in dealing with conflicts (4)
- Employees' workplace network (2)

Compensation

- Reliable information on farm wages not available (3)
- Employees require incentives to follow operating procedures (2)
- Setting adequate incentives difficult (2)
- Costs of benefits to retain employees (4)
- Lack of adequate benefit policies (2)

Immigrant employees

- Language barrier for communication (3)
- Ineffective translation (2)
- Achievements remain unrecognized (2)
- Leave job without notification (2)
- Managers lack cultural knowledge (3)

Figure 1. Managers' Perception of HRM Risk Sources on Dairy Farms (Numbers in Parentheses Indicate How Many Groups Discussed a Particular Risk Source)

lems. On the other hand, the seasonality of work in horticulture seems to contribute to avoiding some discipline problems because outside of peak season, problem employees would be "laid off" for lack of work and then not rehired for the next season.

Figure 1 summarizes risk sources related to HRM practices as perceived by dairy focus group participants. The number of focus groups that discussed a particular risk source is provided to give a sense of the homogeneity of the group discussions. Topics discussed by only one group are not included in the figure.

Recruitment and Selection

Similar to horticulture, the hiring process was perceived as a major source of risk in the HRM process. Dairy farmers saw local labor markets as not adequately supplying them with a suitable workforce. In one manager's words, job seekers are often "unemployable." Declining interest in farm work created difficulties in attracting a long-term workforce. Farmers assumed that motivated workers received better wages and benefits elsewhere in the economy. They also perceived competition

regarding skilled workers within the industry and blamed an informal employee network for employees' moving from farm to farm.

Hiring occurred through employee referrals, word of mouth in the community, and walk-ins. In rare cases, advertising was used to recruit employees for supervisory or specialized positions (e.g., truck drivers). During periods of high unemployment, a drawback of advertising was the large number of resulting applications that managers found difficult and time consuming to handle. Many managers expressed their lack of skills in recruitment and selection. Although they took different factors into consideration, including an applicant's background, prior work experience, and perceived attitude toward the job, managers were often not willing to commit adequate time to selecting employees. Inadequacies in the process may have led to the hiring of unsuitable employees. A few managers indicated that they disliked the hiring process. As one manager put it, "If they make it to the door, you will hire them, because you need somebody to milk today."

Training and Development

Ideally, training ensures work processes and quality that meet the expected norm. Although most participants understood that training and development was an important determinant of their farm's performance, they often preferred to delegate the training responsibility to herdsmen and co-workers of the new hire. Working alongside experienced employees before being allowed to perform tasks alone was a common form of training. However, participants also reported problems when co-workers did the training. In some cases, employees did not like to train or, concerned about their own jobs, they trained inadequately in hopes of making their own performance appear better.

Some managers believed in constant training while others did not see this need. Part of the disagreement revolved around attitudes and personality factors that some managers saw as the underlying causes of performance and believed could not be addressed by training. Other managers did not focus on training due to lack of time. In addition, some participants were concerned employees would quit after being trained. Horticultural managers perceived training in a similar way, but were less aware of potential problems when co-workers were responsible for the training.

Performance Evaluation

Similar to horticultural managers, most of the participating farmers did not conduct regular performance evaluations and lacked formal evaluation procedures and knowledge about methods. Several focus group participants understood evaluations as a way to terminate employment; others mentioned that their employees were offended by the evaluation process. One farmer described an employee as working more than himself and, therefore, not needing an evaluation. Others pointed out that employees expected wage adjustments after each positive evaluation.

Discipline

Similar to horticulture, few of the focus group participants used a formal discipline process, which would include documentation. Because Michigan is an at-will employment state (i.e., employment can be terminated with or without cause by either employee or employer at any time), farmers typically assumed that they did not need a formal process. Several focus group participants mentioned difficulties with tardiness and absenteeism. Some have accepted tardiness and absenteeism as normal rather than as behaviors warranting disciplinary action.

Employees not following sanitation procedures and safety regulations were additional sources of risk. Some employees violated rules by bringing family members, acquaintances, or even pets into areas that were not open to visitors or were sensitive to contamination. Additional problems included incomplete safety procedures and the difficulty of staying current on changing regulations.

Although several managers were concerned about employees' not following operating procedures, extensive efforts were made in de-

veloping an employee before he or she was discharged because of substandard performance. Employees not following procedures were more of a problem on dairy farms than in horticulture. Some managers did not perceive termination as a viable alternative. Cows need to be milked, and termination of an employee would leave a void. The termination process was perceived as painful. One farmer reported trying to create a "good mood" before letting an employee go for fear of damages that may have been inflicted due to the employee's being disgruntled.

Working Conditions and Relationships at the Workplace

Many farms required their milkers to work long shifts in the parlor, which led to low job satisfaction and increased the turnover risk. Employees who did not work well together were another source of risk. Assigning a "difficult" employee to a team was perceived as a challenge. Managing workplace conflicts was also a challenge for many managers who avoided dealing with conflicts, which often resulted in problems' becoming more severe.

A couple of managers reported problems retaining employees, particularly Hispanic employees, unless they were willing to hire family members. A drawback managers saw with this practice was the risk of employees' quitting in groups. Also, they could not keep individuals with superior performance and terminate family members or friends with weak performance. Some managers saw a potential for employees to demand higher wages or other benefits. The associated risk of high turnover and, in extreme cases, interruption of operations until replacements were found had prevented some managers from hiring relatives of employees. This latter risk source had also been discussed by horticultural managers.

Compensation

With respect to wages, participating dairy farmers compared themselves to farmers in other states and thought they paid on a competitive level. More so than horticultural managers, they perceived a lack of reliable information on farm wages, particularly within their region, and were not sure whether their wage and benefit systems were appropriate.

A number of managers complained that employees needed "incentives" to follow operating procedures. Some employees needed a bonus to do their job as expected, whereas others did the job exactly as requested. Although most managers thought that incentives helped motivate employees, another problem was setting up the incentive system and communicating it to employees. For incentives to work, rules had to be communicated clearly, and with immigrant employees, the language barrier led to misunderstandings, leaving the impression they did not receive a promised bonus.

Benefit provision and management (e.g., paid vacation, health insurance, housing) was a convoluted issue among dairy farmers. Although some farmers would prefer to provide no benefits, they felt forced by the industry and outside competition to offer competitive benefits. Participants indicated that rising costs of benefits hurt their businesses; therefore, some managers introduced or increased copayments.

An underlying issue behind farmers' struggles in dealing with benefits seemed to be the lack of benefit policies, rules, and procedures defining benefits eligibility and exceptions. For example, a farmer providing paid vacation did not have a rule to prevent employees from accumulating these over years and then had to confront the situation of an employee's asking for a payout that the farmer could not afford. Another farmer had employees leave after receiving their vacation payments and only afterwards thought about provisions to prevent this. Of the few managers who provided benefits unusual for dairy farms (e.g., sick leave), most complained about employees' abusing these. Horticultural managers perceived fewer problems with benefit provision, except for increasing health care costs.

Some participants had another problem with their benefits: employees who did not understand the system or recognize that they were receiving these benefits. Therefore, in-

stead of offering benefits, some managers increased wages to cover employees' health insurance or retirement plans. However, they were concerned that employees would later expect the higher wages and simultaneously ask for benefits, jeopardizing the affordability of this approach.

In addition to their regular compensation, employees also expected support with personal issues, such as using a farm-owned truck for moving or other necessities. If this was denied, employees became disappointed and less motivated.

Immigrant Employees

Although workforce composition is a factor in most management decisions, it is included as a separate factor because the decision to work with immigrant employees resulted in specific challenges and risks. Language was mentioned as the major barrier for communication with newly immigrated employees and a challenge for management. Some managers used bilingual employees while others used outside individuals, such as consultants or language centers for translation. A majority of managers were worried about incomplete translation or had experienced translation errors in the past. They also feared that the language factor had resulted in employees' not being acknowledged for their achievements, preventing them from receiving positive evaluations or wage increases. Except for this last issue, horticultural managers perceived similar risks and challenges with immigrant employees.

The language barrier had caused teamwork problems between American and newly immigrated employees. Managers indicated that Hispanic employees (most of the newly immigrated employees are of Hispanic descent) worked well with their friends or relatives but were difficult to team with other employees. Another drawback of hiring newly immigrated employees was the risk of them leaving jobs unexpectedly and without notice for a variety of reasons (e.g., fear of deportation, family emergency).

In general, managers indicated that they needed to learn more about the culture and traditions of their Hispanic employees in order to improve management and relationships at work. For example, some managers said that even when offered a higher wage, Hispanic employees were not necessarily interested in a promotion. Managers tried to adapt their management practices to cultural expectations. Some felt that assigning a young individual to supervise older employees would be interpreted as a sign of disrespect and, therefore, avoided this situation. As a result, younger employees could not realize their potential and might explore alternative employment opportunities. In addition, managers mentioned problems in evaluating employment documents. Because the numbers of immigrant employees on farms were growing, employers had concerns about future changes in labor laws and regulations that might impede their access to this workforce.

A HRM Risk Framework for Dairy Farms

In analyzing the focus group discussions with dairy farmers and discussing the results of this and other studies with extension educators, the authors found that there is considerable confusion concerning the nature of HRM risks on farms. In particular, there seems to be no differentiation between sources of risks and risk outcomes. An unstructured conceptualization of agricultural HRM risks hampers risk management education and the application of risk mitigation strategies. For example, turnover is often perceived as a source of risk by farmers and the extension educators who work with them. As a result, they seek to reduce turnover (e.g., by not terminating a problem employee). However, the root cause of the risk is that the farmer is not using adequate HRM practices to address the problem behavior and correct it or eventually terminate the employee. This remedy could also increase other employees' morale and productivity and is likely to eventually decrease turnover.

Figure 2 was developed to provide an overview of the HRM risk structure on farms and to differentiate between sources and outcomes. Although a specific HRM practice may lead to a risk outcome, typically practices act as

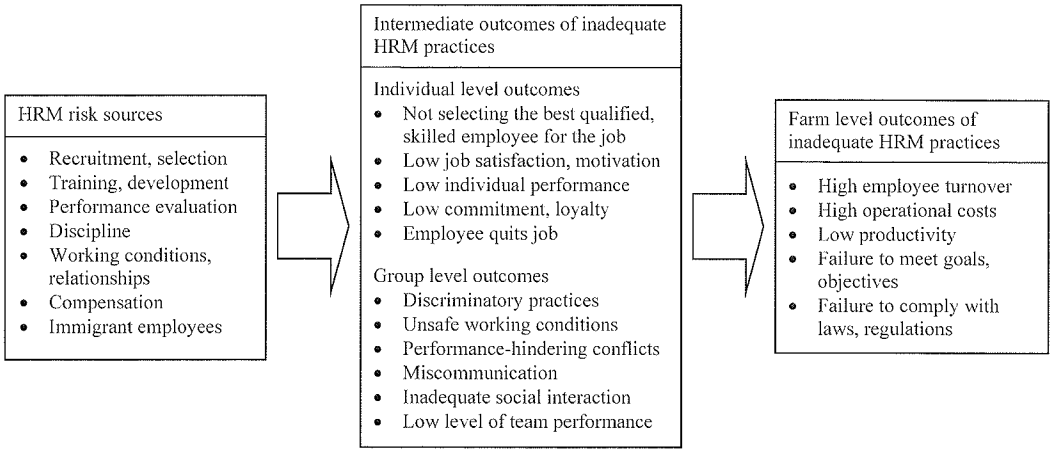

Figure 2. HRM Risk Structure on Dairy Farms

bundles in causing outcomes (Mugera and Bitsch). Therefore, inadequate HRM practices interact with each other on the risk source level and lead to a variety of undesired risk outcomes on an individual and group level. These intermediate outcomes interact further, causing farm level risk outcomes, such as high employee turnover, high operational costs, low productivity, failure to meet farm goals and objectives, and failure to comply with laws and regulations. This process is illustrated with several examples below.

Dairy farmers appeared to venture into the hiring process without prior preparation, and they were unwilling or unable to invest sufficient time to determine selection criteria. Due to the lack of adequate procedures for employee selection, the risk of hiring individuals without the required qualifications and skills emerged. In addition, formal evaluation of training was done rarely. Selection problems interact with inadequate training procedures, resulting in low individual performance, low employee commitment and loyalty, unsafe working conditions, and low level of team performance (causing a decrease in job satisfaction and motivation of other employees) and eventually increasing turnover risk, decreasing work quality and productivity, and resulting in a failure to meet farm goals.

Another example of risk sources causing farm-level risk outcomes was hiring immigrant employees with limited English proficiency in combination with a lack of training evaluation. Two potential problems arose from this situation: (1) inadequate training with the consequences outlined above and (2) reduced development and career opportunities for this group of employees. Both result in productivity losses and dissatisfied employees who feel discriminated against. Additional risks were the failure to comply with civil rights legislation and potential lawsuits and related costs.

More obvious sources of risk were employees' disregard of safety rules or sanitation procedures. Results were unsafe working conditions, lost time, added costs when accidents occurred, higher costs due to infected cows, and lower productivity due to low milk quality. In addition, failure to comply with Occupational Safety and Health Administration regulations could result in fines and penalties.

HRM Risk Control Strategies on Dairy Farms

Participating dairy farmers followed different strategies to mitigate HRM risks. They used these strategies to reduce the possibility of hiring and retaining unqualified or ineffective employees. Some farmers who applied these strategies did this without specific goals in mind. The following sections describe HRM

risk control strategies of the participating farmers.

Hiring Strategies

Farmers considered using current employees to provide referrals and word of mouth in the community as the most successful recruitment methods. Referrals seemed to work particularly well for Hispanic employees. In general, employees tended to recommend dependable and hard-working applicants, because they risked damaging their reputation by bringing in a below-average employee. These new employees were likely to learn job duties and responsibilities without farmers' investing much in training because of the relationships with the recommending employees. Integration with the existing workforce was less difficult. and there was already a basis for efficient teamwork. These new employees typically did not have interpersonal or communication problems and participated in social activities that strengthened the work climate. In addition, both approaches were less expensive than were other hiring practices.

Performance Management

Although formal performance evaluations were rare, some farmers used two informal approaches. First, peer pressure was used to coerce below-average employees to either improve their performance or quit. Co-workers and managers set expectations. Employees who failed to meet these expectations either left on their own terms or were asked by their peers to look for employment elsewhere. Again, this seemed to work particularly well with Hispanic employees. Second, most farmers considered day-to-day feedback as an effective informal evaluation. They used feedback to quickly overcome workplace problems and address performance that was below expectations. Some farmers, rather than evaluating employees, discussed business goals and achievements in general meetings to increase two-way communication.

Family-Oriented Culture

One surprising result of this study was participants' attitude towards related employees. Some farmers gave priority to individuals who already had relatives or friends on the farm. They hired these employees because they perceived family ties as ensuring stability of employment. Other farmers took the opposite stance. They were concerned that related employees might agree to demand a raise or quit the job simultaneously. Participants who had such an experience did not hire related employees to avoid the risk of business interruption and reduce their employees' negotiation power.

Compensation Strategies

To prevent dissatisfaction of employees, reduce loss of employees to neighboring farms, and avoid escalating wages, some farmers required employees not to talk about their wages to co-workers or outsiders. They insisted at least in the short term, that this approach kept employees on the farm. For those employees who were willing to work long shifts or extra hours, farmers tried to offer more hours than their competitors outside of agriculture. They thought allowing extra hours and the additional pay would retain the immigrant workforce. Bonuses, in cash or in kind, were also offered by many farmers.

Participants used different benefit strategies to retain employees. Some farmers provided housing. Others helped employees searching for rental homes (e.g., filling in application forms, paying the deposit or rent in the first months). Some farmers contributed to employees' retirement accounts. Paid vacation was a relatively common practice, although provisions varied depending on years of service. Some farmers had flexible benefit provisions to meet individual employees' needs (e.g., cash payments instead of health insurance coverage). Most participants believed that occasional get togethers, meals, personal gifts, and participation in employees' family celebrations led to satisfied and motivated employees. Providing these additional cash and

noncash benefits was seen as a risk-reducing strategy.

Immigrant Hispanic Employees

Participants described their immigrant Hispanic employees as loyal, respectful, and hard working and also as employees who were satisfied with what they earned and had few or no complaints. In addition, farmers believed that Hispanic employees monitored each other and trained and mentored newcomers of their social network.

Three additional perceptions among participants reinforced the hiring and retaining of immigrant employees. First, farmers thought these employees were not desirable for competitors outside of agriculture. Therefore, hiring them was seen as a strategy to create a stable, long-term workforce. Second, farmers perceived that the decline in the availability of local labor was balanced by the immigrant workforce. Third, in some cases, hiring this group served as a "wake-up call" for local employees. The availability of the immigrant workforce and their readiness to work long hours and accept jobs rejected by others not only challenged the negotiating position of the local labor but also enabled managers to reduce turnover, thereby decreasing hiring and training costs.

Networking with Neighboring Farms

Another strategy discussed during the focus group meetings was networking with neighboring farms and exchanging information about employees (1) as a source of information on job applicants who had previously worked in the region and (2) to minimize the mobility of employees from one farm to another within the same area. Farmers in some areas had established an informal agreement not to hire individuals who sought alternative employment nearby, unless approved by their current employer.

Conclusions and Recommendations

HRM-related risks have long been neglected in agricultural economics research, which is why little research-based guidance is available for management decisions in this area. This study is the second research project to explore agricultural managers' HRM risk perceptions and risk-mitigating strategies with focus group discussions. The first project analyzed horticultural managers' perceptions in terms of risk-increasing and risk-reducing attributes (Bitsch and Harsh). This project analyzes dairy farmers' perceptions and strategies as an example of HRM risks in animal agriculture. Replicating their approach has contributed to the credibility of both studies. Because the results of both studies show the expected differences caused by less seasonality of work, they also are more likely to be transferable to other agricultural industries.

In addition to adding to the knowledge of agricultural managers' risk perceptions and the strategies managers use to reduce risks, results of this study contribute to the body of knowledge in the following ways: (1) showing research needs, further developing a conceptual framework, and providing empirical details as a basis of future research; (2) suggesting a conceptual framework to guide educational efforts addressing HRM risks in agriculture and to tailor educational programs to managers' needs; (3) illustrating common HRM risk sources in agriculture and a number of strategies that can be used to reduce those risks as long as managers are aware of their drawbacks and employ additional strategies to mitigate them.

Future Research

HRM risk sources specified by Bitsch and Harsh for horticultural managers and those found in this study for dairy farmers are sufficiently similar to justify the use of their categories for future agricultural HRM risk research. This study expanded upon the basic categories of risk sources by discussing their interaction with each other and suggesting a framework for analyzing the complex relationships between practices and farm level outcomes. This framework needs to be tested in future quantitative studies, for example with path analysis. More research is required to as-

sess the relevance and impacts of intermediate outcomes on farm level outcomes. Because farmers have multiple goals, measurement should be of outcomes beyond productivity or profitability.

Each area of HRM practices specified in the framework also warrants further in-depth study. Identifying additional details of specific practices and their performance impacts and risks will help clarify whether a set of best practices exists, which can be applied to most farms, or whether performance-enhancing and risk-reducing strategies must be tailored to the specific situation of each farm, its management team, and its employees. Through comparison of risk-mitigating strategies discussed in this study and risk-reducing strategies outlined in Bitsch and Harsh, a number of strategies seem to work in a variety of agricultural contexts. This needs to be explored further by studying different agricultural industries and different production regions.

Farmers' perceptions of HRM practices described in this study can be used to design survey instruments that frame questions close to farmers' conceptualizations of their practices. This approach will increase farmers' willingness to participate in studies and improve validity by making questions more meaningful to respondents.

Beyond HRM risks, this study contributes to the development of HRM research in agriculture by describing the practices and strategies farmers are currently using, their advantages and disadvantages, and the challenges they face. Practices developed and analyzed in large corporations do not necessarily fit the farm environment, where the requirements, expectations, and organizational culture are different. For example, recruitment and selection practices that focus on matching applicants with job descriptions may not be fully applicable on farms. Similar to other entrepreneurial businesses (Heneman, Tansky, and Camp), the nature of agricultural operations may require a focus on the fit of the job candidate with the overall organization, its goals, and its values rather than with strict job requirements. These issues need to be further explored, for example, with case studies of farms employing successful HRM strategies.

Implications for HRM Risk Management Education

The proposed framework for HRM risks was used by a variety of extension educators in the development of workshops and other labor-related HRM materials, both with a HRM risk focus and with a general HRM focus. For example, risk education notebooks and CDs for different agricultural specializations included a HRM section based on this framework (Lee and Marandola 2005a–e).

In particular, the results of this study contributed to identifying dairy farmers' educational needs with respect to HRM risks. Participants' perceptions of HRM risks helped tailor extension programs to managers' priorities. In addition, extension educators were able to address identified weaknesses in HRM practices and human resource risk management strategies with specific material. Comparing HRM experts' risk conceptualization to farmers' perceptions yields additional insights into farmers' training needs. Although advertising HRM training for farmers should address their perceived needs, the training itself ought to include additional topics.

Two of the authors have developed an educational workshop for dairy farmers addressing the following topics: recruiting and selecting employees, hiring a legal workforce, training employees for high performance, building relationships with a diverse workforce, motivating employees, and managing conflict. Participating managers found the presentations and materials particularly well tailored to address their needs. Focus group participants had not perceived issues of labor laws and regulations as a major source of risk, which was identified as a lack of knowledge. Workshop participants welcomed this material and the resulting increase of awareness.

Management Applications

Considering the scarcity of HRM research in animal agriculture, the focus group discus-

sions explored participants' HRM practices, labor risk perceptions, and control strategies. Deficits in recruitment and selection, training, performance evaluation, discipline, compensation, and working conditions caused undesirable outcomes for farm employees on the individual and group levels. Although hiring immigrant employees mitigated some risks, other new risks were introduced, including legal employment eligibility, communication barriers, integration problems with other employees, and cultural differences, which, at times, led to misunderstanding.

Farmers used a number of strategies to reduce risks and stabilize their workforce. Each of these strategies was, however, associated with its own risks. Recruitment through networks was perceived as less risky than recruiting walk-ins or through advertisements but might be discriminatory, not yield the best available applicants, or increase the negotiation power of employees. Delegating training to herdsmen and co-workers relieved pressure from managers. But training through co-workers at times resulted in insufficient training and deteriorating procedures. Daily feedback is an appropriate way to encourage employees and correct immediate problems but might not be sufficient to ensure long-term development and retention of superior employees. Informal discipline procedures fit most farms' organizational culture but might not be taken seriously by some employees and not suffice in case of a wrongful discharge suit. Offering more hours per week instead of higher wages for superior performance was a substitute for defining an incentive system but did not encourage the type of performance-increasing behavior that contributes to overall goals and results.

Farmers who are aware of the accompanying caveats can use several of these strategies to alleviate HRM risks. In the process, they need to establish additional practices to protect themselves from potential drawbacks. Examples of supplemental practices are broadening the recruitment basis, establishing a selection process, evaluating training results, setting up and using a formal discipline process, and documenting performance evaluations and disciplinary actions in personnel files.

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