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Labor Risk Attributes in the Green Industry: Business Owners' and Managers' Perspectives

Vera Bitsch and Stephen B. Harsh

Managers of greenhouses, nurseries, and landscape contractors participated in five focus group discussions on labor-related risks. Managers conceptualize labor risks along the human resource management process: (1) recruitment and selection, (2) training and development, (3) performance evaluation and discipline, (4) careers and relationships, and (5) compensation packages. In addition, they identified (6) immigrant employees and (7) labor laws and regulations as sources of risk. They recognized a large number of risk-increasing attributes, but also a number of mediating strategies to reduce these risks.

Key Words: focus group discussion, human resource management, personnel management, risk management, risk perception

JEL Classifications: B41, B49, M12, Q12

Economists and, in particular, agricultural economists have studied risk all through the last century with varying intensity (Barry), with risk again having become a focus of interest in the late 1990s and the early years of the new century. Publications in agricultural finance and risk management in agriculture assume the risk aspects of agriculture as a given

Vera Bitsch is assistant professor and Stephen B. Harsh is professor, Department of Agricultural Economics, Michigan State University, East Lansing, MI.

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property (e.g., Anderson, p. 103; Barry et al., p. 219; Harwood et al., p. 1; Musser and Patrick, p. 537).

Beginning with Knight, who suggested a distinction between risk and uncertainty, fundamentally different risk concepts can be found in the literature, ranging from objective concepts, such as probability of loss, variance of profit, and size of maximum possible loss (Young), to subjective probability concepts (Bessler) and psychological concepts of risk perception (Musser and Musser). Several recent publications underline the role of uncertainty with respect to long-term decision making (Just 2001; Just and Pope 2002b; Taylor). For this paper we follow the definition by Hardaker, Huirne, and Anderson (p. 4f.) who suggest that the distinction between risk and uncertainty is not useful "since cases where probabilities are objectively 'known' are the exception rather than the rule in decision making." In addition, the empirical field of this study does not lend itself to a clear distinction between risk and uncertainty because issues of

uncertainty (e.g., labor immigration regulations) and risk issues (e.g., labor regulation enforcement) are closely interrelated and overlap in managers' perceptions. Hardaker, Huirne, and Anderson (p. 5) define risk as "exposure to unfavorable consequences," taking a "significant chance of injury or loss."

The agricultural economics literature converges on five major types or 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 (Baquet, Hambleton, and Jose; Harwood et al.; Musser and Patrick). Hardaker, Huirne, and Anderson (p. 6) and Barry et al. (p. 219) distinguish, in addition, between business risk and financial risk, and then further differentiate between different types of business risks. Barry et al. conceptualize two additional risk groups (losses from severe casualties and disaster, risks of technological change and obsolescence).

Although Musser and Patrick (p. 551 f.) underline that financial risk, human resource risk, and institutional risk are more important to farm survival than production and marketing risk, publications do not reflect this. Publications addressing production and marketing risks are numerous; financial risks also have received considerable attention; but legal and human resource risks have received little attention. Several recent publications (Canavari, Caggiate, and Easter; Babcock, Fraser, and Lekakis) show that this trend is changing for environmental risk. Labor-related risks, particularly with respect to hired labor, are still treated only cursorily.

There are significant risks related to engaging and managing labor that go beyond owner- and family-related risks (e.g., divorce, major illness, accidental death), which are foremost discussed in the literature. Both external factors (e.g., legal and regulatory environment, overall labor market) and internal factors (e.g., organizational design, labor management practices) contribute to increasing risk associated with hired labor. Any area of the human resource process exposes farms to potentially unfavorable results. Rosenberg identified five types of labor-related risks as being more per-

tinent in agriculture than in other industries: (1) essential tasks not completed (see also Finedeis on local labor markets; Hurley, Kliebenstein, and Orazem on wage premiums related to expansion); (2) tasks completed inadequately or not in a timely manner (see Hurley, Kliebenstein, and Orazem on skill and wage differentials); (3) incurring high indirect labor expenses (see Hurley, Kliebenstein, and Orazem; Rosenberg, Perloff, and Pradhan; for mediating strategies); (4) conflict with employees; and (5) incurring fines or having penalties imposed for violation of laws and regulations and the cost of proving compliance.

This study was conceived to empirically identify risks in managing hired labor in agriculture, which have received considerably less attention than other types of risk in agricultural economics research. Specific objectives of this study are to (1) collect baseline data on managers' risk perceptions and risk management approaches in the green industry (greenhouse, nursery, and landscaping), (2) draw inferences about the appropriateness of the data collection method (focus group discussion) for future labor risk-related studies, and (3) develop educational programs on risk-mediating labor management techniques for farmers.

Methodology

The study was conducted February through August 2002 in Michigan. Agriculture in Michigan is one of the three largest income-producing sectors, along with manufacturing and tourism. In addition, Michigan agriculture is diverse, including a variety of specialty crops, livestock, and service operations. Ranked by cash receipts, livestock and livestock products are the major commodity groups with \$1,260 million, followed by field crops with \$1,062 million and floriculture and nursery with \$545 million. Michigan places fourth nationally in value of wholesale sales of floriculture products in 2002 (MASS).

The most recent comprehensive publication on the role of risk in U.S. agriculture (Just and Pope 2002a) discussed three general methodological approaches: (1) programming meth-

Table 1. Abbreviated Moderator Guide for Focus Group Discussions

1. Introduction around the table: operation size and specialization, type and number of employees
2. Written question: positive and negative experiences working with employees, major concerns, labor risks
3. Major labor management issues, positive and negative experiences with employees
4. Over the past three years, has labor been a significant factor in determining profits and risks? What were significant impacts of labor on the operation?
5. Examples of labor providing challenges or opportunities
6. Competitors, their advantages and disadvantages regarding employees
7. Role and measurement of labor productivity
8. Labor quality and employers' satisfaction
9. Additional aspects of labor management
10. Scheduling and duration of management training on labor issues
11. Questions for the researchers

ods, (2) econometric methods, and (3) survey and experimental methods. Although significant progress has been made over the last 30 years regarding programming and econometric methods, resulting in increasing convergence of the two (Just 2003; Just and Pope 2002b), data availability is both a constraint and a source of bias in applying these methods, particularly on the micro level (Just 2003). Therefore, in addressing labor-related risks in agriculture, micro-level data collection is considered a priority. Just (2001) as well as Roe and Randall mention the role of direct conversation with actors in the early identification of unanticipated events to understand objective functions, pertinent constraints of behavior, and details of the decision making process. Roe and Randall point out how focus group research can contribute to a deeper understanding of behavior at the individual level. Their argument can be broadened to labor management research in agriculture, where empirical evidence is limited and stylized facts have not yet been developed.

This study uses focus group discussions with managers of greenhouses, nurseries, and landscape contractors as the primary data collection method to identify their perceptions of risk factors in labor management. The focus group discussion method was chosen for the following reasons. First, focus group discussions are resource-efficient data collection instruments, when the timeframe is short and the resources are limited. Second, focus group discussions allow for enrichment of ideas, per-

ceptions, and concepts through active dialogue among participants. Since the study intended to provide detailed data that enable the researchers to identify and understand labor risk perception of agricultural managers, the focus group approach was particularly well suited.

Literature suggests six to ten participants per focus group meeting (e.g., Morgan 1996, p. 42 f.). On average, eight participants joined the focus group meetings. A set of guiding questions was prepared for the focus group meetings (Table 1). After the introduction of the project, the research personnel, and review of the consent forms, participants introduced themselves. To facilitate the initial discussion, participants were asked to write down their thoughts about labor management before starting the main part of the discussion. The group discussions were moderately structured, intervening only to keep the discussion focused. The moderator was advised to probe on the following topics of the human resource management process should discussion need to be encouraged: attracting and recruiting labor, training, communication and feedback, motivation, productivity and appraisals, pay and benefits, discipline and corrective action, conflict at work, and legal issues.

The purpose of focus group research normally defies random selection of participants in favor of purposive sampling, selecting participants with a personal interest in the research question, or based on theoretical considerations (Morgan 1997, p. 35). Selection of participants is based on segmentation variables

with the purpose of attaining homogeneity within groups and heterogeneity between groups. Homogeneity is not attempted with respect to similar opinions about the research question, but with respect to significant background variables. Segmentation variables depend on the research question and the researched population.

The project's focus groups were segmented by location and production focus. Location was deemed important, because different regions will have different labor markets. The multi-industry focus (e.g., greenhouse production, nursery production, landscaping) was deemed important because of differences in the duration of seasonal labor demand and requirements with respect to employee qualifications.

The total number of focus group meetings necessary increases with the number of segmentation variables. Morgan (1997, p. 43 f.) suggests three to five groups for a simple design. Heterogeneous groups require more meetings because it takes longer until coherent opinions and experiences can be identified. When additional meetings do not contribute significant new perspectives, a sufficient number of meetings have been conducted. This study convened five focus group meetings in different production regions, two meetings with greenhouse managers, one meeting with nursery managers, and two meetings with a mix of nursery and landscape managers.

On average, a meeting lasted about 2 hours. All meetings were tape recorded and transcribed. After the focus group meetings, participants were asked to fill out a one-page questionnaire. The information obtained through the questionnaire was needed to assess whether the variance of the industry, with respect to company size, managers' characteristics and experience levels, was reflected in the focus groups.

Analysis of the focus group discussions was based on the transcripts and observation notes (Krueger). After the initial debriefing with the moderator, the assistant moderator, who was also the principal investigator of the project and had observed all group discussions, coded the transcripts in several steps. First, primary coding marked categories of the

personnel management process, e.g., recruiting, selection, and training. The next step used both theoretical codes, i.e., subcategories of the management process (e.g., subcategories of recruiting: labor supply, labor demand, hiring from within, recruiting from outside), and empirical codes, i.e., codes based on discussion content (e.g., work attributes, manager's time commitment). Coding was reviewed by and details were discussed with an outside researcher not previously involved with the project. After individual analysis of each group, another outside reviewer read all group summaries and discussed the themes with the principal investigator. Eventually, with input from the moderator, this process was followed by the aggregation of results across groups by the principal investigator. Accuracy and consistency of the analysis and interpretation process was ensured by both outside input and the principal investigator observing all group discussions, coding all material, and then completing the analysis, interpretation, and reporting process.

Across focus groups, the data was aggregated using "group-to-group validation" (Morgan 1997, p. 63). Results of the content analysis under each subcategory are summarized as risk-increasing or risk-reducing attributes. Risk-increasing attributes are characteristics of the human resource management process managers perceive as leading to risks. Risk-reducing attributes are characteristics and strategies managers perceive as ways to prevent risks. The more consistently an attribute has been discussed across groups, the more important it is to participants; therefore only risk attributes, which have been discussed at two or more meetings, are reported in the *Results* section.

Results

The operations represented at the focus group meetings were predominantly family-owned businesses with family also contributing to the workforce. Forty participants attended the focus group meetings. The majority were men. Their ages ranged from late 20s to mid-60s. The ratio of owners to hired managers was

Table 2. Education Level of Respondents (*n* = 33)

Education Level	Frequency	Percentage
High School or Less	3	9
Some College	17	52
College Graduates (4-Year Curriculum)	8	24
Advanced Degree Study	5	15

almost 1:1. Thirty-three participants filled out the survey requesting background data about their company and demographic information. The average participant has held the current position for 15 years (minimum 1 year, maximum 34 years). More than half of the surveyed participants had taken some college courses and 39% graduated from college or studied for an advanced degree (Table 2).

Participants represented a cross-section of their industry, with annual gross sales of \$100,000 to \$70 million. The largest operation employs nearly 1,600 people seasonally in the United States, half of them in Michigan. In the smallest operation, only the owner works permanently, seasonally hiring two full-time employees and several part-timers. Focus group participants differentiate between year-round and seasonal employees and between full-time employees, working 40 or more hours during the season, and part-time employees, working less than 40 hours even during the season.

A key result of this study is the insight in how green industry managers frame their labor risks conceptually. To reflect managers' perceptions, a framework that stays close to their conceptualizations was developed: (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. A similar approach has been suggested by Baquet, Hambleton, and Jose (p. 18) for modeling risks along the human resource management process with (1) job analysis and job description, (2) hiring, (3) orientation and training, (4) employer/employee interaction, (5) performance appraisal, (6) compensation, and (7) discipline.

Recruitment and Selection

Participating managers employ a diverse workforce: full-time and part-time, adults and minors, men and women, and different ethnicities. While the supply of local labor and high school students has decreased over the last decade, the share of immigrant employees has increased during the same time period. Focus group participants attributed the diminishing local interest in agricultural employment to society's image of agricultural jobs as being low skilled, low paid, and hard work. They also perceived the education system and media as not granting sufficient attention to agriculture (Table 3).

During the study year, a high unemployment rate made it easier for agricultural employers to recruit suitable employees at an affordable wage. But managers perceived a lack of qualified candidates for supervisory and management positions. They see a need to introduce youth early to agriculture to ensure a long-term supply of qualified labor. Although they currently see more applications from local residents, employers who made the transition to an immigrant Hispanic workforce do not want to return to hiring their traditional workforce.

The number of employees required during the spring peak season poses a challenge. Many managers have succeeded in attracting a sizable share of returning employees who are rehired when the season starts in spring, mediating the recruitment risk. The most common recruitment method is turning to current employees for referrals. This method seems to work particularly well for Hispanic employees. Successful hiring also occurs through word of mouth in the community and through temporary services. Although temporary services ask for higher wages, they are perceived as providing a legal and motivated workforce and they take care of benefits and insurances. Walk-in candidates are perceived as likely to expose undesired characteristics. Managers' lack in selection skills might be the underlying problem, which also contributes to limited use of advertising.

Screening of job candidates is uncommon in the green industry. The majority would hire

Table 3. Perceived Risk Attributes of Recruitment and Selection across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups; Low Frequency, Omitted)

Subcategories	Risk-Increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
Labor Supply	Traditional, local employee pool not interested in agricultural work	High	General labor available due to high unemployment rate	High
	Image of agricultural jobs is low skilled, low paid, hard work	High	Introducing youth early to agricultural work ensures long-term labor supply	Medium
	Education system does not provide due attention to agriculture	Medium		
	Media does not provide due attention to agriculture	Medium		
	Limited availability of middle-level staff	Medium		
Labor Demand Hiring from Within	Seasonally high peaks	High	Rehiring of employees after seasonal layoffs	High
			Employee referral provides viable candidates	Medium
Recruiting Outside Candidates	Undesired characteristics suspected in walk-ins	Medium	Word of mouth provides viable candidates	Medium
	Advertisements attract too many unqualified candidates	Medium		
Manager's Time Commitment			Temporary agencies meet requirements	Medium
	During seasonal peaks managers cannot focus on recruiting and selection	Medium		
Work attributes	Job offer not accepted due to work attributes and/or starting wage	Medium		

anyone willing to do the job and learn. The few managers who reported selective hiring seemed pleased with the results. Most often hiring takes place at the entry level. Supervisory positions are typically filled from within. Not all offers extended to applicants are accepted because of starting wages and work attributes. Some managers perceive this as self-selection, while others consider it a risk because of time lost.

Training and Development

Managers perceived training as reducing safety problems, reducing the risk of inferior work quality, and improving the efficiency of employees. Approaches to training vary. Some

managers decided to offer only minimum training, and the tasks in which they need to train their employees are becoming more basic over time. They are concerned about employees demanding higher wages or leaving after being trained. Other managers believe that whatever they invest in training will pay off. These managers take a comprehensive approach to training (Table 4). Beyond explaining and showing basic tasks, they provide the context of the task, why this task is important, and why it should be done in a certain way. In addition, some managers acquaint employees with procedures and equipment beyond their current job responsibilities.

Identifying training needs of new and current employees is seen as difficult. The lan-

Table 4. Perceived Risk Attributes of Training and Development across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups; Low Frequency, Omitted)

Subcategories	Risk-Increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
Training Needs	Training needs identification is difficult	High	Comprehensive training	Medium
	Incoming employees have low skill level	Medium		
	Short-term labor gets minimum training	Medium		
Training Methods	Trainers possess low instruction skills	Medium		
	Language barrier	Medium		
Development Opportunities			Extension programs, trade fairs, and exhibitions utilized as low cost opportunities	Medium
Outcomes of Training and Development	Training employees expect higher wages	Medium	Trained employees are more reliable and take on more responsibility	Medium
	Trained employees more competitive on the market	Medium		

guage barrier of immigrant employees poses additional problems for identifying needs and the training process. Training quality varies, depending on the instructor's training skills. Asking an experienced employee to "mentor" a new job incumbent is the most common approach.

Off-site training is rarely seen as an alternative for new employees. For current employees, presentations and seminars at trade fairs and exhibitions are perceived as useful for employee development, as is an advanced training program offered by the Cooperative Extension Service. Larger operations also arrange on-site training for supervisory employees and middle management, but supervisors are typically promoted into their position without prior management training.

Performance Evaluation and Discipline

Job performance was rarely mentioned as a problem. Focus group participants perceived evaluations as unnecessary, particularly for short-term labor. Evaluations are considered time consuming and costly. Some managers

see evaluations as useful for guiding core employees' long-term development. For other employees, managers articulated the impression that evaluations are not needed because employees control each other. If an employee is performing at a substandard level, other employees apply pressure to be more productive. An employee who is not performing at a satisfactory level is expected to look for a different job. Hiring through referral contributes to this mechanism and reduces disciplinary problems (Table 5).

Managers tend to evaluate informally in the context of wage raises. Employees expect raises after each positive evaluation, but the relation between evaluations and wages is weak. Managers realize that they lack defined criteria and knowledge about evaluation methods. Although employees often perceive evaluations as negative and a basis for potential termination, formal termination for performance reasons is uncommon.

Focus group participants were concerned about developing personal relationships with their employees, which they believe create difficulties in discipline. On the other hand, close

Table 5. Perceived Risk Attributes of Performance Evaluation and Discipline across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups; Low Frequency, Omitted)

Subcategories	Risk-Increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
Need for Evaluation	Evaluation not required for short-term labor	Medium	Evaluation of core group useful for development	Medium
	Formal evaluation is time consuming and costly	Medium	Employees control each other	Medium
Evaluation Methods	Lack of knowledge about methods, lack of evaluation criteria	High		
	Employees perceive evaluation as negative	Medium		
Outcomes of Evaluation	Weak linkage between evaluation and wages	Medium		
Discipline Process	Close relationships inhibit disciplinary action	High	Hiring through referrals reduces discipline issues	Medium
	Formal discipline process rarely established	Medium		
	Tardiness and absenteeism difficult to manage	Medium		

personal relationships reduce the need for disciplinary procedures. A formal discipline process has rarely been established, which leads to inconsistencies in dealing with tardiness and absenteeism.

Careers and Relationships

Green industries in the northern United States face a pronounced seasonal employment pattern. Some managers have found means to extend the season and therefore increase the likelihood of employees returning in the following year after seasonal layoffs. Nursery operations and landscape contractors see seasonality as less of a problem because their longer season seems to fit well with the lifestyle of many of their employees. Still, the risk of supervisory employees not returning after layoffs persists. Some operations have diversified into different activities, e.g., building houses, raising Christmas trees, or snow removal, to provide year-round employment for key employees; few keep key employees even during slow periods (Table 6).

Focus group participants view the availability of alternative employment as the major turnover-increasing factor. They are concerned

about competition from retail stores and restaurants, such as Wal-Mart or McDonald's. Benefits and perks provided at these alternative jobs contribute to turnover or force managers to offer benefits. Nondesired work attributes also contribute to turnover. A practice some managers use to reduce turnover is the sharing of business and financial information with employees. One manager explained that this practice improves employees' understanding of the business and builds trust.

Although most managers wanted to develop their employees' loyalty, they do not want to achieve this by having close relationships with their employees because of the time investment and potential disciplinary problems. They perceived their employees as expecting support beyond the workplace. On the other hand, they found that the social network increases their labor pool. Managers also accommodate scheduling preferences of employees to increase their labor pool. They prefer, however, not to accommodate task preferences.

Managers would like to keep long-term employees because they are often more productive and take on more responsibility, but many green industry operations are not large enough to use promotion as a retention instru-

Table 6. Perceived Risk Attributes of Careers and Relationships across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups; Low Frequency, Omitted)

Subcategories	Risk-Increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
Seasonality	Short seasons limit opportunity to develop relationships	Medium	Complementary season with other employment opportunities	Medium
	Supervisory employees do not return after layoffs	Medium	Prolonging season with different activities	Medium
	Key employees paid during periods with low work	Medium	Winter layoff fits with employees' lifestyle	Medium
Turnover	Alternative employment available	High	Year-round work for key employees	Medium
	Benefits, perks available at alternative employment	Medium	Sharing business and financial information	Medium
	Nondesired work attributes (dirty, hard, wet)	Medium		
Social Capital	Involvement in employees' lives beyond the workplace requires time commitment	Medium	Expanded involvement in employees' lives increases loyalty	Medium
	Meeting different employees' task preference is a management challenge	Medium	Flexibility in scheduling employees increases loyalty and labor pool	Medium
Promotion	Business size limits opportunities for promotion	Medium	Social network increases labor pool	Medium
	Lack of promotion causes turnover	Medium	Long-term employees take on more responsibility and are more productive	Medium

ment. The lack of promotion and development opportunities increases the turnover risk.

Compensation Packages

In general, wages are above the legal minimum. Starting wages reported ranged from \$6 to \$7.50 per hour for general labor, depending on the type of work, location, and English language skills. Supervisory employees are paid significantly higher wages, depending on the size of the operation and their skills. Very few managers have established formal criteria for wage determination. In addition, the relationship between increases and employee productivity is weak, which managers recognize as a long-term risk (Table 7).

Bonuses, merit increases, promotion increases, and skill-based pay for bilingual employees are used as incentives and employers state that these increase retention. Many focus group participants offer a bonus system, e.g., a loyalty bonus for employees staying through the season. Perceived challenges in providing bonuses include the need to define clear rules for receiving a bonus and to communicate these rules to employees. Bonus expectations persist even if work goals were not met. Small businesses see less need for incentives than larger ones.

Benefits for nonsupervisory employees are often limited to the legally mandated minimum. If a more comprehensive benefit package is provided, eligibility depends on job ten-

Table 7. Perceived Risk Attributes of Compensation Packages across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups; Low Frequency, Omitted)

Subcategories	Risk-increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
Wages and Salaries	Lack of formal criteria for wage determination	Medium		
	Weak relationship between raises and productivity	Medium		
Incentive Pay	Rules for receiving bonuses not clearly defined	Medium	Merit increases, position-dependent pay, skill-based pay (bilingual)	High
	Bonus rules not clear to employees	Medium		
Benefits	Bonus expectation persists	Medium		
	Small businesses perceive no need for incentives	Medium	Bonuses increase loyalty, retention, productivity	Medium
Perks	Limited to permanent supervisory employees	High	Health insurance contributes to retention	High
	Administration, costs of health insurance	High	Paid vacation contributes to retention	Medium
	Health insurance cost sharing upsets employees	Medium	Retirement plans favor long-term employees	Medium
	Administration of paid vacation difficult	Medium	Housing contributes to recruitment, retention	Medium
	Administration of retirement plans difficult	Medium		
	Employees prefer cash over benefits	Medium		
Perks			Cookouts, meals, get-togethers increase loyalty and team building	Medium

ure, hours worked, and position held. Health insurance, paid vacation, and retirement plans are only available to supervisory employees. Health insurance is considered most important for retention, but administration of health insurance and increasing cost of coverage are perceived as growing risks. Although copayments or premium sharing can mediate these risks for employers, employees are often upset when asked to contribute to insurance costs.

Paid vacation is not a common benefit in the green industry, although believed to improve retention. Retirement plans are expected to promote long-term employment, but administration, particularly for former employees, involves additional costs. Managers think that employees prefer cash payments to benefits. The exception is provision of housing, which

immigrant employees seem to expect (Table 8) and managers view as contributing to recruitment and retention.

Perks provided to employees include occasional cookouts, meals, nonalcoholic drinks, end of season celebrations, and get-togethers. Some managers lend equipment or vehicles to employees and help with complex administrative tasks, e.g., mortgage applications.

Immigrant Employees

Some managers depend on immigrant Hispanic employees for getting the work performed; others have just started working with Hispanic employees (U.S. born or immigrant) or have no experience at all in this regard. Managers employing a major share of Hispanic employ-

Table 8. Perceived Risk Attributes of Immigrant Employees across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups; Low Frequency, Omitted)

Subcategories	Risk-Increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
Influx of Hispanic Employees	Communication difficulties due to language barrier	High	Workforce skilled, interested in agriculture	High
	Bilingual staff required	High	Bilingual staff available	Medium
	Learning English is difficult, resistance	Medium		
	Long-term supply is questionable	Medium		
	Lack of understanding of U.S. institutions	Medium		
Cultural Expectations, Values	Involvement in employees' lives expected, requires additional resources	High	Dedicated, hardworking, polite, loyal	High
	Unexpected leaving of the job for different reasons	High	Housing contributes to recruitment, retention	Medium
	Housing creates problems	High		
	Values may conflict with procedures (age, seniority, gender roles)	Medium		
	Cultural differences between different Hispanic groups who do not work together well	Medium		

ees perceive them as a skilled workforce with an interest in agricultural work.

Communication is a daily challenge for managers who are not fluent in Spanish. Some managers have started to take classes and learn Spanish; few have reached a fluency level. Managers perceive learning Spanish as a challenge, and some also think it would be better for their employees to learn English. Managers support their Hispanic employees who want to learn better English in numerous ways (e.g., paying for on-farm instructors, paying employees for the hours spent taking English courses). They also encourage supervisors and middle management to learn Spanish. Managers typically hire at least one bilingual employee to have translation readily available (Table 8).

With a major share of the Hispanic employees coming from the southern United States, Mexico, or even from Central America and beyond, some managers are concerned about their long-term labor supply should pol-

icies or immigration law change and enforcement of existing laws become more aggressive. In addition, new immigrants lack understanding of U.S. institutions and, therefore, need help with adjustment to the U.S. work environment.

Focus group participants point out that the Hispanic culture enriches their personal lives and individuals are hardworking, dedicated, loyal, and polite. Hispanic employees are also perceived as commanding a strong sense of community, family attachment, and caring for each other. Managers do, however, recognize several challenges related to these values. Hispanic employees often expect high involvement of their manager in personal issues, which requires additional resources from managers. Another risk related to the value system is unexpected leaving of the job for different reasons (e.g., family requirements, extended visits to a "home" country, avoidance of law enforcement contact). Furthermore, values

Table 9. Perceived Risk Attributes of Labor Laws and Regulations across Five Focus Group Discussions (High Frequency, 4–5 Groups; Medium Frequency, 2–3 Groups, Low Frequency, Omitted)

Subcategories	Risk-Increasing Attributes	Frequency	Risk-Reducing Attributes	Frequency
General Awareness	Keeping current in labor laws, regulations difficult	Medium		
	Distinction of agricultural, nonagricultural difficult	Medium		
Employing Minors	Regulations overly constrain minors	Medium		
I-9 Process	Checking documents, determining employment eligibility difficult	High		
	Staying current with migrant employees' paperwork challenging	Medium		
Targeted for Enforcement	Employment of Hispanic workforce gets attention	Medium		
Wrongful Discharge	Lack of documentation of transgressions, discipline	Medium		
Occupational Safety and Health Administration (OSHA)	Difficult to comply with all regulations	High	Working with OSHA to create a safe work environment	Medium
	Employees negligent of safety procedures	High		

with respect to age, seniority, and gender roles at times conflict with management procedures.

Although some managers report conflicts between groups of Hispanic employees from different regions, many of these employees seem to prefer to live close to where Spanish-speaking people live. This might be far from their workplace, requiring reliable transportation. Some employers provide housing. Although this reduces some of the housing- and transportation-related risks and contributes to recruitment and employee retention, providing housing creates additional challenges (e.g., meeting housing regulations).

Labor Laws and Regulations

Staying current in labor laws and regulations was perceived as a major challenge. In particular, the distinction between agricultural and nonagricultural work seems ambiguous to managers. Managers had several specific concerns about labor laws and regulations. Reg-

ulations regarding the employment of minors were perceived as overly limiting and details of the regulations as confusing and difficult to follow (Table 9).

Many managers have made the transition from hiring out of the local labor pool to hiring newly immigrated employees and consider immigrant employees as a dependable workforce. On the other hand, managers perceived a risk of their workforce being ineligible for work in the United States. They take care to fill out Employment Eligibility Verification Forms (I-9) correctly and require documentation of each new employee. Yet, managers are not immigration experts and can hardly tell fraudulent documents from genuine documents. Another challenge is staying current with immigrant employees' paperwork, which causes additional administration costs. Some managers felt that agriculture was a target for enforcement by government agencies and advocacy groups because they employ a high share of Hispanic individuals.

Although Michigan is an at-will employment state, i.e., regulation that allows employer and employees to terminate an employment relationship at any time with or without cause, being brought to court by an employee for wrongful discharge is another concern of some managers. Lack of documentation of an employee's work-related shortcomings and of the discipline process increases the financial risk when legal action is taken by an employee.

Managers perceived rules and regulations in the context of the Occupational Safety and Health Administration as an additional problem area. Though concerned about safety, some managers felt they were unable to comply with all regulations that apply to their operations. In addition, they suspected that their employees were negligent in following safety procedures, and they were unsure whether training provided and tests given were sufficient to prevent accidents.

Conclusions and Recommendations

The investigation of the green industry (greenhouse production, nursery production, and landscape contractors) provided comprehensive insights in participating managers' perceptions of labor risks. Managers have identified a large number of risk-increasing attributes for each area of the human resource management process. These results allow the identification of managers' educational needs and risk priorities to tailor outreach programs to address managers' perceived needs. In addition, the study has uncovered several mediating strategies managers use to reduce labor-related risks. Overall, the focus group participants identified fewer risk-reducing strategies than risk-increasing attributes. Furthermore, not all managers who are aware of labor risks are using mediating strategies. The empirically identified risk-reducing strategies can be used in educational programs to model risk-moderating behaviors and provide less risk-conscious managers with credible exemplary strategies.

The following risk-mediating strategies can be recommended in most situations. Employee referral and word of mouth seem more viable

hiring strategies than advertisements and walk-ins. Successful long-term staffing requires planning, including arrangements with seasonal employees and a timely start of the hiring season, to avoid manager overload during peak labor needs. Interim shortages can be bridged with temporary employment services. Training new employees needs to be taken seriously; trainers' instruction skills must be assessed to ensure competent training. Regular performance evaluations of at least the core group of employees contribute to increased productivity. Several additional practices seem to improve retention of employees: occasional get-togethers and meals, involvement in employees' lives, flexibility in scheduling, sharing of business information with employees, prolonging the season with diverse activities, and arrangements with employers with a complementary hiring season. Providing benefits to employees also increases retention, as do bonuses, which can also increase productivity. When employing employees for whom English is the second language, it is recommended to keep bilingual staff readily available and take training in cultural sensitivity to avoid misunderstandings and ensure a productive work climate. On the basis of participants' general unease regarding labor laws and regulations, managers are advised to sign up for a related newsletter or website to stay current on these issues.

While some businesses successfully use these practices to manage their diverse workforce and mediate risks involved in the human resource management process, others are struggling. Management practices used need to be investigated and compared to determine whether there is a set of best practices that can be applied in each operation, or whether management practices must be tailored to the specific situation of the enterprise, the management, and the employees. Impacts of the seasonality of labor and the increasing share of employees of Hispanic descent with limited English language proficiency on management practices and risk attributes are other key areas that need further research.

In addition, the results of this study need to be tested in other agricultural subsectors.

Derived from the pertinent risks uncovered, subsectors with year-round production, such as dairy and livestock operations, or with different seasonal patterns, such as fruit or vegetable production, would be logical areas. Similar studies in states where the business environment or the physical environment are notably different would be another area for testing the results.

The focus group approach proved to be an adequate research method to explore managers' labor risk perceptions in agricultural management. The willingness of focus group participants to openly discuss issues of labor management has enabled an overview of the numerous risks from a manager's perspective. The focus group approach was particularly suited to gathering the perceptions of the participants, unfiltered by the researchers' preconceptions. While focus group discussions are suitable for in-depth analysis of perceptions and attitudes and contribute to the understanding of phenomena, they do not allow the generalization of results to the population.

Focus group discussions are a step toward a more stringent conceptualization of risk aspects of labor management in agriculture. To further investigate issues uncovered or asserted during the focus group discussions, a potential next step will be an in-depth analysis of businesses that have successfully dealt with labor management risks. Case studies are an example of a suitable research tool to further address the following objectives: identify strategies to overcome frictions and to build risk resilience, test their generalizability over different enterprises, and assert their context dependability. The focus group results can also be used to develop adequate survey research instruments to study the distribution of labor risk attributes and risk-reducing strategies in agriculture. The human resource management process-oriented framework will be particularly useful for future labor risk studies.

One of the limitations of this study is not having addressed the supply side, how agricultural employees perceive their jobs. Few studies analyze employees' perceptions and attitudes (for a synthesis of studies on agricultural labor relations see Bitsch 2003). A study

with horticultural apprentices (Bitsch 1996) corroborates some of the managers' perceptions regarding agriculture's image, namely that it is straining and hard work. Apprentices are also concerned that their friends might see their job as dirty, with nothing to learn, and where thinking is not required. Physical strain and wages were the most frequently cited reasons for planning to leave the industry. Besides wages, other areas they pointed out for improvement were more frequent recognition of performance, support with additional training, and more participation and responsibility in work-related decision making. Although it is often difficult to gain access to agricultural employees, future studies should make a strong effort to include employees' point of view to gain a more complete picture of labor risks in agriculture.

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