



PEI Farm Learning Study and Designation Survey

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PEI Agricultural Human Resources Development Council (AHRDC)

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The opinions and interpretations in this report are those of the authors and do not necessarily reflect the views of the Government of Canada or the Government of Prince Edward Island.

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1 Executive Summary

1.1 Project overview

In late 2003, PEI's Agricultural Human Resources Development Council (AHRDC) approached Neo Insight to design and conduct a Learning Study and Designation Survey.

The Learning Study focused on gaining a better understanding of the training and skills development needs of the PEI farming community through a series of interviews and group sessions with 85 farmers and farm workers. The Designation Survey gathered input from 111 farmers for application by the Department of Education's Apprenticeship Board to have the job of 'farm worker' achieve designation as a trade.

The objective of both pieces of research was to provide actionable information to address a number of labour issues of concern to PEI's agricultural community, particularly shortages of skilled labour and the need for revitalization of farming as a career.

There are a number of forces and issues at play that make this research timely and appropriate. These include:

- Evolution of family farms to enterprise businesses in order to remain competitive
- Mounting consumer concern about the health and safety of their food supply
- Increasing concern about the impact of farming on the environment
- Adoption of more computer-based technology and sophisticated equipment
- New policies and regulations regarding safety and environment

Pilot research conducted in October/November 2003 (see "*PEI Learning Study: Implementation Plan, Version 1.1*" issued November, 2003 by Neo Insight Inc.) identified that farmers may not easily be able to relate training and learning to outcomes on the farm. This obviously can affect decisions whether or not to support workers attending training or an apprenticeship program. Farmers also expressed their concerns about the need for changing business, technological and managerial skills at a time when they face severe economic pressures.

The research reported here extends this previous research by asking what skills are needed by farmers and farm workers, how best to address these needs, how farmers justify training of workers, what level of support there is for an apprenticeship program, what are the perceived benefits and barriers to a successful apprenticeship program, and how farmers and workers envisage such training or apprenticeship programs working.

1.2 Learning study

Farmers named areas they would like to know more about, or get better at doing. Over one-third of responses involved Business skills. Other skills mentioned were evenly divided between Mechanical skills and Production skills. Human resource management skills were brought up frequently. Farmers were quick to identify mechanical skills they need – mostly in welding and basic mechanics, but also electrical, plumbing, and carpentry. Production skills mentioned by farmers included vaccinations, animal health, feed ration evaluation, "cost of production", "field

knowledge”, and different crops. Two-thirds of farmers do not plan to take five days of formal training in the next year.

Farmers’ preferred ways to learn skills fell into three groups: classroom, hands-on, and informal learning. 42% of farmers prefer to learn business skills in courses, with another 36% preferring informal means. Overall, farmers complement courses with informal ways to learn, or hands-on application – “combining farm and classroom is always nice”. This allows theory to be applied in the farm context of tools and equipment. Preferences for learning computer or internet skills most often involved a theory or a classroom component. For production skills, participants mentioned many informal means of training: visiting other farms and reading books, pamphlets, or safety guidelines.

Farmers rated safety the most important skill needed in farm workers. The important skills they told us they need in workers are essential skills and basic skills. Half of the top six skills were essential skills: communicating, motivating, getting along, and initiative. Basic skills like safety, operating equipment, and maintenance rated more highly than specialties like breeding, crop inspection, soil quality, transactions, and marketing. In open discussion about worker skills, production skills were mentioned most often. Farmers brought up eighteen skills related to production. Two thirds of these mentions were skills related to livestock. These skills included milking, feeding, breeding, and husbandry. Other skills mentioned that relate to production include food safety, quality, grading potatoes, and product integrity. Farmers told us workers need to have basic mechanical skills, understand how to work safely, care for animals, know how to operate equipment or have a truck or pesticide license, and be responsible, trustworthy, and willing to work.

Farmers feel their needs for worker training are being met quite well in most categories. The one exception seems to be in the area of essential skills, especially those related to worker attitude, responsibility, and interpersonal skills. This rating corresponds with many comments about the need for workers that are trainable, willing to work, eager, and have a positive attitude

Farmers want workers to learn hands-on, but do not always feel qualified to train. They feel compelled to take on the role of trainer, because they don’t always trust other people to train their employees. One particular method of acquiring skills is attending a learning experience together with other employees. Farmers mentioned it in several ways. At every off-farm event, there is interaction about the learning, but often participants like the discussions that occur back at work. One common way farmers train workers is to allow them to work alongside another person performing the task. This working alongside allows the worker to get the feel of the speed and handling in the field. A recent way of training that we found was use of video tapes. We visited a few farms that have set up a room where video or other training can occur. Some farms show training videos in these meeting rooms, or send the videos home.

Farmers rated the need for less supervision as the biggest benefit of having trained workers. The payback also shows up in other important benefits – such as efficiency, preventing risk, and protecting investment. Other benefits included efficiency and cost savings; earlier detection of problems; keeping business reputation; less equipment breakdown. Many farmers talked about the payback of training employees how to work safely. Equipment repair and downtime are both costly.

Most of the farm workers feel that employers are more likely to hire workers who have completed either agricultural college or Grade 12, consistent with the finding that farmers are indeed more likely to hire someone who has attended agricultural school. So, education is valued in hiring farm workers and is important for ensuring that workers can read instructions on chemicals or instructions.

Farmers were divided about whether workers should get training before being hired, some feeling compelled to train new workers even if they had been trained previously. Farmers generally want to hire workers that have some basic training but one compensating factor is the worker's attitude. Most farmers are more likely to hire a worker who is trainable and has a positive attitude.

We discovered from farmers that workers' learning needs vary by age and experience. One way to look at this variance is segmenting learning needs by worker type – seasonal, part-time, junior, and senior workers. The labour force of farm workers is presently made up of 29% full time farm workers, 9% part time farm workers, and 62% seasonal farm workers. Each of these segments could be seen uniquely, regarding the need for training and skills development. Some skills are needed before hiring, other skills will be trained on the job.

There is mobility between the segments. Farmers told us that often their full time workers come from the part time employees. Workers that are valuable to a farm can “move very fast”, and “the better workers better themselves”. At times, seasonal workers become trained enough to become full time workers. We heard more comments, however, that seasonal labourers are not as likely to seek year-around work. A few participants estimated that a farm worker might stay at a given farm five to ten years.

In skill development terms, this implies that the Province could organize programs to uniquely serve the segments of the labour force. Doing so would reinforce the mobility within the segments, and align the labour force with farmers' needs. The part time workers could be seen as a prime target for apprenticeship training. Full time workers could be a target for skill upgrades or lifelong learning, eventually building on apprenticeship credentials. Seasonal workers could be candidates for introductory or pre-apprenticeship training.

1.3 Designation Survey

The Designation Survey was primarily designed to provide quantitative data on the degree of support for apprenticeship in the EI farming community, including the number of workers who might become apprentices.

Of the farmers interviewed, 88% support the idea of forming an apprenticeship program either “Strongly” or “Somewhat.” 87% feel it would benefit the agricultural industry on the island as a whole, with 76% feeling that it would help to hire or train better workers.

Many farmers (60%) thought that an apprenticeship program would be beneficial in providing training before a worker is hired. However, even more (67%) felt that such a program would be of benefit in developing new skills for employees.

Farmers identified a number of other benefits that they felt would result from an apprenticeship program, including producing more trusted and reliable workers; improving the image of farming as a career and profession; providing the benefits of formalizing farm practices; and focusing students on a career and reducing the school drop-out rate.

If farmers' concerns about apprenticeship are fully met, then they indicated that they might enrol 113 workers over the next 3 years, representing 15% of their workers. Separately, we also found significant interest from farm workers regarding an apprenticeship program. 56% of workers we interviewed said they would be interested in becoming an apprentice.

While participants identified strong support for apprenticeship, they also qualified their opinion with dependencies and voiced their concerns. Farmers' support depends on a number of factors which have implications for the way that any apprenticeship program is implemented. The most important issues on which their support is dependent appear to be:

- Funding and incentives – including workers' wages and serious concerns around EI
- Training content – balancing generality with the specifics needed by a particular farmer
- Practicality of the training – fitting in with the daily and seasonal needs
- Who is involved – which workers, trainers, managers, assessors, etc.
- Effect on the labour pool costs and availability of good workers
- Overall program organization

Farmers' concerns regarding apprenticeship fell into three categories: issues regarding money, issues regarding the people involved, and issues regarding program content. The concerns farmers raised regarding money were:

- Is a program economically viable given the difficulties of PEI farming?
- How will apprenticeship training be subsidized?
- Will all farms benefit equally?
- Will EI be used to fund apprentices?
- Will apprenticeship force wages up beyond farmers' ability to pay?

The concerns farmers raised regarding people were:

- Where will apprentices come from?
- Will the right people become apprentices?
- Will I lose my good workers?
- How will we manage risks of having untrained people on the farm?
- Will the best people be in support roles – coaches, trainers, managers, assessors, etc?

The concerns farmers raised regarding program content were:

- Farming isn't like other trades – will apprenticeship work here?
- Will the apprentice have the right skills for my farm?
- How can we be sure that apprentices learn the right skills, in the most efficient way?
- Will we learn from earlier programs and programs elsewhere?
- It's a good idea, but will it be implemented well?

Some interviewees recommended a minimum level of education for apprentices, with the most frequent choices being Grade 12 (42%) and Grade 10 (32%). Half of the farmers felt that no

experience would be necessary for someone becoming a Farm Worker apprentice. Others suggested one year or less would be sufficient (27%) or between one year and two years (15%).

When asked how many months of on-farm work an apprenticeship should require, responses were divided largely between six and twelve months. Farmers suggested that duration should be most closely related to the production cycle of different farms. Farm owners and managers would carry out most of the on-farm training, with support from supervisors, other workers and family members.

Participants voiced several models for the program, many of which may be integrated into a final program recommendation. For example, they suggested that High School students, Seasonal workers, or experienced workers could take parts of it. Introductory training prior to apprenticeship might provide students with the opportunity to decide if farming would be a preferred career option. Another suggestion was that an apprenticeship program could help establish a farm labour pool – particularly of speciality and relief workers.

Farmers and farm workers' training and skills development needs are described in the Learning Study section of this report. When specifically discussing apprenticeship, farmers prioritized the following categories of skills training for a Farm Worker apprenticeship:

- Reliability, motivation, communication, team-work and trainability
- Safety – probably mentioned more frequently than any other
- Operational and mechanical skills, including modern computerized equipment
- Book-keeping, financial planning and business skills were also frequently suggested

Farmers felt that apprenticeship must be comprehensive and set up to prioritize the needs of the farmer, yet they recognized that training would continue after apprenticeship, for the worker to learn the specifics of that farm.

In summary, participants recommended the program include the right candidates, the right farmers, and the right farms. It should be designed well, promoted well, and aimed at improving farm profitability.

Taking into account all these suggestions by the participants, we make the following recommendations about a farm worker apprenticeship program:

- Apprenticeship should be modular, and targeted at labour market groups' needs
- Apprenticeship might provide a route for the next generation of farmers
- Paths after apprenticeship should be clear up front
- Design program content to meet farmers' most pressing skill needs
- Manage the first cohort to promote the best image of farm worker occupation
- Recognize the training that is presently done – don't reinvent it
- Encourage and reward farmers who train apprentices and enhance the labour market
- Farmers will need to compare outcomes with the current situation
- Teach emerging and sustainable ways to farm - new farmers are more open about data
- Provide a labour pool or relief workers - for farmers who need to cooperate over labour
- Match learning styles and education to the strengths of farming

1.4 Headlines

The labour force of farm workers is presently made up of 29% full time farm workers, 9% part time farm workers, and 62% seasonal farm workers. Each of these segments could be seen as having unique needs for training and skills development.

Over one-third of farmers mentioned the need for business skills for themselves. Frequently human resource management skills were mentioned.

One particular method of acquiring skills is attending a learning experience together with other employees. Preferred ways to train workers include events off the farm, discussions at work, working on a task alongside another person, or a room where video or other training can occur. 42% of farmers prefer to learn business skills in courses; 36% prefer informal means.

Two-thirds of farmers do not plan to take five days of formal training in the next year.

Trainability may be the most important worker ability. Farmers rated safety the most important skill needed by farm workers. Half of the top skills needed in workers, and where needs are not well met, were in the categories of communicating, motivating and getting along with other workers, and personal initiative.

Farmers rated the need for less supervision as the biggest benefit of having trained workers. The payback also shows up in other important benefits – such as efficiency, preventing risk, and protecting investment.

88% of farmers support a Farm Worker apprenticeship program on PEI. 87% feel it would benefit the industry as a whole, with 76% feeling that it would help to hire or train better workers. Farmers indicated that they might enrol up to 113 workers over the next 3 years.

Many farmers felt that an apprenticeship program would be beneficial in providing training before a worker is hired (60%) and in developing new skills for experienced employees (67%). They suggested that apprenticeship would be valuable to other groups including High School students and seasonal workers.

Farmers' main concerns about apprenticeship centred on money, the people involved, and program content. Farmers' support for apprenticeship depends on factors including funding and incentives; training content; who is involved; the effect on labour costs and the availability of good workers; and overall program organization.

Half of the farmers felt that no prior experience would be necessary for a new Farm Worker apprentice. The most frequently chosen minimum levels of education for apprentices were Grade 12 (42%) and Grade 10 (32%). Most farmers recommended durations of six and twelve months for on-farm apprenticeship – closely related to the production cycle of different farms.

Farm owners and managers would carry out most of the on-farm training. They prioritized skills training for Farm Workers in reliability, motivation, communication, team-work and trainability; safety; operational and mechanical skills, including modern computerized equipment; book-keeping, financial planning and business skills.

2 Project overview

2.1 Acknowledgements

We would like to thank everyone who helped with our research by providing direction, contacts, and feedback throughout the project. In particular, we'd like to thank:

- Angela Campbell and Wilhelmina Murphy – PEI Agricultural Human Resources Development Council (AHRDC)
- Martha Burka and Shirlee Hogan – PEI Department of Agriculture, Fisheries, Aquaculture and Forestry (DAFAF)
- Craig Norton – PEI Department of Education, Apprenticeship Training

Many thanks also to the farmers, farm workers and their families who allowed us into their homes and onto their farms, or who took part in the group sessions or telephone interviews.

2.2 Background

This report is a deliverable for PEI's Agricultural Human Resources Development Council (AHRDC), a non-profit organization formed in 1994. It is divided into two main parts: the Learning Study and the Designation Survey.

The Learning Study presents research conducted to help AHRDC accomplish its mission "...to address agricultural awareness, labour market supply and industry training needs on behalf of the PEI agricultural industry and act as a coordinator in Human Resource Management." It consists of both quantitative and qualitative data.

The Designation Survey presents the results of a comprehensive survey of the PEI farming community with respect to a proposed apprenticeship training program. The survey was conducted to provide the Department of Education's Apprenticeship Board with the quantitative data needed to apply to have 'farm worker' designated as a trade.

A number of labour issues are of concern to PEI's agricultural community. Priority issues include labour shortages and the availability of skilled labour in particular. A number of programs are under way to help identify the underlying issues and address the needs of the community. This work is being done by AHRDC, HRDC, the Department of Agriculture, Forestry, Aquaculture and Fisheries (DAFAF) and other partners

In previously reported pilot research (see "*PEI Learning Study: Implementation Plan, Version 1.1*" issued November 2003 by Neo Insight Inc.) we identified that farmers may not easily be able to relate training and learning to outcomes on the farm. This is a key concern as farmers will be the ones deciding whether or not their workers attend training or take part in an apprenticeship program. We also noted farmers' concerns about the need for changing technological and managerial skills at a time when they face severe economic pressures. We described how farm workers' concerns are less strategic than those of farmers, and centre more on how, when, where, and by whom farm skills are transferred. This research expands on those earlier findings.

2.3 Context

It is no accident or coincidence that many stakeholders are responding favourably to the discussion around skills development and apprenticeship as being important to the future viability of the farming industry on PEI. There are a number of forces and issues at play that make this discussion timely and appropriate. A more detailed discussion of these issues is provided in Appendix A.

- **Food safety** – There has been a dramatic increase in the importance of food safety and traceability fuelled by consumer concerns about the health and safety of their food supply. This has created the need for new skills related to detailed record keeping, a better understanding of issues related to handling of chemicals, and learning new processes for tracking all aspects of food production and preparation.
- **Environment** – Increasing concerns about the impact of farming on the environment has resulted in more legislation and regulations to which anyone working on the farm must comply. This requires ongoing training and communication skills to ensure everyone understands the potential impact of their actions on the environment.
- **Business** – To remain competitive, farm owners have to put more emphasis on planning, marketing, budgeting, financing and cost reduction as opposed to production. This means they require new business skills and require their workers to have the more advanced skills required to work more independently.
- **Consolidation** – Current economic trends and pressures have resulted in farms evolving from small, family-only operations to larger enterprises that require hiring of many staff. This has created the need for a skilled pool of farm workers to fulfill both full-time and seasonal requirements.
- **Technology** – Technology has crept into all facets of farm life from computerized record keeping systems to highly sophisticated equipment, including tractors, sprayers and GPS systems for monitoring of inputs and yields for different fields. The farming industry requires everyone to have increased levels of literacy, numeracy and computer skills.

A number of PEI DAFAF policies and strategies also reflect the growing need for improved learning and skills development options and programs. These include:

- Sustainable Resource Policy – Focused on the intersection of economic, environmental and community sustainability in the primary resource sector.
- Food Strategy – Focused on bringing better value to the producer for high quality, niche market products and improving branding of PEI's food image to build value.
- Learning Strategy – Focused on identifying the key skills required in the agriculture sector and to promote systematic and appropriate adult workplace learning.
- Future Farmers – A provincial government initiative to support new entrants into farming that links economic incentives to learning.

The objective of the Future Farmers program (referred to throughout this report) is to promote the entry of new farmers to the industry and improve the probability of new entrants establishing profitable and sustainable farm businesses. Farmers of the future will need access to capital, will face a more complex industry, and will engage in life-long learning. The Future Farmer program is aimed at providing the kinds of resources and services required by the next generation of farmers. There are four components of the new program.

- Education and Training – Supports training activities in such areas as business planning, marketing, accounting and sustainable production practices.
- Credit Relief – Helps reduce the costs of borrowing for applicants.
- Business Planning – DAFAF has partnered with Agriculture and Agri-Food Canada and developed an Agricultural Policy Framework aimed at providing a comprehensive business planning service with emphasis on food safety, environment, skills, learning and innovation to help PEI's farming sector move into a competitive position.
- Risk Management – Helps address the risk issues often encountered during the critical start-up phase of a new farm.

2.4 Objective

Our previous research left us with a number of information gaps. We needed to know whether farmers on PEI are easily able to make the connection between learning and farm outcomes and whether they regard training of workers more as a cost or as an investment. We needed to validate that generalist training was most appropriate and to find out what skills farmers would prioritize. We also needed to gather farmer's reactions to the idea of an apprenticeship program, to see how they might envisage such a program working on their farm and to see if they might actively participate in training apprentices and/or seek training for themselves to provide better mentorship, coaching and support.

2.5 Research approach and method

The Learning Study employed a number of different research instruments, including:

- On-farm interviews
- Group sessions
- Telephone interviews

The Designation Survey also took a multi-faceted approach, conducting surveys by fax, email, mail, and telephone.

An overview of the research method is provided in each section of this report and a more detailed description, complete with copies of all interview and survey protocols used, are provided in an accompanying document entitled: "*PEI Farm Learning Study and Designation Survey: Research Methods and Protocols, Version 1.1*", issued May 16, 2004 (The electronic file is named: "*AHRDC Report – Research Methods and Protocols v1.1.pdf*")

2.6 How this report will be made available

A summary of this report can be found at: <http://www.gov.pe.ca/af/agweb/index.php3?number=73836>

For further information or to request a copy of this report in Adobe PDF format or in print, please contact the PEI Agricultural Human Resources Development Council at (902) 892-1091.

3 Learning Study – training and skills development

3.1 Overview of the Learning Study

In this Section, we report the results of the Learning Study, which took place between August 2003 and April 2004. In interviews, phone surveys, and group discussions we asked participants what skills were important for workers to have on their farm, preferences for learning, skills they need for themselves, and whether an apprenticeship program might improve the supply of trained farm workers. We report the responses to those questions in the ensuing sections:

- 3.2 What training or skills do farmers need?
- 3.3 What training or skills do farm workers need?
- 3.4 How do farmers justify training of workers?
- 3.5 What are the concerns?

After having surveyed over a hundred farms in the Designation Survey (reported in Section 4), we recruited 85 participants for personal interviews. We interviewed 34 farmers or farm women in person, often on their farm. Eleven on-farm interviews were conducted in October and November 2003, with another 23 completed in April 2004. All interviews followed a structured protocol to formalize data collection.

In April 2004 we also conducted group discussions with 10 farm women and 12 Future Farmers.

A total of 29 interviews were conducted with farm workers, either one-on-one, in small groups, or on the phone.

The following table summarizes the number and type of participants involved in the Learning Study. Different interview types were used to target the different groups, based partly on the type of information we needed from a group, and how best to bring out that information. For a more detailed description of the method and questions asked in each type of interview, see the partner document: ‘AHRDC Report - Research Methods and Protocols.’

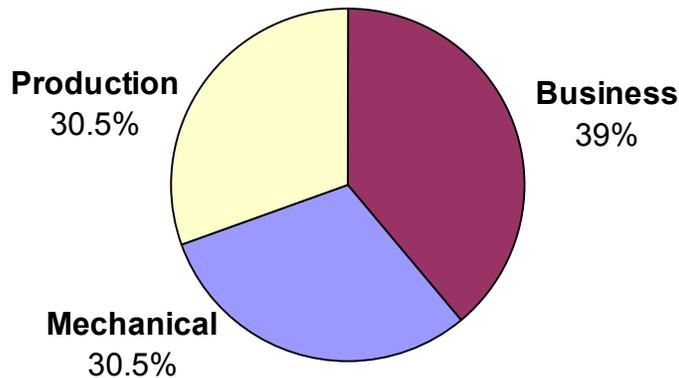
Interview type	Farmers	Farm workers
On-farm interviews with <i>farmers & workers</i> (Pilot study)	11	4
On-farm interviews with <i>farmers</i> (Main study)	23	-
Telephone interviews with <i>farm workers</i>	-	18
Large farm group sessions with <i>farm workers</i>	-	7
<i>Farm women</i> group sessions	10	-
<i>Future Farmer</i> group sessions	12	-
Total: 85 participants	56	29

We owe a sincere debt of gratitude to all the participants who shared their knowledge so openly and willingly during this project.

3.2 What training or skills do farmers need?

On-farm interviews began with a discussion of what farmers would like to learn and how they would prefer to learn those skills. We asked them to name a few areas they would like to know more about, or get better at doing. The table below shows the farmers' responses. We categorized the responses as mechanical, business, or production skills. The areas in the chart below represent the proportion of responses about a need for skills in those categories.

Skills farmers need



59 responses by 34 farmers – multiple responses were encouraged

Skills farmers said they need		
Categories of skills	Number of responses	Responses to question: “Areas you'd like to know more about or things you'd like to be better at doing?”
Business skills	12	Computers, internet, technology, data, and GPS
	8	Accounting, book-keeping, farm management, money management, marketing
	3	Managing human resources, interacting or communicating with employees
	23 total Business skill needs	
Mechanical skills	8	Carpentry, electrical, plumbing, safety
	5	Welding
	5	Mechanical, diesel mechanics
	18 total Mechanical skill needs	
Production skills	7	Animal health, nutrition, or production
	5	License to spray or drive trucks
	3	Crop production knowledge
	3	Food Safety
	18 total Production skill needs	

The responses in the right column show some of ways farmers describe their skill needs. The categories at left were imposed afterwards. The number of responses in each category gives a sense of what is on farmers' minds. The table shows how important business and technology skills are to farmers right now.

Farmers mentioned business skills when asked what they would like to know more about.

Business skills were mentioned most frequently in farmers' responses. One participant compared farms to any other small business and concluded that the key skills he needed for himself are H.R. management, organizational development, and vision or strategic planning.

A few participants identified the need for business management training. These farm operators also identified the need to improve in areas of business communications, interacting and communicating with employees, and marketing their products.

Human resource management skills, or managing people, were brought up in specific. The larger farms manage people year around. Small farms need workers at peak periods, sometimes hiring many people at a time. Several participants raised the issue that the greater problem may be managing, rather than training, farm workers. "The problem isn't with the workers", two different farmers told us.

As farms have rapidly become more like businesses, farmers have been slower to adopt people-management training. Participants suggested they should begin to "treat the farm worker job like a profession", and "have job descriptions". A few farmers responded to our picture of worker skills in a log-book, saying they need written expectations of workers.

"A list of skills in a log book would help manage workers; help the worker know what is expected of them, like having a job description."

Other participants thought these written skill descriptions would help workers plan their own future, and know what it takes to work on certain farms. One farmer gives workers "a sheet with duties; each duty written out; every week – checklist and initial."

Farmers were quick to identify mechanical skills they need – mostly in welding and basic mechanics, but also electrical, plumbing, and carpentry. One third of the skills mentioned were in this category. One farmer wanted to develop his electrical skills, not to become an electrician, but to better control the expenses associated with calling tradesmen out to the farm – adding that "the electrician makes more than I do".

Obviously, production is another important area for skills development. Farmers with livestock want to improve their knowledge about vaccinations, animal health, or feed ration evaluation. Those with crops mentioned the need to learn more about "cost of production", "field

knowledge”, and growing different crops. Other skills mentioned were associated with operating farm equipment, for example, sprayers or large trucks.

What are the preferred ways of learning for farmers?

Farmers’ preferred ways to learn skills fell into three groups: classroom, hands-on, and informal learning. Farmers often mentioned combinations that included an on-farm application of a skill – “combining farm and classroom is always nice”. This allows theory to be applied in the context of relevant farm tools and equipment. For production and some business skills, farmers preferred to learn through more unstructured ways such as interacting with other farmers.

How farmers prefer to learn skills				
		Responses to “Tell me your preferred way of learning this skill”		
Responses	Skills needed	Learn in a course	Learn hands-on	Learn informally
33	Business	42%	21%	36%
15	Mechanical	53%	47%	0%
19	Production	26%	32%	42%
67	Totals	40%	30%	30%
		Course, online course, college, university, short course, program	Do it, on the job, see a demonstration, hands-on with someone, watch someone	Books, magazines, interacting, rely on people, one to one, neighbour, groups

67 responses from 34 on-farm interviews with farmers

When acquiring new knowledge, farmers often preferred to learn theory in a classroom. For example, computer technology skills are often best suited to the controlled nature of a classroom environment where there are many opportunities to interact with other people and ask questions. Theory is a requirement for certain licenses such as pesticide application, and farmers expect to get that in a classroom. Interestingly, several farmers mentioned that the pesticide application book is now very effective and is all that is needed to adequately prepare for the applicator exam.

Participants mentioned many informal means of training: visiting other farms and reading books, pamphlets, or safety guidelines. One farm mentioned that their accounting software vendor offers support for a monthly fee, and that service has been worth the money. The interval to applying the theory is short, and thus is an effective way to learn. In record-keeping and farm management skills, participants especially need the classroom methods and the informal social support with other people in the course. Farmers are quite often comfortable learning through informal means, and are vocal about the need to apply learning quickly and on the farm. Many participants preferred to learn about production skills from reading and discussing on their own. Farmers and farm women talked about having to figure out accounting and book-keeping skills informally. People who mentioned they figure things out informally, in isolation, also prefer a little

classroom at times; one example is computer record-keeping, where one person said they have to employ all three ways - read about it, take a course, and do it. For accounting or computer skills, learners depend on the Internet or telephone support mechanisms.

Personal interaction was mentioned frequently as a way farmers prefer to keep current. To learn about cost of production, one farmer preferred to visit “model farms”. Dairy farmers mentioned they often visit “new barns – to see how other people are doing it”. They sometimes send a worker or go together. Personal interaction at conferences or events was often mentioned:

“Networking – that’s the most effective way to learn – and get a lot of support”

“You can get isolated on a farm”

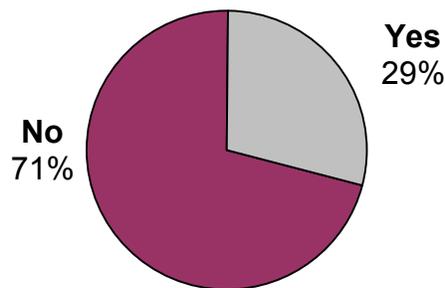
“You can’t learn anything at home unless you’re talking”

“You learn a lot in the classroom, but you learn a lot a half hour after”

Participants brought up a specific type of classroom training – the “refresher” course. Some farmers didn't like being *forced* to take an entire course over, and other farmers spoke of the need for a refresher. One example was an air brakes course. A manager said the course was good, and it taught him to deal with air brakes himself. But since he didn't apply it frequently, he lost the skills. He reasoned that a refresher course could bring those skills back. A farm woman spoke of the value of a refresher course for farm business management skills. “There are issues you miss” because they weren't needed at the time of the course. Refresher courses were appreciated because “it helps to hear it twice, it helps to repeat it”, and they require less off-farm down time for farmers or senior workers.

Most farmers do not plan to take more than five days of formal training this year.

Do you plan on taking more than five days of formal training this year?

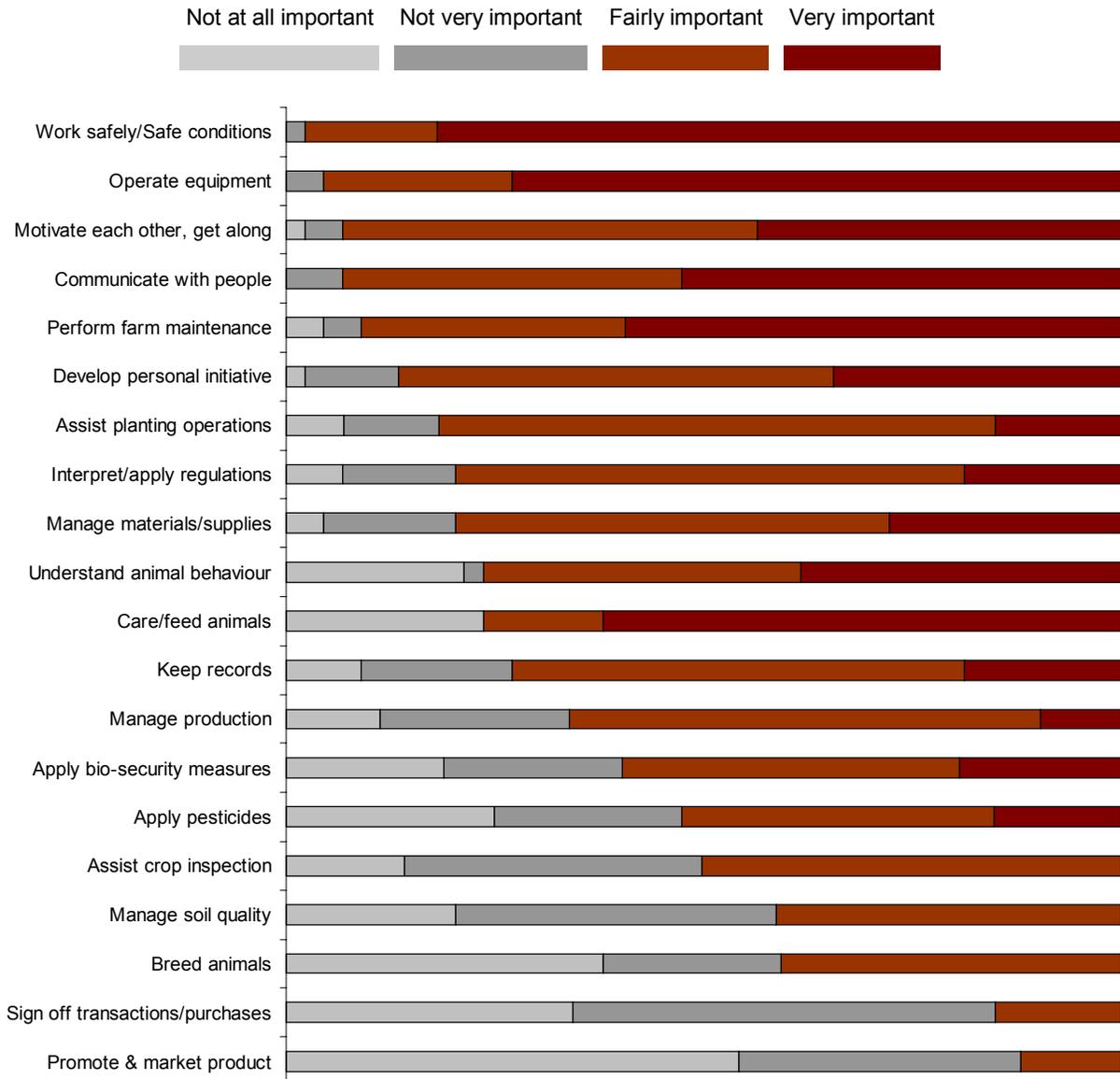


35 farmer responses

3.3 What training or skills do farm workers need?

We asked farmers and workers to rate the importance of the following list of skills for farm workers. Since some farms do not have livestock, and others do not have crops, skills specific to animals and crops may rate lower overall. The statistics in the chart and tables that follow are the responses of farmers, farm workers, and farm women. The first table shows the skills in rank order based on the number of people responding “Very important” or “Fairly important”.

Farm worker skills that are important to have on the farm



Responses from 63 farmers, farm workers, and farm women

Farmers rated safety as the most important skill for farm workers. Half of the top six skills were essential skills: “Communicate with people”, “Motivate each other, get along”, and “Develop

personal initiative”. Basic skills like safety, operating equipment, and maintenance rated more highly than specialties like breeding, crop inspection, soil quality, transactions, and marketing. In general, farmers said they value the training that is most directly related to a payback: “put training where it hits the farmer's wallet: animal health ... weight gain ... milk”.

Some skills that we asked about were not rated as highly for five main reasons.

1. All the above skills are not commonly found in a single worker – “most would jump at the chance to hire someone with these twenty five skills”.
2. Some skills are not uniformly important to all farm workers, but may apply to select workers, such as senior or experienced workers.
3. Crop skills are not quite as important for workers on dairy or hog farms, and animal skills are not important to crop farmers.
4. Some of the skills are for tasks that the farmer considered as their responsibility – “I do that” – while the other farms with well-trained workers rated the skills highly.
5. Some are specialized skills that farms hire out when needed, such as rouging or breeding. The skills of farm service companies are important to recognize, even though the focus in this report is on how to improve the supply of trained workers *on* farms.

When farmers described in open discussion what skills they need workers to have on their farm, they told us workers need to have basic mechanical skills, understand how to work safely, care for animals, know how to operate equipment or have a truck or pesticide license, and be responsible, trustworthy, and willing to work.

As farmers mentioned what skills are needed for workers on their farm, we asked how well their needs are being met for this training. We then categorized the open-ended responses by the following categories. *Production skills* include quality of work, animal care, milking, feeding, food safety, bio-security, hygiene, and operating equipment such as trucks, tractors, and sprayers. *Mechanical skills* include basic machine repair, basic mechanics, welding, working safely, and safety on equipment and around the farm. *Essential skills* include the following skill statements: “be adaptable”, “socially responsible”, “willingness to work”, “trustworthiness and telling the truth”, “communication and listening”, “work independently and take direction”. The following table shows the percentage of farmers mentioning particular skills required for farm workers and also their rating as to how well they think those training needs are currently being met.

There may be a correlation between the essential skills farmers need in workers, and the H.R. skills they need in themselves. Many farmers and farm women talked about challenges in managing, recruiting, motivating, compensating, or communicating with workers. This may be reflected in the skills they rate highly for workers. In the table below, farmers say their needs for worker training in this area are not being met. More information on essential skills for farm workers can be found at the following web site:

<http://www15.hrdc-drhc.gc.ca/english/profiles/121.asp>

Skills farmers need in workers
(mentioned in open discussion)

Skills farmers need workers to have, mentioned in open discussion	Percentage of farmers mentioning skill	Number of mentions	How well are needs met?*
Production skills – 52%			
Operate equipment or have license	14%	8	3.2
Care for animals	21%	12	3.0
Quality of work	10%	6	3.4
Food safety	7%	4	3.0
Mechanical skills – 38%			
General mechanical skills	22%	13	2.9
Work safely	16%	9	3.3
Essential skills – 10%			
Responsible, trustworthy, willing to work	10%	6	2.5
Total mentions	100%	58	

* - Mean ratings in the right column are based on the following scale:
4 = Very well 3 = Quite well 2 = Not well 1 = Not at all

A rating of three in the right column indicates that their needs are being met “quite well”. Responses show that farmers feel their needs for workers’ training are being met quite well in most categories. The one exception is in the area of essential skills. This rating corresponds with many comments about the need for workers that are trainable, willing to work, eager, etc.

In the following sections we discuss in detail some of the comments we received regarding the skill categories shown in the table plus the special skill requirements of highly-skilled workers.

Mechanical skills for workers

Safety was identified by our participants as the largest training issue. Farmers talk with employees about safety on day one and many farmers talk about it frequently with employees. “Safety training raises awareness” of other safety issues. It seems veteran farmers are even more keen to talk safety. Several farmers pointed out that safety is important throughout a workers' life because accidents can be very costly, sometimes crippling people or even taking their life.

One-on-one instruction may be necessary in tasks where safety is a consideration. A worker needs safety knowledge, but also needs safe habits. Habits take time to develop. As one participant put it, “it takes a long time for a person who is new to be safe”. Using tools safely may be learned in a course, but often needs one-on-one instruction afterwards.

“Training depends on the person. Some can go and not get anything out of it.”

“Chainsaw has to be taught one-on-one. A long time is needed to learn how to be safe”.

Some safety skills can be taught before a worker is hired while others will be taught on the farm, such as when walking new workers around the farm for the first time. Equipment safety, many suggested, could be taught as part of a basic introduction to farming. People’s comments also indicated the importance of needing to know how to act around equipment, “safe clothing around machines”, what to listen for, and “the damage they can do by not doing it the right way”. Several suggested using the safety training provided by the Agriculture Certificate program or other safety training courses.

One participant said the core skills required for workers are ability, interest, and “the knack”. By “knack” farmers meant the inclination, or ability to understand and do tasks quickly. Quite a few farmers made reference to the term “knack” or “knacky”, and said they were quick to spot someone with “knacky” inclinations either before or soon after hiring. Mechanically-inclined skills are important because operating and maintaining a wide range of equipment is part of many farm workers' tasks. Even simple maintenance skills can be very valuable, like being able to change the oil or listen to equipment for problems. Quite a few farmers mentioned the basic training needed to operate equipment, drive a tractor, or perform simple equipment maintenance. Farmers acknowledge that workers won't need sophisticated mechanical skills.

“[Worker] doesn't need diesel training – needs to change a tire without killing himself”.

Workers develop mechanical skill or inclination by experience with a wide variety of tools and methods. As someone said, “every piece of equipment is slightly different to operate” and offers something to learn. Sometimes a trained worker may need to update his or her skills because of new or different equipment, because “a lot of things with John Deere are different than New Holland”, or because “we just got a new planter. The dealer put on a seminar... good to send people”.

Many suggested that basic farm skills be taught in high school alongside other career choices offered to students. Some farmers thought that a basic course might help seasonal or part-time workers consider more full time work.

Essential skills for workers

Essential skills rated highly as a requirement for workers. Essential skills included responsibility, getting along with others, not making trouble, and ability to communicate. Farmers felt these skills were important, even critical.

Trainability is one work skill that farmers felt important to talk about on its own. “I would rather hire a worker that is trainable than a trained worker” one farmer said. It may be the most important worker ability. The way people gauge it is by evaluating a worker's positive attitude, interest level, work ethic, initiative, get up and go, and willingness to work. Trainability can be explained by how the worker's attitude can allow them to learn more: “The more you learn the more useful you are.”

Willingness to work is an important attribute farmers look for in workers. Farmers also see it as an important ingredient for learning – “the more you learn the more useful you are.” Good workers get training by “looking for things to do” and learning as they do them. Persistence is also important. As one farmer put it: “Part of training includes staying on the job and doing it”. Managers value a positive attitude for maintaining morale in the workplace.

“A worker's attitude [can] mean more work for the manager. [It can] bring down the whole crew. We had to let two go or the others wouldn't work.”

Farmers were divided about whether workers should get training before being hired. Some farmers prefer that workers are introduced to farm work before hiring them while other farmers feel compelled to train new workers even if they have been trained previously. It is not hard to see why some farmers like to hire workers that have been trained. As one said, “you can't beat a man that's trained”. But, farmers also raised downsides to new hires that have undergone re-training for a new occupation: “What kind of baggage are the re-trained workers bringing?” They say “I could do [a task a certain way] at the last place.” But a skill learned in another occupation may not be valuable, since “farm jobs are different”.

This report establishes that most farmers want to hire workers that have received some basic training although one compensating factor is the worker's attitude. Most farmers are more likely to hire a worker that is trainable and has a positive attitude than someone who is trained but has a negative attitude. Here is the way some participants described this preference:

“I prefer to take somebody untrained with a positive attitude than somebody with training and a bad attitude”

“You can train somebody with a good attitude”

“A positive [workplace] context makes for a positive worker”

“A positive work atmosphere breeds positive attitudes”

Production skills for workers

In open discussion about worker skills, production skills were mentioned most often. Farmers brought up eighteen skills related to production. Two thirds of these skills mentioned related to livestock. These skills included milking, feeding, husbandry, breeding, and observing for what is normal. It reflects other comments farmers made about:

“I wouldn't want somebody else teaching him [to milk].”

“Need patience. If you're nervous the cows are nervous.”

“Know when they're sick; a little calf will die pretty quick.”

Other skills mentioned that relate to production include food safety, quality, grading potatoes, and product integrity. Several farms have dedicated a person to food safety paperwork, tracking, and forms. These skills also include organizational abilities to deal with large numbers of files. Farmers are proud of their ability to meet standards related to quality, food safety, or HACCP. Several farms talked about the importance of quality to their customers, who audit the farm in personal inspections.

“Now food safety is a full time job. It is a lot of time record-keeping”

“We are audited; they look the place inside and out”

Production skills on crop farms include operating the equipment related to production. Operating spraying equipment is one area many farmers mentioned. Some farms operate with one or two sprayers who maintain their license to apply chemicals. Other farms encourage as many workers as possible to get their license to apply chemicals: “We get checked [for spraying licenses] every second week”

A farm worker might appear skilled to the farmer, but still need coaching. “If a worker fails [at a task], I have failed; [because] then, he's intimidated”. The skill to operate one type of equipment may not completely prepare a worker for operating a similar piece of equipment, nor for a different purpose: “a water truck is different than [a load of] potatoes”.

The courses that helped them on the farm (welding, driving, and spraying) were most useful to the farm workers. One respondent noticed the need for a course on soil erosion so that he could gain a better understanding.

Senior worker skills

We heard that, although many farm workers move on, some remain on farms to become senior workers. Some farmers used the term “senior worker” to distinguish from seasonal, part-time, or junior workers. Senior workers often have special roles on farms, although these roles vary from farm to farm. As a result, senior workers have specific learning needs.

Some workers move on

Some farm workers do not stay long on any farm. A few interviewees estimated how long a farm worker might stay at a given farm: maybe five to ten years. Farmers know that some of the best workers will be those who are ambitious and most likely to want to move on, and sometimes assist them in this process: “You don't want the employees who don't move on.” For example, one manager told about a young worker who had begun raising his own calves. Another was proud that three of his workers had gone on to college and two went into trucking after getting their license. This farmer was glad to “return the favours that were done for me”. Some Future Farmers also told us that they had been farm workers for 5-7 years before starting their own farm.

Some workers become senior workers

Other workers remain on farms and become senior workers. We encountered many farms where senior employees had been on the same farm much longer. One farm estimated that “10-20% come back the next year; for 15 years we had the same crew.” Some senior workers may be family members. Others are ex-farmers and may be very well trained and experienced.

Senior workers may identify closely with ‘their’ farm. One farmer talked about the sense of ownership that an older worker had in the farm – even after the worker had left: “...he called from the road after we laid him off to ask ‘what are we doing?’”

Senior workers specialize, some become ‘cross-trained’

Senior workers gain status through their longevity and knowledge of one particular farm. They may also gain status by increasing their skills. Some specialize in one area of the farm. One farmer said “He’s our man in the field; he never goes in the barn.” Others gain skills that are valuable at any time or place on the farm.

Workers that are valuable to the farm often have a willingness to learn, “they move very fast”, and “the better workers better themselves”. One measure of employability is how many tasks a worker can do; a worker with training in multiple tasks is more employable because they have demonstrated the ability to learn, and can change jobs when farm cycles demand it. These 'cross-trained' workers are valued on small farms for obvious reasons – a small farm has to do everything. Cross-trained workers are also valued on large farms.

Yet this ability to be cross-trained is not always valued. On small farms, cross-training is limited because of budget. On some growing farms we visited, cross-training is limited because of the tendency to divide up roles, or specialize.

The family farm, as it grows, develops an organizational structure in human ways. If one brother is better at mechanical tasks, perhaps the other brother finds a niche in the financial issues, etc. Some ways we observed growing farms dividing up skill groupings were:

- (a) Doing the paperwork versus working the field versus minding the operations.
- (b) Working in the barns or shops versus working with the crops versus keeping the books.
- (c) Involved in processing operations versus growing crops and working the field.
- (d) Making mechanical repairs versus record-keeping and doing the finances.

Good senior workers figure in succession plans

Because of their identification with the farm, their special knowledge, and their long working relationship with the farmer and other workers, good senior workers are sometimes important to succession planning. As one farmer considered how to exit or retire, he talked about one of his workers as a possible successor, rather than a member of his own family.

So, learning needs will vary within the senior worker segment, perhaps by age as one farmer suggested, by certainly by their role on the farm, and whether the senior worker has become a generalist or specialist.

What are the preferred ways for workers to learn?

In this section we discuss how farm skills are learned through hands-on, working alongside, learning together, video training, and courses. We include the perspective of the farm workers as well as the farmer.

Many farm skills are best learned on-the-job, hands-on. Farmers often value reading about new skills or learning about them in a classroom, but all participants made it plain that there is no replacement for hands-on.

“Books are a reference; hands-on is the learning”

“The book gives the basic knowledge. The hands-on gives the expertise to do it correctly without damaging the equipment”

Further, often the farmers have to train even those workers with lots of experience, because of the variability of farms and equipment. As one farm owner put it,

“If I assume the worker can operate the equipment, and he fails, and is then intimidated by it, I have failed.”

Farmers want workers to learn hands-on, but do not always feel qualified to train. They feel compelled to take on the role of trainer, because they don't always trust other people to train their employees. With the cost of equipment and repair, farmers are keenly aware of the trust they have to put in workers learning to operate their equipment. They want to be very good at evaluating a worker, and “sizing up” their mechanical inclination. They must develop a sense of when they are communicating or not. – “I look them in the eye [to make sure they understand]”. Every farm has some old technology that may be used in training workers – “just because a farm has a lathe, doesn't mean the lathe is good enough to train on.” Hands-on learning can be limited by many factors.

One common way farmers train workers is to allow them to work alongside another person performing the task. Many examples were given for this.

“I'd like to do it hands-on with someone who sells it” [learning from a salesperson who knows the product]

“On-the-job with someone who knows how”

“I'd prefer hands-on with someone leading the training.”

Working alongside someone doing the task allows the worker to see the task done right, and build confidence. Dairy farmers take the employee through the whole sequence of tasks. “We show them – it takes a long time to sink in.” A mixed farm walks the employee around the whole farm the first day. A potato farm trains truck drivers in the field by letting them drive alongside the truck actually being loaded. This working alongside allows the worker to get the feel of the speed and handling in the field.

One particular way of learning is attending events together with other employees. Farmers mentioned it in several ways. A farm with many full time workers sends more than one worker to shows and conferences. Even farmers with just one full time worker often mentioned taking a course together, going to a farm visit together, or getting a license together. The common rationale was that if people discuss what they learned, they are more likely to apply it. Another farmer put it “we all have different perspectives.” Infrequently, an event is structured just for the interaction. One example is “once a month island-wide 'bull-sessions' for crop scouts, sponsored by the Potato Board and chemical companies.” No matter what event, sometimes interaction about the learning happens off the farm, but often participants like the discussions that occur back at work. One farmer saw the justification for learning at farm shows like this:

“Employees who are interested are paid to go to farm shows. We pay, and get return for the dollar. They learn, and tell us what we might have missed. It's education.”

A recent way of training that we found was use of video tapes. We visited a few farms that have set up a room where video or other training can occur. Some farms show training videos in these meeting rooms, or send the videos home.

Farmers often mentioned that training takes time away from work. “When we get busy, there is no time for training.” Quite a few mentioned that the most convenient time for training is when things slow down. Winter courses are appreciated.

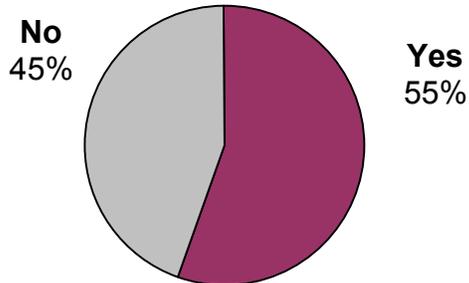
In our phone interviews, half the farm workers had taken formal courses in the last year. These courses tended to be in business or for licence requirements. Most people preferred a mix of ways to learn skills that included informal seminars, hands-on practice with an instructor, and the use of the skill on the farm.

Educational requirements for farm workers

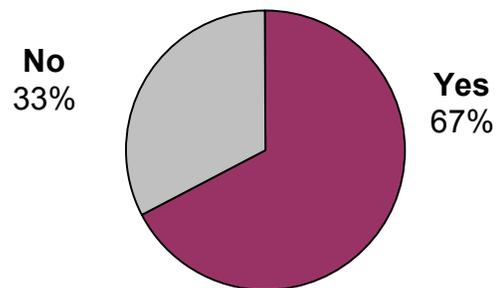
Most of the farm workers feel that employers are more likely to hire workers who have completed either agricultural college or Grade 12.

We asked farmers whether they take education into account when hiring workers. We asked farm workers whether farmers take it into account. Most of the farm workers feel that employers are more likely to hire workers who have completed either agricultural college or Grade 12. Altogether, participants responded that education level is not always taken into account when hiring a farm worker. But, agricultural education does increase the likelihood of hiring that farm worker. When asked specifically whether it would impact a hiring decision, this is how farmers and farm workers responded:

More likely to hire farm worker who has completed high school?



More likely to hire farm worker who has attended an agricultural school?



Combined responses of 34 farmers and 21 farm workers

The most frequent reason given for farmers preferring some education in new-hires had to do with the necessity to read instructions on chemical packaging. The ability of farm workers to read has become increasingly important as the liability associated with the use of chemicals has risen.

3.4 How do farmers justify training of workers?

What are the perceived benefits of a trained worker?

Benefits ranked by number of responses to: “Here is a list of benefits people say they get from having trained workers”	Participants responding to “Which of these benefits have you seen with your workers?”
Less supervision	54%
Efficiency, cost savings	48%
Preventing unnecessary risk	48%
Protecting investment	46%
Earlier detection of problems	46%
Keep business reputation	46%
Less equipment breakdown	43%
Accurate field reports	38%
Easier to find workers	33%
Ability to expand business	30%
Better yield or production	30%
Regulations or requirements	25%
Making time for other planning	24%

Combined responses of 63 farmers, farm women, and farm workers

The benefit of less supervision is the most highly rated for having trained workers. The payback shows up in other important benefits – such as efficiency, preventing risk, and protecting investment. Many farmers talked about the payback of training employees how to work safely. Around equipment, the cost of an untrained employee can be measured in serious human terms. Farmers mentioned numerical impacts to knowing safe work habits too. Equipment is costly to repair, and downtime can be costly as well. As these farmers said:

“It's not hard to get in trouble [on equipment]. A few thousand hours can disappear awful quickly”.

“If they break a piece of equipment it can cost a couple days and be very frustrating.”

“It is costly to get a guy out from the dealer”

“Better to learn the safety here [on our farm]. We can't afford to fix things. When you go to trade [equipment], it's better to have looked after it.”

Many farmers talked about the payback of training employees how to work safely. Equipment is costly to repair, and downtime can be costly as well. As these farmers said:

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“It is costly to get a guy out from the dealer.”

“Better to learn the safety here [on our farm]. We can't afford to fix things. When you go to trade [equipment], it's better to have looked after it.”

Future Farmers were articulate about how to justify training workers, perhaps because they have been on both sides of the paycheque. They recommended focusing on training that has a direct impact on the farm's bottom line. Some specific mentions were truck driving, animal health, and weight gain. Here is how some participants worded it:

“A worker has to know the consequences – what comes in and what goes out.”

Workers know that “if the farm isn't doing well then I won't do well.”

“Everybody understands money. He knows if I am losing money, his paycheque is at risk.”

Many farmers appreciate government programs for making it financially feasible for farms to encourage employees to improve their skills. But many farmers were also vocal about the negative impact of training non-employees through unemployment insurance. This issue evokes sensitivities that we discuss elsewhere. Here are some comments to put this in the context of how the farmers make decisions about training.

“The problem with a lot of government programs is you have to be on unemployment insurance.”

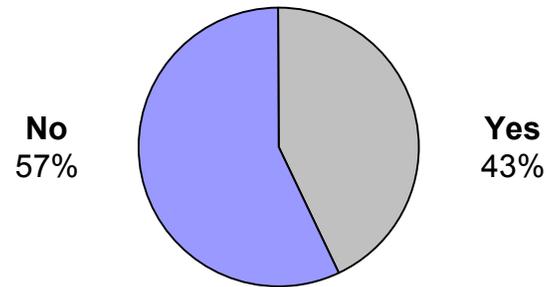
“The problem with some training is that the boys have to be laid off to be eligible.”

“If [training] is in the category of EI will you get the workers that want to farm, or the ones that don't qualify for anything else?”

“We send people on training, not on unemployment.”

By the responses we received from farmers and farm workers, training is not an annual event. Less than half of the workers we interviewed have taken training in the past year, and similarly, less than half of the farmers responded positively to the question whether any of their workers have taken training in the past year.

Have workers taken training in the past year?



Combined responses of 34 farmers and 21 farm workers

Farm workers provided comments about the benefit of such training to the island. The benefits can be summarized in three statements:

1. get people back into farming
2. provide security to workers regarding wages or health plan
3. provide economic assistance for farmers to afford workers.

3.5 What concerns do farmers have about training?

This section discusses the concerns farmers raised about training and training programs for farm workers.

Can't find out who is available as a trained farm worker

Farmers have difficulty getting access to information about available skilled short-term 'relief' workers that have the training they need – e.g. with milking skills. Farmers told us that relief workers cannot be cheap labour. There is too much at stake. Here is how one dairy farmer cast the dilemma:

“I had an injury and needed a relief milker. [it cost me] two hundred litres a day. The relief milker missed cows. Some cows got mastitis.”

Farmers mentioned the need for an occasional relief worker for many different situations. Many farmers need someone to look after the farm while they are away. One farmer had been laid up and needed a relief worker for weeks. Addressing the need for trained relief workers may be one way of solving the difficulties farmers have in finding trained workers. Management of a shared labour pool would allow smaller farms access to skilled labour for which they could not provide full-time positions.

Government programs attract workers away from farm jobs

Farmers often commented that with low returns, farm wages cannot compete in certain areas. Government was often identified as offering high wage employment that attracts potential farm workers; in directing workers away from farming; or simply not being helpful.

One farmer said that he feels government “...does not encourage people to work on farms – they push for higher education, so farmers have to go with migrant workers.”

Some other similar comments we heard were:

“I called my MLA about the worker shortage and got nowhere.”

“Government pushes workers into different fields like manufacturing and other industry or government work. No farmer can compete with those wages.”

“Farming is hard work. No one wants to do it if these other jobs are available.”

Some felt that government might look at alternatives to apprenticeship:

“If the government wants to help PEI farmers, they would be better to top off wages that the farmers are able to pay our workers. That way more people might go into farm work again.”

Some suggested that government solutions might be in dealing with much larger issues:

“Cheap food is coming into the country from Mexico, Argentina, China... These undercut PEI farmers because even the low wages the farmers pay are still hugely more than workers from these countries earn to make their produce cheaper.”

Low wages, low returns – cost vs investment

A major concern was the farm profitability necessary to provide jobs for trained workers. Some farmers perceive a ‘vicious circle’ of low farm wages attracting poor workers, with poor productivity, leading to poor returns, meaning that farmers cannot offer higher wages.

“Decent wages are hard to give because of low returns on produce... it’s a vicious circle.”

“It’s difficult to find good workers because of low pay – you must pay good workers more to keep them – the others don’t do as good a job.”

“I see no way out of this conundrum without some kind of wage subsidy.”

“Wages for farm workers are too low so people don’t want to get into this line of work. We need to raise the pay but can’t afford to because there’s so little return on commodities.”

Some farmers try to break this cycle by providing incentives to workers who remain longer, or by seeking out a few key workers – lead hands – to whom they offer higher wages. Some manage to view at least some of their best workers’ wages as an investment:

“When she’s in the barn, I’m in the field looking after next year’s product quality.”

3.6 Summary of Learning Study findings

Summary of Skills Needed

In summary, we found that farmers need to keep up their skills related to the business, mechanical, and production tasks they face day to day. Business skills dominate the areas in which farmers want to improve their skills. They mentioned human resources skills such as how to manage people, confront performance problems, and motivate and train workers. Other business skills involve taking financial risk, finding new markets, justifying niches, and packaging for clients. Mechanical skills farmers would like to improve are in general areas such as welding, electrical, equipment operation and maintenance, and licenses. Production skills they desire include managing input costs and cost benchmarks, productivity, and regulations.

Farm workers were more interested in learning mechanical skills such as welding and equipment operation. Farmers would like workers to have essential skills and basic skills. Half of the top six skills were essential skills: communicating, motivating or getting along, and initiative. Basic skills like safety, operating equipment, and maintenance rated highly. Specialties like breeding, crop inspection, soil quality, transactions, and marketing were rated as important, but less so. In general, farmers said they value the training that is most directly related to a payback. Safety is the largest training issue, requiring training day one, daily reminders, and updates throughout a workers' life. Trainability and attitude were the most frequently-mentioned attributes of workers, affecting all other skills, including work ethic, initiative, and interest level.

As for their preferred method of learning, farmers are like other small business owners. They may not think in terms of what education they might take, but they are always thinking of areas to know more about, or skills to improve. Farmers we spoke with learn by informal means, hands-on means, and by taking courses. They talk with other farmers to keep up; they read magazines; they attend exhibitions, visits, conferences, and shows. Informal learning takes place in interaction too – “I learn more at the coffee pot afterwards”. Courses and seminars are good sources of theory. Farmers do value the classroom for business and mechanical skills, if courses are convenient and can be applied soon after.

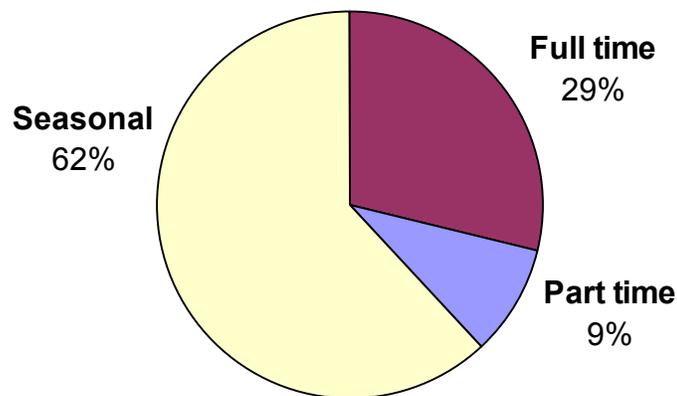
Farmers justify their investment in training workers in terms of payback. Some of the top-rated benefits were: less supervision; efficiency, cost savings; preventing unnecessary risk; protecting investment; earlier detection of problems; maintaining the business reputation; and less equipment breakdown. However, more than half of farms had not sent workers for training in the past year.

Implications for skill development in the labour force

The PEI 28th Annual Statistical Review (2001) says there are 4,000 employed in agriculture, on about 1700 farms. HRSDC's Labour Market Information web site says that about 1600 of these are employed as farm worker, NOC 8431.

Based on our Designation Survey, the labour force of farm workers is presently made up of 29% full time farm workers, 9% part time farm workers, and 62% seasonal farm workers. Each of these segments could be seen uniquely, regarding the need for training and skills development.

Estimation of PEI farm worker labour market



Based on 111 responses from employers of farm workers

There is mobility between each segment. Farmers told us that often their full time workers come from the part time employees. At times, seasonal workers become trained enough to become full time workers. We heard more comments, however, that seasonal labourers are not as likely to seek year-around work.

In skill development terms, this implies that the Province could organize programs to uniquely serve the segments of the labour force. Doing so would reinforce the mobility within the segments, and align the labour force with farmers' needs. The part time workers could be seen as a prime target for apprenticeship training. Full time workers could be a target for skill upgrades or lifelong learning, eventually building on apprenticeship credentials. Seasonal workers could be candidates for introductory or pre-apprenticeship training.

A missing piece of the labour force is the segment not yet employed but likely to seek employment in farm work. This includes high school students who are considering careers in agriculture, such as high school Ag Certificate students. While they are gaining part time or summer experience, they could be gaining recognition for skills learned. This body of learning could be recognized as qualifying for hours within a future apprenticeship.

How do we improve the supply of trained workers?

Going into this research, we were aware from farmers that they have difficulties finding trained workers. Here is a summary of what farmers have said might help, in labour market terminology. Any training program needs to support the mobility of labour upward. This may result in good workers receiving more pay, something individual farm employers may not receive eagerly. But the upward mobility of highly-trained workers is necessary to create demand for basic-skilled workers. As one farmer put it, “the better workers better themselves.”

Another thing that will improve the supply of trained workers is raising awareness of farm work opportunities amongst Island youth, in high schools, and through career-counsellors. This could include academic credit in high school for work placements, or get farmers in front of classrooms. “Place kids on a job to learn work skills.” Overall comments pointed to this as activities that will raise the image of farming as a career and a preferred lifestyle.

Whatever program is chosen, many participants commented about the need to build a positive attitude. This includes comments about a positive workplace attitude, which helps make for positive worker attitudes, building morale in the labour force, and avoiding negative attitudes that affect production.

One practical recurring theme for improving the supply of trained workers was the coordination of relief workers. Farmers expressed this as someone or some service supplying reliable workers with which they can entrust the farm while away or on vacation, yet which will not affect production or animal health.

A tangential idea came up several times to improve the supply of new workers. Ideas included attracting off-island workers, foreign workers, and new types of workers that will bring new ideas. The program to bring in Newfoundland workers was seen as a practical idea. Another suggestion was to create an immigration policy to encourage the influx of new types of farm workers.

Finally, farm families are an important asset in improving the supply of trained workers. Input from participants ranged widely on the need to help farm kids consider farming as a career. “Tackle the people who are exposed to it already but not interested.” “People who work on farms aren’t kids of people in town.” Training plans for family members could be encouraged as part of succession planning. Yet a number of participants say they need more explicit succession planning, and the new generation have new expectations: “Not knowing what’s going to happen is the worst thing” – “How can you plan?” Any training program needs to equip the next generation of farmers, including farm family members.

Provide a labour pool and/or relief workers

This idea came from many people in response to many different situations: “This program might provide a good 'bridge' for workers and employers to connect.”

Interviewees told us:

- Access to information about what trained workers are on the island would be useful.
- Access to information about available skilled short-term ‘relief’ workers would be valuable.
- If modular, apprenticeship could provide specific skills for a short-term labour pool, or relief workers – e.g. with milking skills.
- Management of a shared labour pool would allow smaller farms access to skilled labour for which they could not provide full-time positions.

One farmer asked if there was a place to get names of trained individuals. He felt this might be more valuable to farmers than the apprenticeship program itself.

“We have just searched through H.R. for a worker and this would have been helpful as we would have had access to people we know were interested in farm work.”

- Some farmers could see the value in cooperating over labour
- Many see the training they do as benefiting other employers
- Some see training as preparing employees for other careers, and are proud of it - e.g. “He became a long-haul trucker because we sent him.”
- Networking with non-like industries helps find good seasonal workers
- Networking with other farmers saves hiring time
- Holland College had a farm worker labour pool. A study by Matheson recommended a labour pool. “Seasonal Agricultural Labour Issues in Prince Edward Island”, Matheson Consulting, Ltd, for PEI Agricultural Human Resources Development Council and the Canada / PEI Labour Market Development Agreement, February 28, 2003.

There are barriers to innovation in farming

In our discussions with Future Farmers, we came to understand that barriers exist to innovation in farming on PEI. We heard evidence of two related systemic barriers.

Some farmers are trying to bring innovation to their business, for example, by trying new crops, finding new markets, or even new kinds of business activity. However, the banks who lend farmers their investment capital are naturally conservative, and need to see a good, predictable Business Case. Commodities provide the predictability needed by bankers. Niche markets and innovation do not provide the solid Business Case prediction data that banks need.

There are barriers to innovation in farming just as there are in other industries.

Similar systemic barriers exist even in traditional areas of farming. Banks and farmers will use publicly-available figures for their Business Case calculations. For PEI, these tend to be averages across the Island. Often, there are no figures for PEI. Even farmers with acute business skills cannot argue the case for their specific farm because comparative figures are not available. One farmer complained that he had to use figures from Manitoba farms to argue with the bank.

The same group of Future Farmers suggested that there might be ways for PEI farmers to share information that would help each other, but still retain anonymity – for example “Our accountants could share the data.”

There may be opportunities to bring farmers together to discuss the information that would best help them – particularly in Business Case development – and to work out ways of providing this information. Government may have a particular role as a ‘neutral’ party.

4 Designation Survey and apprenticeship findings

4.1 Overview of Designation Survey

In this section, we report the results of a survey conducted to provide input to an activity focused on having 'Farm Worker' designated as a trade. In addition, we provide comments specific to issues of apprenticeship from the on-farm interviews and group sessions that were part of the Learning Study.

For the Designation Survey, we conducted 111 surveys with farm employers to determine their support for a proposed 'Farm Worker' apprenticeship program. Several media were employed, including fax, email, mail, and telephone. Method details are provided in the partner document: 'AHRDC Report - Research Methods and Protocols.'

The Designation Survey was necessary to give the Department of Education's Apprenticeship Board an understanding of the farming community's perspective on a potential 'Farm Worker' apprenticeship program. It was specifically designed to provide data for the application for Designation as a Trade. Most of the quantitative data in this section comes from the Designation Survey, while additional qualitative comments come mainly from the Learning Study.

A total of 111 farmers participated in the Designation Survey, comprising more than two-thirds of the estimated population of PEI farms who employ farm workers. The survey was done to establish the level of support for apprenticeship, but it also offers some valuable statistics about the labour force.

We report the survey results in order of priority to the client, rather than in the order in which we asked the questions. We did not want to ask important questions about levels of support until we had covered some context-establishing questions. This was to ensure as far as possible that responses to the priority questions were considered opinions, in which some relevant issues had already been thought through by the respondents.

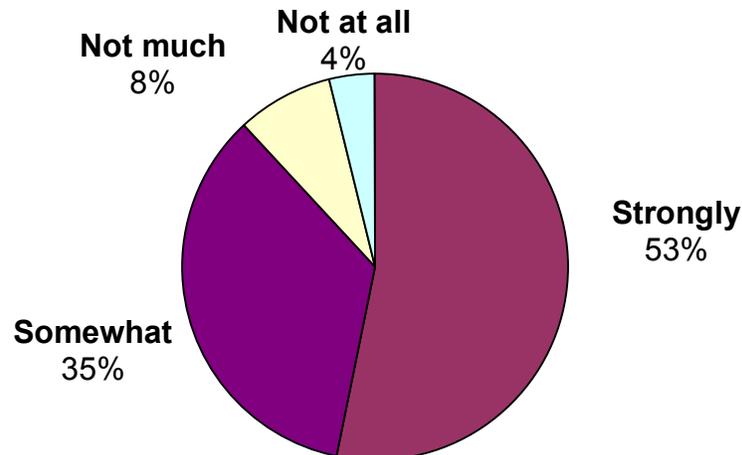
In this section, when we refer to a question number, we are referring to a question within the Designation Survey. For the complete survey as it was faxed to participants, see the partner document: 'AHRDC Report - Research Methods and Protocols.' For a summary of the quantitative results from the Designation Survey refer to Appendix B.

4.2 What level of support is there for apprenticeship?

Level of support from farmers

Support for an apprenticeship program was very marked, with 97 interviewees (88%) stating that they would support a ‘Farm Worker’ apprenticeship program either “Strongly” or “Somewhat.”

Level of support for Farm Worker Apprenticeship



88% of farmers would support an apprenticeship program either “Strongly” or “Somewhat.”

Support for apprenticeship has dependencies

However, not surprisingly given the early stage of apprenticeship program planning, many of the farmers described dependencies for their support based on how the farming community’s concerns are addressed. Once more details regarding the implementation of the apprenticeship program become available, more accurate estimates can be made.

Details of farmers’ concerns are described in a later section. The most important categories on which support is dependent appear to be:

- Funding and incentives – including workers’ wages and serious concerns around EI
- Training content – balancing generality with the specifics needed by a particular farmer
- Practicality of the training – fitting in with the daily and seasonal needs
- Who is involved – which workers, trainers, managers, assessors, etc.
- Effect on the labour pool costs and availability of good workers

- Overall program organization – many farmers have a distrust of government’s ability to implement even good ideas. One farmer said: “I would not support the program if the butt of program dollars were to go to professionals for their training.”

Some farmers’ support is dependent on getting more information about the program – so their support could increase. Other farmers would need to see how the program works before being sure of their support: “It must be done right” was the simple summary.

4.3 Who doesn't support apprenticeship?

13 farmers said that they would support apprenticeship either 'Not much' or 'Not at all.' We had noticed what could be a constellation of related opinions about farm workers – that more junior workers just need to be reliable, motivated, and able to learn; and that the farm does not demand a great deal from their workers. This could lead these farmers to conclude that there is no value at all in an apprenticeship program. We looked at correlations between lack of support for apprenticeship and answers to other questions to see if we could characterize this group. We saw some trends, but little statistical significance.

There were only 3 questions on which these farmers deviated to any great extent from the average responses. They were as follows:

Farmers who didn't support apprenticeship tend to have fewer workers. The mean number of full-time workers for the sub-group was 1.1 whereas the overall mean was 3.2. This has to be taken carefully though as a few large values elevate the overall mean significantly. If we remove the 3 farmers who have 20, 25, and 50 full-time workers, then the mean drops to 2.4 which is a more reasonable comparison. So we could say that farmers who don't support apprenticeship generally have less than half the average number of full-time workers. There are no real differences for part-time or seasonal workers.

Perhaps not surprisingly, the mean for the number of workers that this sub-group would send on apprenticeship indicated they would essentially not send any, giving a rating of 1.1 (1 = none) versus 2.2 (2 = 1 worker) for the total sample. In fact, only one of these 13 farmers said that they would consider sending a worker on an apprenticeship program.

Farmers who do not support apprenticeship intend to hire fewer workers. For this same group, the only other interesting characterization was the number of full-time people that they plan to hire over the next 3 years. Their mean was 0.2, compared to the sample mean of 1.2. Only 2 of the 13 people (15%) indicated that they plan to hire, compared to 44 of the 98 (45%) remaining farmers (who support apprenticeship).

So we might conclude that farmers who do not support apprenticeship, or do not support it strongly, tend to have fewer workers, and intend to hire fewer workers, than the rest of the population of farmers. They would also not send workers on an apprenticeship program.

4.4 How many apprentices might there be?

Collectively, the following questions from the Designation Survey provide us with an indication of the size of the population of potential apprentice candidates, at least in the short term. These figures also provide valuable information about the PEI labour force. For more details on responses to these and other questions see Appendix B.

How many workers are in the labour force?

Survey question	Workers employed by our sample
Could you tell me how many full-time workers you have on your farm – that is, people who work more than 30 hours per week for more than 40 weeks during the year? This may include family members.	351
How many part-time farm workers do you have on your farm – that is, people who work less than 30 hours per week, for more than 40 weeks during the year? This may include family members.	110
What is the maximum number of seasonal workers you employ at any one time? Seasonal workers are workers who are employed for less than 40 weeks in the year.	750
How many full-time workers do you expect to hire over the next 3 years?	127

30% of farmers stated that they had no *full-time workers* on their farm. 23% reported having 1 full-time worker, 15% had 2 full-time workers, and 32% had more than 2 full-time workers.

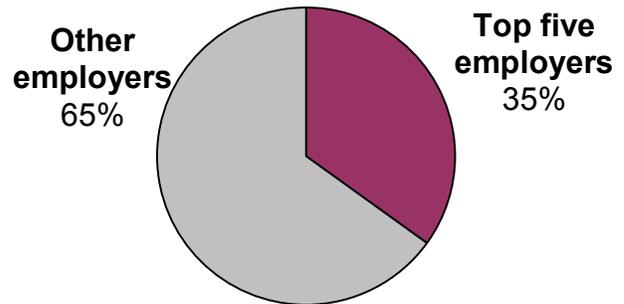
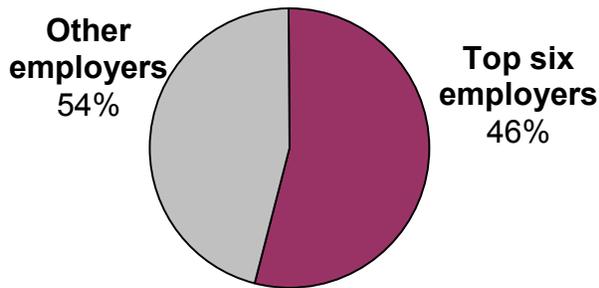
Almost all of these PEI farms employ few full-time workers – and foresee remaining this way.

The 6 biggest employers we surveyed reported having 12, 15, 20, 25, 40 and 50 full-time workers. The 111 farms in total employ 351 full-time workers. The implication is that amongst farms active in the labour market, almost half of the full-time labour force is employed by 6 large employers, or employers with more than eleven full-time farm workers.

**Percent of labour force employed by large farms
Full-time vs. seasonal workers**

How many full-time workers are there on your farm?

How many seasonal workers are there on your farm?



We believe large farms will be particularly important to the success of an apprenticeship program on PEI. The trend to increasing farm size continues. The evidence shows that large farms employ about half the full-time farm workers on PEI. They are more likely to have supervisors and formal staff training programs. They are more likely to have the ability to free up workers for the periods of time required for classroom learning. They are more likely to be users of modern equipment and techniques.

We found a correlation between the number of full-time workers on a farm and the number they would send to apprenticeship ($r=0.31$). We also found a correlation between number of employees and the number of workers a farmer might send on apprenticeship. Thus for the farms with 10 or more full-time hires, they reported a mean number of people to send of 3.71 versus the sample mean of 2.2. If we look at the mean for farms employing 5 or more full-time workers, the mean drops to 3.19. The standard deviation for this sample is high at 1.15 so only the 3.71 value is getting close to being statistically significant.

As we saw earlier, farms with fewer employers who plan not to hire over the next 3 years will also tend not to send workers on an apprenticeship program.

Part-time workers

56% of the farmers who replied stated that they had no *part-time workers*. The remaining farmers employ 109 part-time workers in total, with a maximum of 10 part-time workers on one farm.

Seasonal workers

80% of the farmers interviewed employ a total of 750 *seasonal workers*. Farm needs for seasonal workers vary widely: 17% of farms employ no seasonal workers, while 14% of farms reported employing more than 10 seasonal workers. The top 5 interviewed employ 25, 25, 37, 75, and 100 seasonal workers.

Hiring expectations

The farmers who responded to the question on hiring expectations indicated that a total of 127 new full-time workers will be hired over the next 3 years. However, 56% of the farms do not expect to hire any new full-time workers at all. Only 4% of farms expect to hire more than 5 full-time workers in the next 3 years.

How many workers might become apprentices?

To help estimate the viability and size of a 'Farm Worker' apprenticeship program, farmers were asked how many workers they might consider sending on such a program over the next 3 years.

Despite uncertainties about the nature and costs of an apprenticeship program, farmers were willing to provide an estimate.

Although 32% of farmers said they would not send any workers, some pointed out that this reflected current economic conditions, rather than a lack of support for the program.

As another estimate of support, 63% of farmers indicated that they would consider sending one or more workers into an apprenticeship program in the next 3 years.

If we take the conservative view that "More than 2 workers" means "3 workers", and that "Don't Know" is 0 workers, then the replies suggest that the farmers interviewed would consider sending 113 apprentices on a 'Farm worker' apprenticeship program over the next 3 years.

How many workers would you estimate that you might send on 'Farm Worker' apprenticeship training over the next 3 years?	Percent	Count	Number of potential apprentices
No workers	32%	36	0
1 worker	36%	40	40
2 workers	15%	17	34
More than 2 workers	12%	13	39
Don't Know	5%	5	0
TOTALS	100%	111	113

There is potential for 113 candidates for apprenticeship over the next 3 years.

We assume that the actual number of workers that farmers would send on apprenticeship would be significantly less than this figure. We reason that farmers have responded to this question on the assumption that any concerns they had would be fully resolved. As we found, farmers have many concerns about a potential apprenticeship program, and their support has dependencies. Any implementation of a 'Farm Worker' apprenticeship program will not satisfy all concerns of

all farmers, thus reducing the amount of support and the number of apprentices. In addition, we feel that numbers will be less when the decision has to be made in consideration of letting good workers off the farm under tough business conditions, rather than in response to a survey question.

Some farmers gave an idea of the issues they would take into account in making this decision:

One farmer said: “As apprenticeship training would drive up worker's wages, I would only send 1 or 2 - those workers who were committed to the farm long-term.”

Another farmer indicated that he was enthusiastic about sending family members (e.g. his 14 year old son who could benefit from classroom training in things like accounting and be able to help his father out).

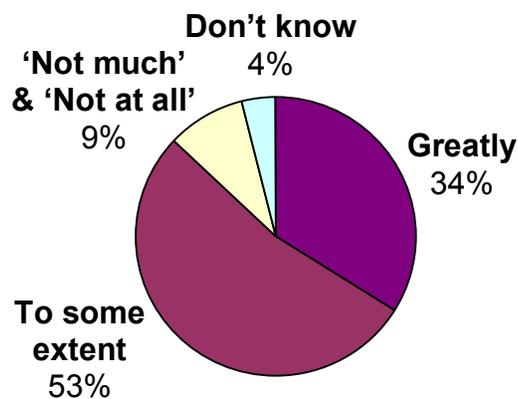
4.5 What are the perceived benefits of an apprenticeship program?

In the Designation Survey, farmers were asked about the benefits an apprenticeship program might have for the PEI farm community; whether it might help them hire or train better workers; and where apprenticeship training might provide the most benefits.

In the on-farm interviews, farmers also expressed their views on potential benefits.

How much would apprenticeship benefit the PEI farm community?

Farmers' perceptions of level of benefits to the PEI farm community



87% of respondents felt that the PEI farming community would benefit either "Greatly" or "To some extent" from an apprenticeship program.

When farmers explained their position, it became obvious that different farmers see the value of such a program in different ways:

"If we can get kids interested in farming again, rather than leaving for other work..."

"This program might provide a good 'bridge' for workers and employers to connect."

"There is a niche market for this program – to find out who would want to enter into farming."

Although there were only a few farmers and workers with experience of apprenticeship and/or other longer-term training programs, they seemed generally to be more supportive than other interviewees. They felt that apprenticeship had made them much more capable and valuable. One person said he would never have been able to set up his own farm:

“I took an apprenticeship program 23 years ago. It helped me get to start my own farm.”

“I took an automotive course in high school and it saved me from being a drop-out; I went into farming. But the [automotive] program is no longer offered.”

One young farmer who had attended horticultural college said that he had “found it very useful”. As a result, he would like to see something like an apprenticeship program “to raise standards for farm workers and for their image”.

Some farmers provided caveats:

“Not as much [benefit] as 15 years ago – 15 years ago there were big turnovers. Now, when you're hired on a farm you stay there for 30 years”

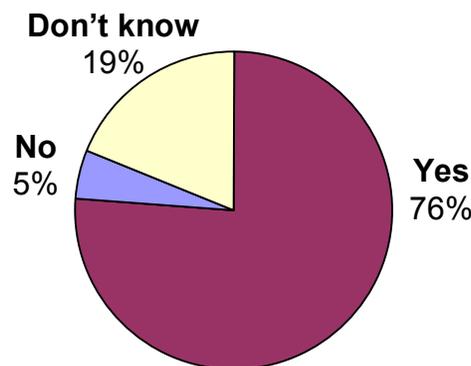
“It depends on WHERE the emphasis is in the program – it must focus on the management level. Farmers are NOT good managers of workers – they lack the soft skills, then blame the workers for doing a poor job.”

“The program could be very valuable – if done properly.”

“It would be a great benefit if the person is serious about full time work – but not if all he wants is to qualify for his unemployment insurance and then leave.”

Would apprenticeship improve the supply of trained workers?

Would apprenticeship help hire or train better workers?



76% of farmers who employ feel that an apprenticeship program will help them hire or train better workers.

In the on-farm interviews with farmers and workers, most participants responded that the apprenticeship program would help farms get better workers. Participants had only a few sentences about the program to base the decision on at this point in the interview, but made the following kinds of observations:

“This person would know what they’re doing – you’d spend less time on training, there’d be less chance of accidents, you’d be more able to leave them unattended.”

“I would jump on people that already knew how to handle milking machines, etc.”

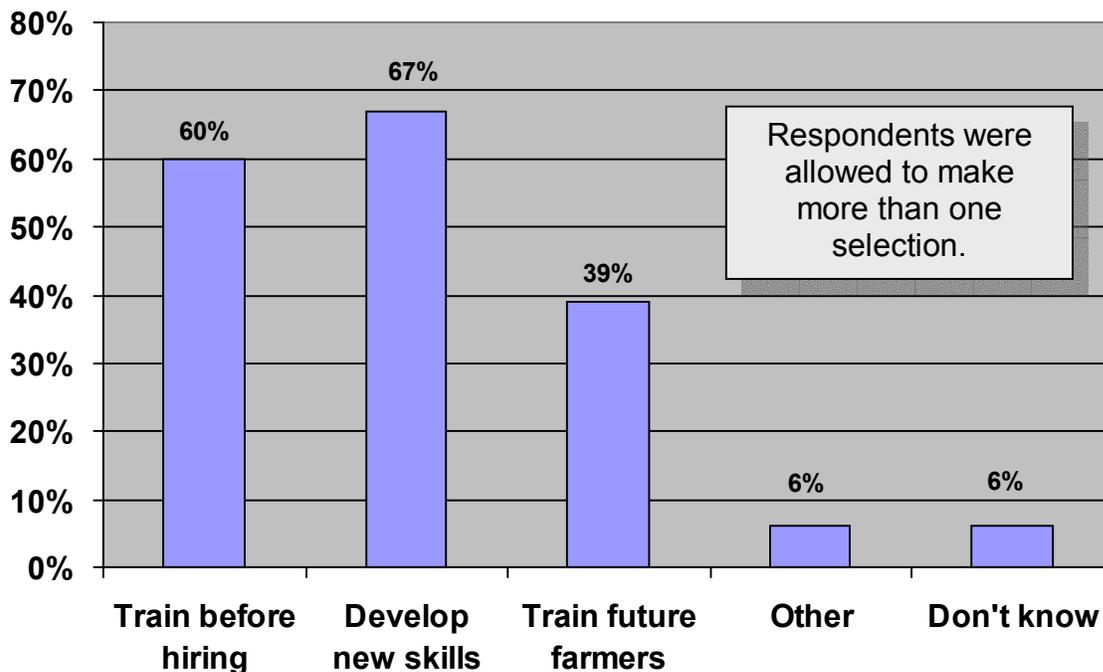
“The program would set some standards so farmers would know what they were getting.”

“If a worker has gone through the program he would know what is involved already so he would be more likely to stay for a long term.”

Apprenticeship benefits – before hire, new hire, experienced worker?

In the Designation Survey, farmers were asked where apprenticeship might provide the most benefits. They were given 4 options, from which they were allowed to make multiple selections.

Where would apprenticeship provide the most benefits?



60% of farmers felt that apprenticeship training would provide benefits before a worker is hired:

“Training before hiring is always an advantage.”

“It would provide farmers with skilled workers.”

“If someone was committed enough to go through the program, then they are motivated and committed – so less likely to leave – more dependability.”

Even more farmers (67%) suggested that apprenticeship training could be a way of developing new skills: “You could be trained to work in a different area of the farm.”

One farmer suggested that these two aspects of apprenticeship might go hand-in-hand: “Training should be done in two parts – an introductory part before the worker is hired and then more training later on to develop skills after they have been working for a time.”

Fewer farmers saw apprenticeship training as benefiting the training of the next generation farmers: “It... would be beneficial for a student to aspire to run his own operation.”

Apprenticeship might provide the benefits of formalizing farm practices

Some farmers and workers talked about the value of formalizing their practices. Quite often this had not been initiated wholeheartedly by farmers, but had been necessary to provide stricter safety, through implementation of HACCP etc:

“We're going thro' HACCP & ISO – we have lots of checklists e.g. Daily Premises Inspection Report...”

“We have some production records, herd health and vaccination on each is just starting.”

“We do preventive maintenance... Everything is written down, everything has to be measured. Each employee has their job.”

“The egg industry has started the ‘Start clean/stay clean’ (HACCP-based) program... with monitoring clipboards – with checklists we have about 100 around.”

But farmers and workers had perceived that – despite the extra paper-work – there was value in recording their activities. Sometimes it means that farmers do not have to manage a worker so frequently during the day:

“When we started writing stuff down for HACCP it saved a lot of time. It was easy to understand.”

Sometimes the benefits to farmers are even more direct:

“Now we get inspected it's easier to get new clients [because they know we have externally-verified quality standards.]”

“We have a log of recording milk temperatures. It is all about sequence. I would have forgotten it if it wasn't.”

The formalization of farm practices that is taking place may help provide specific modules of a farm work apprenticeship, by taking advantage of the processes and records that farmers have developed.

Other benefits of apprenticeship

Farmers and farm workers suggested a number of other benefits of apprenticeship.

Apprenticeship might produce more trusted and reliable workers

A common theme in farmers' discussions of worker characteristics in both the Designation Survey and the Learning Study was the need for reliable, motivated workers who are able to learn. Some farmers saw apprenticeship as one approach to providing a pool of good workers; for example, in training employees to run the farm while they're away, or even providing a measure of trust when bringing in someone new.

Certainly, farmers felt that certification would provide an employer with a level of confidence that a worker was able to learn, had some ambition, and could persevere:

“It would help you in identifying the workers – his skills and what he's capable of doing.”

An apprenticeship program might show farm work as a career

Farmers identified the image of “farming as manual labour” as a barrier to young people choosing farming as a career. Some saw apprenticeship as a means to showing farming as a professional trade and a viable career.. One farmer said: “There is a stigma attached to farm labour now which stops many individuals from taking it up as a vocation” The same farmer felt strongly that “This type of program would raise the esteem of workers and raise their value in the eyes of other people.” Another said: “It would improve the overall image of farming and farm work in the community.”

Apprenticeship might focus students on a career and reduce the school drop-out rate

Some farmers indicated a mismatch between the learning styles suited to farm workers and the teaching practices in schools. This systemic issue is discussed more fully in Section 4.7.10 *Learning styles and education.*

Farmers and workers feel that there are children – and adults – who do not work well in the typical academic style of learning in schools. Some felt that apprenticeship might help address these issues by offering less-academic alternatives: “It should be offered to high school students who would otherwise fail out because they are not suited to an academic setting.”

Some see an apprenticeship program as a way to encourage high school kids to consider farm work, and at the very least as a way for students to find out if farming is for them. One pointed out that “It's better to put someone off farming at 19 than at 27.” Some expressed the hope that apprenticeship might actually encourage academic learning, and reduce school drop-out rates. One worker noted that academic requirements are being raised even for basic employment: “There are still a lot of people who don't have their Grade 12. It's getting so even to get your application into Cavendish you need Grade 12.”

Another worker said: “It might stop a lot of students dropping out of school. You hear them say ‘When am I going to use algebra?’” The worker noted that math, including algebra, and good

English, are all necessary on farms for tasks like mixing feed, applying pesticides, and for monetary transactions, etc. These workers felt that apprenticeship might provide value for some students:

- A less academic style of learning
- A clear career path
- An opportunity to try out farming before making a decision
- A motivation to remain in school and learn the academic subject matter necessary for farming

An interviewee noted that some teachers have been visiting fisheries and farms to understand just how the academic subjects are used in work locations, in order to provide real-world examples and motivation to their students.

4.6 What concerns do farmers and farm workers have about an apprenticeship program?

There are concerns about money

Can PEI farming justify an apprenticeship program?

Some supportive farmers nevertheless feel that the economics of PEI's farming community mean that an apprenticeship program is not viable:

"The way the farming industry is in PEI at the moment it's too little too late."

"It's a good idea, but should have been done 5-10 years ago."

"PEI is too small – there's not enough work to justify an apprenticeship program."

"Training someone to work on a farm is a waste of time because you're preparing them for a life of poverty. It may be helping the farmers, but not the workers. The best thing you can do for the workers is to give them a Greyhound ticket and send them to Alberta"

How will apprenticeship training be subsidized?

Specific concerns in this category included "Who will fund the program?" and in particular, "Who will pay for the cost of training apprentices?"

"I would need financial assistance to take on an apprentice because they would not have the experience and would involve more supervision."

"My level of support would depend on financial assistance levels."

"The on-the-job portion of training will cost the farm something."

In related comments, farmers suggested that government grants or loans should not be tied to apprenticeship evaluation.

Farmers also suggested some possible solutions to the issue of funding:

"You could subsidize [an apprentice's] pay. Provide their labour for free."

"Don't give Tax credits!" (Tax credit is only a benefit if you're profitable)

"On-the-job costs could be offset by a wage subsidy like other trades - half paid by Department, half paid by the apprentice's employer."

One farmer suggested that – in some cases – non-financial compensation such as increased access to DAFAF services or training credits, etc, might be preferred.

Financial planning of an apprenticeship program will need to include consideration of the costs of administrative time, mistakes, and supervisory time.

Will all farms benefit equally?

Some farmers expect the benefits of apprenticeship to be unevenly distributed. One comment which summed up this concern was:

“[Apprenticeship] needs funding and wouldn’t benefit small farmers, mostly corporations.”

Will apprenticeship be associated with EI?

There are a number of emotions and issues tangled up in farmers’ strong antipathy towards associating apprenticeship with EI.

The overriding opinion of farmers regarding Employment Insurance was that an apprenticeship program should be independent of EI, to attract committed people, to raise the image of farm workers, and to ensure that farmers can keep their best workers. Our survey and interviews included no specific questions about EI, but we heard many comments, such as:

“If they have to qualify for EI to take the training then it won’t work.”

“If the training is only available to EI recipients, it will be no good.”

“They should help top off wages instead of associating it with the EI program – there’s a stigma attached to this.”

“I don’t think EI should be a criterion. Willingness to learn and a desire to learn should be the only requirement. You’re going to get the best workers if you pick people who are willing to learn”

We believe there are a number of emotions and issues tangled up in farmers’ strong antipathy towards associating apprenticeship with EI.

Farmers have the perception that there are a number of workers who have no ambition or motivation, and whose only interest is to find enough work in order to claim EI:

“I don’t trust EI employees – they leave as soon as they are able to.”

“It would work for those fellows on EI, but if they’re on EI they’re not that valuable.”

“The job requires a great deal of knowledge – you try to teach them all the skills and then they are gone after their 14 weeks and go back to EI.”

“Most of these candidates are not motivated. Agriculture is very demanding, so it needs an ambitious, motivated person to go into it.”

Some farmers have had bad experiences with programs in which EI claimants were brought onto the farm as workers: “Sometimes I wouldn’t answer the door – I was scared.”

Farmers want to offer training to their best workers. The paradox they face is that, in order to take advantage of many training opportunities, they have to lay off these workers. They feel that this increases the risk of losing them: “I’m cutting my own throat if they get a job elsewhere.”

Sometimes, farmers expressed their concerns for the workers in this situation; especially low-waged workers:

“Workers have to go on EI and they get only 52% of their already very low wages. Who can live on \$50 a week?”

“You hire people then they’re ineligible for programs. If they’re part-time it’s not fair. The short employment of 3 to 4 months in summer is not enough on current programs. Apprenticeship programs should also be possible for some who may not technically be unemployed.”

One farm worker expressed the view that EI was not treated in the same way across the island: “There was a course – I couldn’t do the course because I needed the EI. HRDC wouldn’t support Class 1 here, but did it in Summerside.”

So when farmers tell us “Do not associate apprenticeship with the EI program”, what we believe they are saying – at least in part – is:

- Make sure that apprenticeship is only for the best workers, and for those potential workers who have motivation.
- Make sure that apprenticeship doesn’t increase the farmer’s chances of losing their best workers.

Our recommendations are, firstly, that if EI is the basis for funding apprentice training, then there will need to be good communications to the farmers as to the reasons, and the need to provide information and reassurance that this does not create the kinds of problems that farmers anticipate. We believe that this is partly about clear communications. But we also feel that, if well-designed, an apprenticeship program will be able to deal with the underlying causes of farmers’ antipathy, such that the program could incorporate some EI-based students. HRSDC is changing policies towards a focus on workplace learning, and we think farmers would welcome a flexible program that attracts the right apprentices, and allows for on-farm and classroom training which will meet their needs.

Will apprenticeship force wages up beyond farmers’ ability to pay?

Some farmers already feel that “We cannot pay workers what they are worth.” Some feel that apprenticeship would create pressure for an increase in wages, either for the apprentices, or for the workforce as a whole.

“This program, in my opinion, although beneficial to the trainee, is going to end up costing farmers more to hire seasonal workers or occasional hired hands.”

“You’d have to top up the salaries if you’re going to provide this type of program to get people through to the point where they are worth higher salaries to the farm employers.”

“Commodity prices won’t allow higher pay.”

“Farmers can’t pay people with skills more than they already do.”

There are concerns about people

Where will apprentices come from?

In considering the potential sources of candidates for apprenticeship, some farmers were not convinced that there would be a large pool to draw from; we heard “I can’t see where they’ll come from” more than once.

For example, many farmers felt that farming could not easily attract new people:

“Anybody who hasn't grown up on a farm...” [shouldn't become a farmer]

“No one in his right mind would go into farming today unless they are from a rich family or inheriting the farm.”

Farmers told us that children from farm families grow up around equipment, animals, and barns, and are more acquainted with basic skills like safety, equipment operation, maintenance, and animal health. However, we heard many farmers say that they would not recommend farming as a career to their children: “Everything's really bad here - lots will be exiting this spring. We have... children – they won't be going into farming, it's too tough.”

Many farmers screen out potential employees who lack a familiarity with farming. They suggested that introductory courses prior to employment might make them more employable. Apprenticeship might provide some courses for these people either as introductory courses for labourers and seasonal workers, or as part of an initiative to increase the number of people who might wish to take a ‘Farm Worker’ apprenticeship.

Some farmers seem to hold a constellation of related opinions about farm workers – that more junior workers just need to be reliable, motivated, and able to learn; and that the farm does not demand a great deal from their workers. This leads a small number of farmers to conclude that there is no value at all in an apprenticeship program: “Why apprenticeship training? It doesn’t take even a week to learn to operate a tractor.”

Some farmers suggested that new workers might be recruited from off-island, even from outside Canada, but that this might require changes to immigration policy.

Seasonal workers cause the most immediate pain in hiring - since peak times are intense - yet farmers could not see how training could improve that.

Will the right people become apprentices?

Farmers were concerned that any apprenticeship program should involve the best workers – workers who are reliable and with a desire to learn. We believe these concerns are closely related to issues of training based on EI; from farmers’ experiences with poor workers; and with some bad experiences taking people on EI onto farms. We have already discussed the EI-related issues.

Farmers who made these comments may be particularly concerned that an apprenticeship program does not become a scheme to remove people from EI. Note that farmers did recognize that completion of an apprenticeship course would be an indication of a good worker.

We would conclude that farmers will form much of their opinion of an apprenticeship program based on who is involved, including which workers become apprentices. As such, a good qualification process for apprentices will be required.

Will I lose my good workers?

Farmers expressed concerns about the possibility of losing good workers, in various ways. One farmer said that he would not send one of his workers to the program if he is "...happy with the person", because he wants "...to keep the worker."

Some suggested that the problem might be greater with part-time workers: "Good workers go on to full time jobs."

Other ways this concern was phrased include:

"I'm cutting my own throat if they get a job elsewhere."

"If you've hired them for a specific job, you don't want them to become a future farmer."

"You can over-train workers" (concerned about losing workers to other farmers who might pay more).

However, farmers are aware that their workers may not stay for life. They value workers who are motivated and ambitious, but recognize that these are the workers who are most likely to leave.

How will we manage risks of having untrained people on the farm?

We heard some 'horror stories' about workers who had caused severe damage or problems on the farm. Farmers said that, with an inexperienced worker, their salary can be the least of the costs to the farm:

"They need to know how to handle chemicals and expensive farm equipment – if they mess it up it is way more than their salaries."

"The problem is - [the apprentice] could be the most expensive person you bring onto the farm."

In some ways, of course, this situation will be no different with an apprenticeship program than it is when farmers bring any new employee onto the farm. However, if the worker comes onto the farm as part of an apprenticeship program, then that program will be associated with the risk, and will need to take action and be seen to manage the risk.

There are concerns about program content

Farming isn't like other trades – will apprenticeship work here?

Some farmers and workers have experience of apprenticeship, or some contact with it. Some made comparisons between farming and other trades, and raised concerns that there are aspects of farming that might make it less amenable to apprenticeship:

“[In other trades] the apprentice is always within spitting distance [physically close to the journeyman]. A problem [on a farm] is I'm over here, the farm is 500 acres, and you're over there out of my control.”

“In the _____ trade, by union, the ratio [of journeymen to apprentices] is 1:1.”

“It's a great idea but I don't think it will fly. There's not the turnover like [other trades].”

Will the apprentice have the right skills for my farm?

We frequently heard the statement that “Every farm is different.” Farmers who expanded on this statement suggested that each farm decision interlocks with other farm decisions already made, such that a farm evolves into a unique ecology, and what works for one farmer does not necessarily work for another.

The implication of this view, expressed by some farmers, is that generalist training may be of value, but there will need to be significant continued training after an apprentice comes onto a farm:

“You can take anybody that is trained, and they will still need to learn my operation.”

“If they come with experience, they may have too much.”

“The worker should be trained to work on ‘my’ farm.”

How can we be sure that apprentices learn the right skills, in the most efficient way?

There are a number of related specific concerns in this category. They include:

- Some farms may be better places to learn than other farms
- Classrooms mix people with varied skill levels
- Will workers entering apprenticeship have the basic skills they need to succeed?
- Will the apprentice learn the best techniques, the latest techniques, or the techniques most useful to my farm?
- Not all farmers will be good teachers: “Longevity doesn't make us good teachers.”

We discuss most of these issues in the section “How should an apprenticeship program work?”

Will we learn from earlier programs and programs elsewhere?

Some farmers referred to similar PEI workforce programs, and apprenticeship and training programs elsewhere in Canada and Europe, and suggested that lessons could be learned from their successes and failures. These included ‘apprenticeship’-like programs, specific training programs, and programs that take EI claimants onto farms.

“Other programs have been tried but got nowhere.”

“We had participated in an apprentice program in the past, but the person [apprentice] left after two days and never returned.”

Some of the clues we had about these earlier programs were:

“Ron Sampson had a mentoring program. . .”

“I had to spend 2 days on a beef farm, and a few days on grain; really just measuring attitude. Robert Rackham evaluated me.”

“Jim Newson at Holland College did the [DACUM] chart for Farm Business Management – it was 12 months in 1981. It was part-time; you worked at your own pace.”

It's a good idea, but will it be implemented well?

Farmers say they have seen good ideas poorly implemented. Some did not like the fact that programs which were apparently successful did not receive continued support.

“I'm very doubtful about any government-instituted programs.”

“The government is always throwing money at programs but they are not well implemented.”

4.7 How do farmers feel an apprenticeship program should work?

There will be awareness, education, and pre-apprenticeship programs

Awareness will attract new workers and raise the image of farming

Farmers and farm workers felt that awareness would be important for any apprenticeship program, not just to attract workers, but also to raise the image of farming as a lifestyle and a career.

They suggested that communications could be addressed to many audiences; for example, students in schools, career counsellors, farm workers on- and off-island and potential immigrants.

Some farmers pointed out that it is very difficult for someone not brought up on a farm to become a farmer, because of the high capital cost requirements as well as lack of experience. They therefore suggested that the current priority may still have to be farm children.

Schools were particularly identified for awareness: “You should start at Junior High, Grade 7, 8, 9.” Interviewees proposed that farmers could visit schools and other locations to help create awareness: “Take someone into the schools to tell them about farming.” They noted that there were special events that take place in schools which would be ideal for some communications activities:

“We had a career day at school...”

“I’m not sure if they do more of it – they have mechanics, like they have Cosmetology – my daughter liked that.”

There are other communications channels that were identified. One worker said: “Even on the computer – right now HRDC send job openings, we can see what’s happening, like nursing.”

Some felt that awareness needs to go beyond promotion of the apprenticeship program:

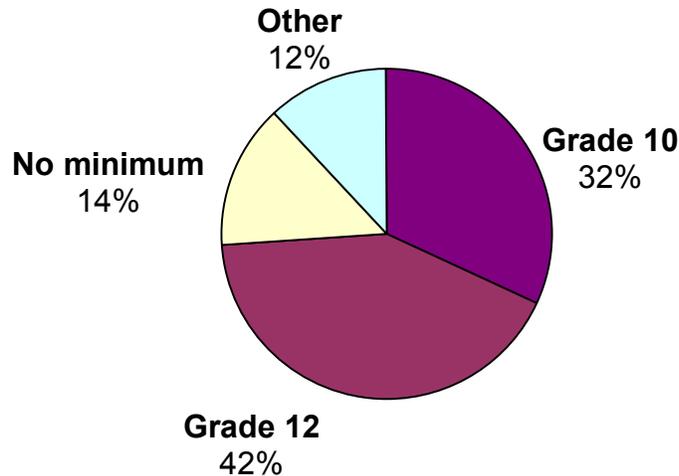
“This program should be promoted to attract people - to promote the province to our kids.”

“We need to promote agriculture as a profession”

We take away the message that strong communications will be vital to the success of an apprenticeship program. We noted that some forms of communication, for example magazines and newsletter, often go to the farm or to the farmer. There will be a need to make sure that if the target of a communication is farm workers it actually reaches them.

Grade 10-12 is the minimum level of education for apprentices

Minimum level of education for apprentices



42% of respondents said that Grade 12 should be a minimum level of education for a ‘Farm Worker’ apprentice, and 32% said Grade 10. We didn’t ask for a rationale for the choices, but some suggested that Grade 10 or 12 would be a requirement because it would show that a worker can “read and write and want to work.”

One farmer said “Safety on the farm makes Grade 12 education important, as farming is becoming much more complicated.” Other comments included:

“It’s an absolute minimum. There are a lot of things here that require a lot of comprehension.”

“The business part needs it – you need a fair amount of education to run a farm.”

“It’s hard to put a grade level... I value education... I’d look at the individual case – they might not be good at English but good at what you need to be good farmer...”

Those who said that there should be no minimum educational requirements for an apprenticeship often indicated that this is because a worker’s reliability and attitude are much more important than specific skills:

“Education is important, but a natural tendency to be practical and mechanically inclined is an asset.”

“Any grade level qualifies if the person is interested, committed and willing to learn and work”

No comments received against ‘other’ responses suggested higher educational requirements. The responses tend to suggest that this group also consider educational level to be of less importance than a worker’s ability to learn.

This type of comment also surfaced in response to other questions. Even those who suggested a minimum educational level often shared this opinion. Perhaps an extreme view expressed was that “You don't need formal education, you just need common sense”

One farmer suggested that, rather than an educational requirement, an aptitude test might be more appropriate. Some farmers have a concern that the more educated and/or trained a worker is, the more likely they are to leave the farm.

Apprenticeship could be preceded by introductory courses

There were recommendations that apprenticeship could be preceded by introductory courses, especially for high-school students. These courses might give credits if the person eventually chose to take the apprenticeship training.

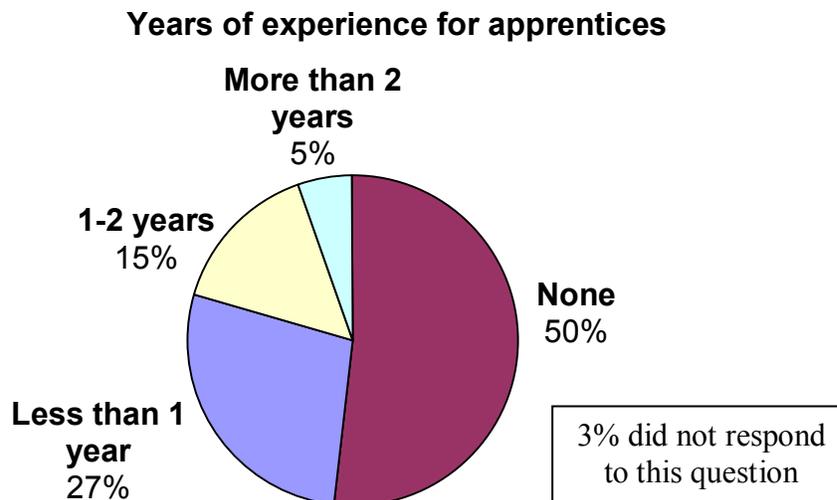
Interviewees said that introductory courses could serve a number of purposes:

- They could encourage less trained workers to consider apprenticeship
- They would allow students to decide if they really wanted to do farming
- They could pre-filter seasonal workers for farmers who have labour needs in peak times
- They could be an alternative for workers that did not have an option to take the Ag. Certificate

Despite many negative feelings towards EI-funded training, it was proposed that some pre-apprenticeship training could be EI funded, for the purpose of increasing labour force capacity.

Workers don't necessarily need experience before apprenticeship

Half of the Designation Survey respondents said that workers entering an apprenticeship program do not necessarily need any previous experience.



In response to this question, we heard further comments about the importance of reliability and attitude of workers above and beyond specific experience:

“It’s more about commitment and motivation.”

“I couldn’t care what his skills are as long as he is physically able, smart and appears to be capable.”

Some felt that no experience was necessary for apprenticeship because the program would be targeted at younger people – high school attendees – who might not necessarily have any farm experience, and that this should not be a barrier to entry.

Other reasons given for not requiring previous experience included:

“If there’s too much then people won’t apply.”

“It’s better if some people are trained from scratch, they’re more flexible.”

“None [no years experience] if they’re a good student.”

Some of the farmers who chose the option ‘no experience necessary’ pointed out that living on or near farms might help: “Many of the people have grown up on or around farms and have assimilated the knowledge as they were growing up.”

There are things that should happen during apprenticeship

Farm owners and managers will do most of the on-farm training

We asked farmers who on the farm might carry out training. Most felt that they would do the training themselves. Farm managers were then next most frequently identified trainers on the farm, followed by ‘lead hands.’ ‘Other’ trainers suggested included other family members, foremen and supervisors, and other workers.

Apprenticeship training would require some training to be done on the farm. Who is there on your farm that might – with appropriate training and support – carry out some of the training?	Counts
Farm owner	64
Farm manager	36
Other	15
Lead hand	12
Husband	7
Wife	5
Retiree	4
Total Count	143

Many noted that there must be incentives for the people training the apprentices. Farmers who want to teach will have to make a trade-off between the ‘opportunity cost’ of spending time training instead of doing farm work, versus any monetary or other rewards they might receive for being a recognized trainer.

Some farmers suggested that 3rd parties would be valuable for certain kinds of training: “I would love to see a program hooked up with equipment dealers [for teaching mechanics] and especially maintenance of equipment.” When talking about specialist or advanced skills such as relief milker, crop scout, roguer, machinist, or hoof-trimmer, farmers frequently indicated that the priority would be to work with an expert, even if only for a short period of time. This training might take place off the apprentice’s main or current farm

People recognized that trainers might need to be certified, or that there should be some other checks in place to ensure that apprentices receive training from the best trainers:

“A journeyman would have pride in their work and teach well.”

“Longevity doesn't make us better teachers.”

“...need to train the farmers themselves in management skills.”

“It would have to be people [farmers] working on new ideas. Not just taking from the apprentices but giving something back.”

Farmers recognized that some monitoring would be required:

“Someone must be trained to assess the farmers - need a fair evaluation system.”

“You’d need to know ‘does the farmer do things properly?’. You could start production awards. Department people could do this.”

Farmers know that they may need assistance if they are to train well. They felt that an apprenticeship program could support them in a number of ways:

“Describe the job of the trainer – a job description would show farmers what is expected.”

“When farmers are busy, training is not a priority - be flexible about expectations.”

Some felt that this was key to apprenticeship program success:

“If trainers are supported...” [then apprenticeship would work]

Some suggested retired farmers as trainers: “Lots of people hire retired farmers because they are trained, and they don't damage equipment.” Other workers would teach that part of the farm they're most involved with – “He’s our man in the field; he doesn't go in the barn.”

From many farmers’ comments, their assumption seemed to be that they would take on an apprentice and then keep them on afterwards – that a program would basically be a subsidized training program to help them get and develop new workers. This expectation will need to be managed, and other forms of reward or compensation for training put in place.

Apprentices must work on the right farms

Farmers believe that apprentices should receive training from good teachers. They also pointed out that not every farm would be appropriate for training apprentices, and that any one farm will not usually have all the latest equipment, nor use all the latest techniques for every activity. Farmers suggested that apprentices should visit more than one farm, and have farm-by-farm skill targets set, so that they can see their own path forward, and their progress. It is not clear what interviewees' views are on how many farms apprentices should visit.

Interviewees said that training needs to include a necessary variety of farm experience. Some farmers were concerned that this need might not match the needs of the farm:

“If there's someone who's hired at _____ tomorrow, he'll end up just doing one job.”
[implying that this would provide limited learning opportunities for the worker]

“You'd have to make sure apprentices are not just used as cheap labour for doing odd jobs. They need to be trained in the actual farm skills that are important.”

There may be some tension between learning the latest techniques versus learning current practice or day-to-day practicalities of farming. Some farmers pointed out that training would need to expose apprentices to the day-to-day realities of farm life that they might not encounter in a classroom, laboratory or 'model farm' setting.

We were told that sometimes it's good just to get away from your own farm, and to learn from someone who is not a family member: “One brother went away to work. It's a good thing to work for somebody else.”

The apprentice's log-book is a Learning Plan

As we described earlier, some farmers had formalized some of their working practices in Quality Assurance or safety programs (especially HACCP). They recognized the value this gave them in terms of easier management of workers, easier training, and increased reassurance that tasks were being completed and carried out to a consistent standard.

Farmers in the on-farm interviews who saw the example page from an apprentice's log-book felt that a log-book would provide value to the farmer as well as to the apprentice:

“The log book is like a 'learning plan'.”

“It would encourage apprentices to set goals.”

An apprenticeship program must include basic skills, safety

Farmers and farm workers' skills requirements are covered in the earlier Learning Study section of this report. Here we only highlight the priority skills raised in discussions of apprenticeship.

Safety was probably mentioned as a specific requirement more frequently than any other:

“Safety training would be a major thing”

“An apprenticeship program would be a big help in reinforcing farm safety training – it [safety training] is as important as any other aspect.”

“It should have component of farm safety and training with heavy equipment and pesticide certification.”

“Safety is the largest training issue – from day one; every day; throughout a workers' life.”

Operational and mechanical skills were another frequently-mentioned category. One farmer illustrated that skills needs are changing even in this traditional aspect of farming: “I would like to see training in machinery operation and repair, and operating of navigational equipment and other new computerized farm machinery.” Book-keeping, financial planning and farm business decision-making were also frequently suggested.

Some farmers maintain that they need farm workers to “feel they own” the farm operation – to understand the trade-offs and decisions, and the impact of their behaviour and mistakes. Farm workers also said they felt that it was important to understand the workings and priorities of the farm as a business. As one farm worker put it: “You need to know the decisions the farmer makes – I see his head going round and around.”

Farmers felt that apprenticeship training “...must be comprehensive.” They felt it must be directed: “They [apprentices] can't spend the whole time driving a tractor, that's fun.”

Some felt that the direction would come from the apprentice's own preferences and abilities:

“They would have to direct the apprentice into the type of farm they will work.”

“You would see what aspect of the job the person likes and is best suited to. A person that loves tractors may be useless in a livestock barn and vice versa.”

Most said that programs must be set up to prioritize the needs of the farmer – welding, operating expensive farm machinery, maintaining farm equipment, doing basic repairs.

As described in more detail in the Learning Study section, farmers highlighted categories of skills they need of their workers:

- Soft skills are broadly important – responsibility, initiative, communicating and the ability to work with others.
- Trainability is the most important worker ability – their work ethic, interest and motivation
- Farmers mentioned specialties that would be valuable future career options for apprentices
 - Relief milker, crop scout, roguer, machinist, hoof-trimmer
 - These specialties may be one way apprentices are trained, in an off-farm service
 - Apprentices would be exposed to a breadth of farms types and practices.

Duration and timing on-farm will relate to farm life-cycles

We asked farmers: How many months of on-farm experience do you think a ‘Farm Worker’ apprenticeship program should include to ensure adequate exposure to farm tasks?

The responses identified 18 different choices of duration, ranging from 0 months to 48 months. In order to simplify the presentation of this data, we have aggregated the less-preferred values, and left preferred values as single data items.

This table confirms how strongly the respondents favour 6 months and 12 months as the length of the ‘Farm Worker’ apprenticeship program, with the third choice being shorter periods of on-farm apprenticeship, followed by 24 months.

How many months of on-farm experience do you think a ‘Farm Worker’ apprenticeship program should include, to ensure adequate exposure to farm tasks?	Counts
0 – 5.5 months	19
6 months	30
7 - 11 months	5
12 months	40
16 - 20 months	3
24 months	9
36 months	2
48 months	1
N/A	2
Total	111

There are probably a number of factors at play in producing this clustering above and beyond farmers’ considerations of the requirements of an apprenticeship program. Firstly, in providing approximate answers, people often tend to choose fractions or multiples of a year. The previous question on the Designation Survey required an answer in years, and this might also have biased responses to fractions or multiples of years. Those who do not support apprenticeship might have answered ‘N/A’ or ‘0’, but might also have provided some other valid response.

Some farmers feel that there is little learning required during an apprenticeship, and that most learning would take place after apprenticeship, and be specific to their farm. These farmers might have indicated a relatively low number of months. There are other reasons farmers have for proposing a short period of training, for example: “Keep training short or no one will take it.”

We know from farmers’ comments that many responses are related to the seasonal nature of farming, and that the different seasonal cycles of different commodities might lead to differing responses – e.g. a hog farmer might respond differently than a potato farmer. Sometimes workers

have a different view on seasons; one suggested that the best time for training would be: “When we’re laid off – October to March.”

Farmers often talked about ‘cycles’ or ‘seasons’ in their comments:

“Crop farms might require a full year to see all the various seasonal activities.”

“Dairy farms are very repetitive – it could be only 3 months.”

“It depends on the farm. It should be a full cycle - at least 6 months. If dairy - one year.”

“For this farm about 7 months is a full season for the worker to see the full operation.”

“Maybe 6 months in the hog barn.”

“If mixed farming 30 weeks minimum.”

Some farmers based their opinion on other information:

“Any worthwhile program would be 2 years. The 1st year would be an introduction; the 2nd year would be in-depth learning for all the seasons.”

“48 months, based on my [trade] apprenticeship.”

Farmers pointed out dependencies other than the type of farm or length of cycle:

“It depends on what the worker is required to do – it may need a couple of months training.”

“For some [workers], 6 months is enough, for some, 4 years still wasn't enough.”

Some talked about being able to take this program a few courses at a time and spread it out over several years. They said they can only spare people from farm for short periods for this type of training (evenings or weekends).

We certainly heard again about the importance of hands-on training for farm workers:

“The classroom would not benefit training – it needs to be on the job training.”

“I would expect the majority of training would be done on the farm.”

“I believe in hands-on training. My son took an automotive course where the teacher taught out of a book and he didn't learn anything.”

4.8 Apprenticeship summary discussion

In this section, we summarize some of the findings and insights we came across that do not directly result from interview or Designation Survey questions, and/or do not neatly fit into the major topic headings.

Apprenticeship might provide a route for the next generation farmers

The opportunity to talk to Future Farmers as part of the Learning Study group sessions provided us with some insights into how apprenticeship could relate to the learning path that the next generation of farmers might take.

If we believe that:

- The next generation of farmers might be more willing to share data than previous generations of farmers, even if anonymously
- The next generation of farmers recognize that the practice of farming is going through rapid change
- The next generation of farmers recognize that farming will require greater application of skills in:
 - Rapidly applying the latest production techniques and scientific research
 - Decision-making, marketing and business management
- The next generation of farmers feel that learning from parents might not be the most efficient or effective way to learn these new farming techniques

Then:

- Apprenticeship might provide the next generation of farmers with a route to learn the ‘new farming’
- The apprenticeship program might provide access to scientists and researchers who will provide farmers’ networks into these sources of differentiation
- Apprenticeship might be an effective new way of producing farmers’ support networks
- Apprenticeship might help accelerate learning and adaptation by new farmers
- Apprenticeship might be the only way to learn some of the latest farming techniques
- Apprenticeship might help reduce inter-generational conflict on the farm

Apprenticeship might provide the next generation of farmers with a route to learning the ‘new farming’ quickly

If this argument is followed, then planners might consider:

- Targeting the next generation of farmers as a key source of apprentices
- Embedding apprenticeship into:
 - Communications Plans
 - Succession Planning decision-making

- Future Farmers programming – at least awareness, and some involvement and connection with the apprenticeship program
- Establishing relationships between an apprenticeship program and researchers in universities and elsewhere
- Targeting families of the next generation of farmers who might make – or help make – decisions about their children’s career paths

Get the right people in all parts of an apprenticeship program

Farmers were adamant that the right people must be involved in any apprenticeship program, especially the right apprentices and teacher/farmers. One said: “Design it properly at the outset - set standards and attract good people.”

In planning such a program, there are other individuals who will be key to its success:

- The right Champions for the promotion of apprenticeship
- The right Coaches for the practical learning
- The right farmers for the supervisory roles
- The kinds of farms that will attract workers into farming and deliver the right kind of learning
- The right assessors and managers; especially if farmers and farms have to be certified, and if difficulties such as personality clashes on-farm have to be managed by the program

Note that there are at least 3 or 4 people who have been through apprenticeship programs in other countries and are opinionated. Their experience would be valuable to the detailed implementation of an apprenticeship program on PEI.

Manage the first cohort

The first few years will be critical to an apprenticeship program. Many people will establish their life-long opinions about farm apprenticeships in this short time. The people most critical to the success will be the first group of apprentices.

We suggest that the managers of an apprenticeship program should actively create this first cohort; screening, seeking out and encouraging motivated and able workers and/or potential farmers who have the qualities it takes to be leaders of the next generation of farmers.

Then, even if the program only lasts a short while, it might have kick-started or accelerated cultural change.

Managers of the apprenticeship program should create the first ‘cohort’ of apprentices.

Apprenticeship should be modular

We heard many potential values, applications and impacts of an apprenticeship program as expressed by farmers and farm workers. As a result, we would recommend that any apprenticeship program might be designed to be very modular, so that it might address other audiences. For example:

- High School students could take parts of it
 - And perhaps gain academic credits
 - And start filling in an apprentice's log-book
- Farm Workers could attend just one part of the training
 - To learn just the skill they currently need on the farm
 - And still get a check in a log book
- Farm workers can take as long as they need to obtain their certification
- People on EI could attend parts of the training
- Parts of the Apprenticeship Program would provide 'Winter Training' courses
- Senior workers could be provided with specific skill-upgrades
- Young workers could be provided with exposure to a broad number of farms and skills
- Seasonal labourers could be provided with introductory training to get accustomed to farm work

Farmers need to compare apprenticeship with their current situation

In the Designation Survey, farmers showed a great deal of support for apprenticeship, suggesting that they might send large numbers of workers on such a program. However, when it comes to the time for a farmer to make a decision, there will be many factors to consider that may not have been top of mind when answering the Survey.

One important factor to recognize is that, although apprenticeship may be seen to have value, farmers will need to be able to assess the *incremental value* of apprenticeship, rather than its absolute value.

Farmers account for their investment – whether in money, time, effort, or people – and will need to account for apprenticeship in a similar way. An apprenticeship program will have to prove better than the current training regime for workers. It will have to be better enough to warrant the additional time expended by the farm, or the time lost while the worker is off-farm, in order to be seen as providing a good Return On Investment.

Farmers will find it easier to make decisions about sending their workers on apprenticeship if they have the tools and assistance to help them. In particular, benefits that accrue to the industry as a whole, rather than to individual farmers, will be most difficult for them to measure or to take into account in decision-making.

Apprenticeship must prepare farmers and workers for mobility

We heard that farmers are concerned that an apprenticeship program might lead them to lose their best workers. Apprenticeship will certainly be best suited to motivated and ambitious workers, those who might be most likely to move around farms to gain experience. Apprenticeship might make the farm workforce more mobile, and needs to prepare workers and farmers for this.

For the workers, apprenticeship will need to prepare workers for potential job changes, and provide the training that will prepare them for it.

An apprenticeship program will also have to prepare farmers for the fact that if it produces better workers, those workers may be difficult to keep. Some farmers will need reassurance that the apprenticeship program does not increase the chances of losing their best workers. Other farmers may need to be convinced that the apprenticeship program will increase the pool of good employees and will make good workers more easily available. Some will be satisfied to know that benefits accrue to the overall farming community, even if not directly to them in the short term. The farmers who are first to send their workers on an apprenticeship may be the ones with most to lose. The program planning must take all these issues into account.

Education could better match learning styles

Most farmers and farm workers value learning farm work ‘on-the-job.’ This probably reflects a whole cultural constellation of behaviours, attitudes, and environment.

There is a suggestion in many farmers’ comments that schools support an academic approach to learning, and do not well support other learning styles – particularly those of a more physical nature. Schools often do not give academic credits for agricultural courses. Schools (and sometimes government) are also seen as promoting more academic careers:

“I see a trend of educators to push students into other fields, so there is a shortage of skilled agriculture workers.”

“Educators are pushing students into anything but farming.”

“I feel there are many students like me out there who are frustrated and feel like failures academically, but today don't have the options I had.”

“If they have higher education they won't be interested in these jobs.”

The farm environment is one that has evolved to deal with a less academic way of learning – especially one passed down by experience from generation to generation. There may be people whose learning style is intrinsically not academic. Certainly many farmers feel this way:

“It should be offered to high school students who would otherwise fail out because they are not suited to an academic setting.”

“My son took an automotive course where the teacher taught out of a book and he didn't learn anything.”

“I attended vocational school after Grade 8 because I was not academically inclined but good mechanically.”

Any training program aimed at the agricultural community needs to take account of these characteristics. Set against this is the fact that the farm is changing rapidly. So new training will have to balance the need for ‘hands-on’ production training with the recognition that the learning practices of future generations of farmers may well be different than in the past, and that the skills farmers will need in the future are more managerial and business-oriented – rather than production – and in the understanding and application of scientific knowledge to farm practices.

4.9 Summary of Designation Survey findings

Support and perceived benefits of apprenticeship

As part of the public consultation for designating 'Farm Worker' as a trade, we carried out a survey of 111 farmers from farms active in the PEI workforce. The survey was primarily designed to provide quantitative data on the degree of support for apprenticeship in this community.

Almost 90% of the farmers interviewed support the idea of forming an apprenticeship program either "Strongly" or "Somewhat."

87% feel it would benefit the agricultural industry on the island as a whole, helping to hire or train better workers. Farmers thought a program could provide training before a worker is hired, as well as for employees developing new skills.

If farmers' concerns about apprenticeship are fully met, then their responses indicate that they would send significant numbers of their workers on apprenticeship training. The farmers interviewed might send 113 workers over the next 3 years, representing 15% of their workers.

Separately, we also found significant interest from farm workers regarding an apprenticeship program. 14 of the 25 workers we asked said they would be interested in becoming an apprentice.

Farmers identified a number of other benefits that they felt would result from an apprenticeship program, including producing more trusted and reliable workers; improving the image of farming as a career and profession; providing the benefits of formalizing farm practices; and focusing students on a career and reducing the school drop-out rate.

While participants identified strong reasons for apprenticeship, they also qualified their opinion with dependencies and voiced their concerns.

Dependencies for farmers' support, and concerns about apprenticeship

Farmers' support depends on a number of factors, ultimately on the way that any apprenticeship program is implemented. The most important categories on which support is dependent appear to be:

- Funding and incentives – including workers' wages and serious concerns around EI
- Training content – balancing generality with the specifics needed by a particular farmer
- Practicality of the training – fitting in with the daily and seasonal needs
- Who is involved – which workers, trainers, managers, assessors, etc.
- Effect on the labour pool costs and availability of good workers
- Overall program organization

Concerns farmers had regarding an apprenticeship fell into three categories: issues regarding money, issues regarding people involved, and issues regarding program content.

The concerns farmers raised regarding money were:

- Can PEI farming justify an apprenticeship program?
- How will apprenticeship training be subsidized?
- Will all farms benefit equally?
- Will EI be used to fund apprenticeship?
- Will apprenticeship force wages up beyond farmers' ability to pay?

The concerns farmers raised regarding people were:

- Where will apprentices come from?
- Will the right people become apprentices?
- Will I lose my good workers?
- How will we manage risks of having untrained people on the farm?
- Will the best people be in support roles – coaches, trainers, managers, assessors, etc?

The concerns farmers raised regarding program content were:

- Farming isn't like other trades – will apprenticeship work here?
- Will the apprentice have the right skills for my farm?
- How can we be sure that apprentices learn the right skills, in the most efficient way?
- Will we learn from earlier programs and programs elsewhere?
- It's a good idea, but will it be implemented well?

Farmers' views on how apprenticeship might work

Farmers suggested possibilities for how an apprenticeship program might work. Some recommended a minimum level of education for apprentices. When asked how many months of on-farm an apprenticeship should require, responses were divided largely between six months and twelve months duration. Half of the farmers felt that no experience would be necessary for someone becoming a Farm Worker apprentice. Others suggested one year or less would be sufficient (27%) or between one year and two years (15%).

Participants' voiced several models for the program, many of which may be integrated into a final program recommendation. It could be an option for young people or right after high school. It could be taught like trades, on the job. It could train basic skills alongside specialists. It could recognize the training that goes on regularly on farms. It could be a farm labour pool. Farmers and workers recommended that the training include hands-on or application on farms.

Participants could see how the apprenticeship program might attract youth into farm work, by providing exposure to a broad number of farms and skills. Others saw how it might increase the value of eager junior workers to employers. Participants recommended the program should somehow enable experienced workers to upgrade their skills in specific ways. Additionally, introductory training prior to apprenticeship might give seasonal labourers a way to get accustomed to farm work.

In summary, participants recommended the program include the right candidates, the right farmers, and the right farms. It should be designed well, promoted well, and aimed at improving farm profitability.

4.10 Recommendations for a Farm Worker apprenticeship program

Taking into account all these suggestions by the participants, we make the following recommendations about a farm worker apprenticeship program:

- Apprenticeship should be modular, and targeted at labour market groups' needs
- Stratify the program according to labour market learning needs
- Apprenticeship might provide a route for the next generation of farmers
- Paths after apprenticeship should be clear up front
- Design program content to meet farmers' most pressing skill needs
- Manage the first cohort to promote the best image of farm worker occupation
- Raise the status of senior workers to attract and keep good workers
- Put farmers in teaching roles
- Recognize the training that is presently done – don't reinvent it
- Encourage and reward farmers who train apprentices and enhance the labour market
- Systemic barriers to innovation in farming on PEI may need to be tackled
- Farmers will need to compare outcomes with the current situation
- Teach emerging and sustainable ways to farm - new farmers are more open about data
- Provide a labour pool or relief workers - for farmers who need to cooperate over labour
- Match learning styles and education to the strengths of farming

5 Benchmarking

5.1 Using the Survey and interview questions as benchmarks

The purpose of the Learning Study was to produce benchmarks that might be monitored over time, from simple measurements of farmer age and education level, to other more complex benchmarks. In this section we briefly describe how the data produced in this research could be used in benchmarking studies. All of the questions provide data that could be tracked for trends; here we highlight the ones likely to be most useful for benchmarking.

Benchmarks might be used in the following ways:

- Monitoring farm trends over time
 - For example, age of farmer and level of education
- Setting targets and measuring outcomes of programs
 - For example, levels of worker education, increased instances of recent training
- Making correlations
 - For example, between size of farm and farm worker education
- Making comparisons
 - For example, with similar research and programs in other Provinces
 - To establish and adopt best practices
- Complementing other Labour Market information
 - For example, frequency of hiring, farm worker population, mobility, skill gaps

5.2 Filtering the questions for actionability

Some benchmarks may be selected from questions asked during this project. The questions need to be filtered for use in benchmarking. The prime filter should be ‘actionability’ – i.e. the ability to take action as the result of receiving answers to the question. Actionability filters would include:

- How did the answers we received to these questions affect policy or programs?
- Are the answers to the question expected to change (what’s the hypothesis)?
- What does it mean if answers change (in any direction)? Or if they don’t change?
- What would AgHRDC, DAFAP or anyone else do with or about the change?

5.3 Learning Study questions to follow up in benchmarking

Demographics and worker population characteristics

The demographics collected in the screeners help provide an overall picture of PEI’s farm population. Tracking factors such as age, farm size, and commodity will maintain an up-to-date picture.

One key benchmark of skills development will be how workers move upward within the labour force by learning new skills. We determined the number of full-time, part-time, and seasonal farm workers. We observed that there is upward mobility between the segments. Benchmarks could be refined to characterize this mobility, and how skill development increases the value of workers.

In the screening for interviews, and in the initial questions of the Designation Survey, we collected data on the farm worker population – full-time, part-time, and seasonal workers. This information could be combined with other Labour Market data collection to provide a picture of the overall farm worker population. As we discovered in research prior to the Designation Survey, existing figures do not necessarily provide a clear or up-to-date picture.

A coding could be provided for location, as it was suggested to us that attitudes may differ in different parts of the island.

Areas farmers would like to know more about

Tracking the questions about skills that farmers feel they need to know more about would provide guidance on development of new courses, or evolution of existing courses, for farmers. The results would help prioritize skills development for short courses and for apprenticeship program content. They might also provide measures of program effectiveness: as farmers' training needs are met, ratings of whether those needs are being met should improve.

As an apprenticeship program becomes implemented, farmers may become aware of possible opportunities and benefits of being involved in apprenticeship as 'master farmers', coaches, or some other support role. As a result, we might also start to see those skill requirements being identified in responses to this group of questions.

Farmers' and workers' recent training

Questions about recent training will help measure the reach and adoption of training, as well as perceived effectiveness. There could be a correlation between farmers' recent involvement in training and the likelihood of them sending workers on training in the future.

It would be helpful to know how often training will be needed. From our questions on recent training, we can only make crude estimates about how frequently workers take training. Benchmarks could be refined to measure the frequency of training events, to help educational institutions and government departments manage course load and budgets.

We might hypothesize that the perceived benefits of having trained farm workers might change over time. This type of change could have many causes. We know the importance of relating training to farm profit and safety, for example, if only to assist farmers in making decisions about investing in training for their workers. As farmers come to make the connection more easily, we might see more tangible perceived benefits. Changing farm practices and needs might also change perceived outcomes. For example, increased stringency in regulations, food safety, and general farm safety might lead to increased requirements for reading, math, communication and decision-making skills, and changes in the perceived benefits of such training.

Skills farmers need workers to have

These questions are in 2 main groups – open-ended questions on priorities, and ratings of a list of 20 farm skills derived from the DACUM charts for Farm Worker.

These question groups will provide prioritization of skills to be included in an apprenticeship program and/or short courses for farm workers. The open-ended questions may provide evidence

of new skill needs not identified in the DACUM skill-set or elsewhere. New skills could be added to the list of 20 for longer-term comparisons of need.

HRSDC have identified ‘Essential Skills’ for many NOC-coded occupations, including General Farm Workers (NOC 8431, see: http://www15.hrdc-drhc.gc.ca/english/general/all_profiles.asp). The Survey and interview questions include related skills (e.g. ‘Communicate with people’, ‘Motivate each other and get along’). Given the priority assigned to these skills by farmers, it may be useful to break these down further and to match them with the Essential Skills structure in order to provide easier data comparison. For example, questions might be added concerning literacy and numeracy.

5.4 Apprenticeship-related questions from Designation Survey

If and when an apprenticeship program becomes implemented, this section of questions will be valuable in tracking responsiveness of the program to the farm needs. The current data provides a baseline from which changes can be measured as farmers become more informed about apprenticeship, and as specific implementation issues—such as the funding arrangements—are decided.

Support for apprenticeship

We would expect support to drop from its current high level. In part, this will result from implementation decisions that will not suit all farmers. For example, if apprenticeship is targeted at the needs of larger farms, then we would expect a significant drop in support from small farmers. We also expect that farmers will find it difficult to release workers for apprenticeship training; a drop in support for the program could be in part a rationalization of this difficulty.

Benefits of apprenticeship

Apprenticeship might be expected to provide some short-term benefits, but only to the small number of people directly involved. Measurable changes in perceived benefits to the broader community will take longer. However, as implementation takes place and farmers have to make decisions about sending workers on apprenticeship training, they may start to change their ideas about where the benefits might apply. Targeting of the program—for example at the next generation of farmers—might also change perceptions.

Entering workers into apprenticeship

We expect the number of farmers who would consider entering workers into apprenticeship to drop as implementation issues are resolved, and as farmers understand the full investment involved. Answers to this question will migrate from being a matter of attitude correlated to general support of apprenticeship, to being a decision being made in the farmer’s business context.

Concerns about apprenticeship

Together with questions about support for apprenticeship, the open-ended question about concerns will help fill in details and reasons for changes in attitude. We would expect concerns overall to increase as implementation takes place, then to decrease for specific issues as the program deals with them. Some concerns may remain if resolutions do not meet a farmer’s needs.

Master farmers, training, coaching and support roles

An apprenticeship program requires many support roles on the farm, in the classroom and elsewhere. A number of questions in the interviews and Survey will help quantify and identify people willing to take on some support roles. Numbers may drop as farmers recognize the investment in their time that is required for these roles, or it may increase as farmers perceive benefits that have accrued to others who have taken on these roles.

In addition to responses to questions in this section, responses to the earlier section ‘Areas farmers would like to know more about’ might also clarify the training, communication and coaching skills which farmers who take on these supporting roles feel they need.

5.5 Updating the benchmarks

If maintained properly, benchmarks can avoid rigidity and stagnation. Benchmarks need to be maintained such that they respond to changes in local conditions while still providing comparability with important long-term measures.

We have suggested a number of areas where the current measures might be modified. In addition, each measurement cycle should include a review of the current measures, and consideration of the introduction of new measure to the benchmarks, as well as the deletion of measures which do not pass the ‘filters’ identified above, or which may no longer be relevant.

Appendix A – Current issues regarding skills development and apprenticeship

It is no accident or coincidence that a number of stakeholders are responding favourably to the discussion around skills development and apprenticeship as being important to the future viability of the farming industry on PEI. There are a number of forces and issues at play that make this discussion timely and appropriate.

A recent conference on PEI highlighted the industry's awareness that the status quo is not going to serve well as the industry competes in a broader market place. Change will require an increasingly broad skill set for farmer and farm work both.

Food safety

A key factor in the discussion of skills and learning revolves around the dramatic increase in the importance of food safety and traceability that has been fuelled by consumer concerns about the health and safety of their food supply.

A fully traceable food chain or system requires a high degree of record keeping and reporting on all activities from field preparation to every step of production and preparation of the food that ends up on the consumers' plate. This is required to ensure a defensible and marketable quality assurance standard.

The detailed record keeping and the quality of handling that is required for every aspect of crop or livestock production requires farm staff to be trained to deliver consistent, high quality work.

Environment

Increasing concerns about the impact of farming on the environment has led to the implementation of more legislation in a number of areas. This means that farmers and anyone using equipment or inputs in a farming operation must be aware of changing regulations and be able to comply with them.

This requires ongoing training, better use of information and better communication skills for both staff and management. Communication is required to insure everyone understands the regulations, how to comply and how best to inform the public about farm practices in the context of environmental concerns.

Technology

Today's farm business makes increasing use of technology in many aspects of farm management and production – from computerized record keeping to highly sophisticated equipment, including tractors, sprayers and GPS systems for monitoring of inputs and yields across different fields.

The basic employability requirements for a farm hand have steadily increased over the past decade, and now include the need to deal with technology in a variety of forms.

Consolidation

Current economic trends mean that there are fewer farms and each is trying to maintain, if not increase, production. Those that remain are often larger due to purchases of additional land from farmers going out of business. This means that farms are evolving from small family-only operations to larger enterprises that require hiring of many staff. This in turn leads to the requirement for staff who can function at a higher level of self-direction and oversight which requires a higher skill level that can understand both the theory and function of many processes on the farm.

Business

As farms increase in size their success is determined more by business management and work done in the office, rather than in the field. Where farm businesses may have previously been primarily focused on production, they are now more involved in planning, budgeting and cost reduction.

A more skilled staff is able to carry out plans, to understand the impact of their actions and choices on the farm's economic success, and to reduce costs through proactive intervention, prevention of costly mistakes, and more effective troubleshooting. Well trained staff are also able to work more independently when the farm manager or owner is not as directly involved in field work from day to day.

Information literacy

Our information-based economy and society impacts all businesses, including farm operations. It requires an increasing level of literacy, numeracy and ability to use computer technology effectively in day to day work for all farm staff – from owner to hired hand. Traditional farm experience or a willingness to learn will no longer be enough – workers will have to demonstrate or achieve significant skills in handling information and new technologies as they become an integral part of most farm-related work.

This is further compounded by the workplace demands for continuous learning as regulations, equipment, and production methods change. Those with a strong learning background and essential skills will be able to continue to learn.

Competitive environment

To be successful and competitive in agriculture these days it is important to manage risks and be innovative in adding value to the product or in establishing niche markets.

The cost and complexity of today's equipment and changing regulations magnify the risk inherent in growing and marketing food. One way to manage risk is to define and ensure certain quality standards for all farm processes. However, this also means that all farm employees must be aware of and adhere to the correct processes.

Innovations and other value-add processes bring both value and a different sort of work into the farm business. This work requires an adaptable workforce that can rapidly learn new skills or applications for the innovation to grow and add to the bottom line.

DAFAF policy and strategies

A number of government policy and strategies also reflect the growing need for improved learning and skills development options and programs. These include:

- Sustainable Resource Policy – Focused on the intersection of economic, environmental and community sustainability in the primary resource sector. Requires from all participants in farming an ability to balance competing concerns to meet sustainability outcomes.
- Food Strategy – Focused on bringing better value to the producer for high quality, niche market products. Relies on quality standards and branding of PEI's food image to build value. Food quality standards require farm management and staff to meet HACCP-based performance standards in their day-to-day work.
- Learning Strategy – Under development. To date DAFAF has adopted a CBE approach to identify key skills required in the agriculture sector, and to promote systematic and appropriate adult work place learning for farmers, farm workers and agencies.
- Future Farmers – An incentive program to support new entrants into farming that links economic incentives to learning. Future Farmer participants are taken through an assessment based on a Farm Management skills chart, and develop an Individual Learning Plan (ILP).
- Agriculture Policy Framework (APF) – the new Federal/Provincial Agreement on Agriculture will put emphasis on Food Safety, Environment, Skills and Learning and Innovation. The goal is to help PEI's farming sector move into the 21st century in a competitive position. This will require rapid learning and adoption of quality standards in a variety of areas, including the knowledge and skills of farm staff who are part of the food quality chain.

Agriculture and Agri-Food Canada APF Priorities

The new Federal/Provincial Agriculture Policy Framework (APF) Agreement will put emphasis on Food Safety, Environment, Skills and Learning and Innovation. The goal is to help PEI's farming sector move into the 21st century in a competitive position. This will require rapid learning and adoption of quality standards in a variety of areas, including the knowledge and skills of farm staff who are part of the food quality chain.

AHRDC strategies

AHRDC is working to help develop a Sector Council for agriculture to identify skills and training needs, and fostering discussions about a variety of new learning and skills development opportunities, including a farm worker apprenticeship program.

Appendix B – Summary of data from designation survey

This appendix reports the quantitative results of the 111 surveys with farm employers carried out in fulfillment of the requirements for farm workers to be designated as a trade. The method details are provided in the accompanying Research Method and Protocols document.

The questions and numbering represent those used in the actual interview protocol and survey form. The data in the column labelled with # are the number of farmers that gave a specific answer.

- 1 Full-time workers work more than 30 hours per week for more than 40 weeks during the year. This may include family members.
- How many full-time workers are there on your farm?

Mean	3.16	
Median	1	
Maximum	50	
Total # of full-time workers	351	
Answer	#	%
0 full-time workers	33	29.7
1 full-time worker	26	23.4
2 full-time workers	17	15.3
3-10 full-time workers	29	26.1
Over 10 full-time	6	5.4
TOTAL	111	100.0

- 2 Part-time workers work less than 30 hours per week, for more than 40 weeks during the year. This may include family members.
- How many part-time farm workers do you have on your farm?

Mean	1.01	
Median	0	
Maximum	10	
Total # of part-time workers	110	
Answer	#	%
0 part-time workers	62	55.9
1 part-time worker	20	18.0
2 or more part-time	27	24.3
No answer	2	1.8
TOTAL	111	100.0

- 3 Seasonal workers are workers who are employed for less than 40 weeks in the year.
- What is the maximum number of seasonal workers you employ at any one time?

Mean	6.88	
Median	3	
Maximum	100	
Total # of seasonal workers	750	
Answer	#	%
0 seasonal workers	20	18.0
1-5 seasonal workers	47	42.3
6-10 seasonal workers	26	23.4
11-20 seasonal workers	10	9.0
More than 20 seasonal	6	5.4
No answer	2	1.8
TOTAL	111	100.0

- 4 How many full-time workers do you expect to hire over the next 3 years?

Mean	1.19	
Median	0	
Maximum	30	
Total # of planned hires	127	
Answer	#	%
No plans to hire	62	55.9
Plan 1 full-time hire	24	21.6
Plan 2-5 full-time hires	18	16.2
Plan to hire more than 5	4	3.6
No answer	3	2.7
TOTAL	111	100.0

- 5 What do you feel is the minimum level of education a farm worker should have before becoming an apprentice?

Answer	#	%
Completed Grade 10	36	32.4
Completed Grade 12	47	42.3
No minimum level	15	13.5
Some other level	13	11.7
TOTAL	111	100.0

Other responses:

Education is important, but a natural tendency to be practical and mechanically inclined is an asset. Do an aptitude test.

Any grade level qualifies if person is interested, committed and willing to learn and work.

Grade 11 or 12 - depends on how ambitious the person is.

Depends on what work they had to do. Education not required as much as ability.

Doesn't matter - willingness and ability to learn is what is important.

Doesn't matter so long as they can read and write and want to work.

The more the better but Grade 9 would be acceptable.

All individuals vary - formal education is a benefit but not necessary.

People with no formal education but very good workers.

Grade 3.

Grade 8 would do if the person can read and has an aptitude for farm work and a good work ethic.

As long as person can read and write and has elementary math.

- 6 How many years of farm experience do you feel a worker should have before entering an apprenticeship program?

Mean	0.79	
Median	0	
Maximum	5	
Answer	#	%
No experience necessary	55	49.5
0.1 to 1 year	30	27.0
1.1 to 2 years	17	15.3
More than 2 years	6	5.4
No answer	3	2.7
TOTAL	111	100.0

- 7 How many months of on-farm experience do you think a 'Farm Worker' apprenticeship program should include to ensure adequate exposure to farm tasks?

Mean	10.4	
Median	12	
Maximum	48	
Answer	#	%
0-3 months	12	10.8
4-6 months	37	33.3
7-12 months	45	40.5
13-24 months	12	10.8
More than 24 months	3	2.7
No answer	2	1.8
TOTAL	111	100.0

- 8 Do you feel an apprenticeship program would help you hire or train better workers?

Answer	#	%
Yes	84	75.7
No	6	5.4
Don't know	21	18.9
TOTAL	111	100.0

- 9 Where do you think apprenticeship training would provide the most benefits?
(NOTE: People could select more than one option affecting the total responses and percentages that do not add up to 100%)

Answer	#	%
Train before hired by you	67	60.4
Training to develop new skills	74	66.7
Training for a future farmer	43	38.7
Other	7	6.3
Don't know	7	6.3
TOTAL	198	NA

Other responses:

Have trainees go out with a mechanic, electrician, etc.

To help determine if someone is even suited for this type of work.

Training to ensure workers perform a skill set to complete the tasks assigned properly.

For cheaper seasonal labour (to save himself costs of hiring seasonal workers).

Understanding the participant's background and reason for involvement in program will determine how this program can benefit the farm.

To see what aspect of the job the person likes and is best suited to, a person that loves tractors may be useless in a livestock barn and vice versa.

Some class work.

- 10 To what extent do you think a 'Farm Worker' apprenticeship program would benefit the PEI farming community?

Answer	#	%
Greatly	38	34.2
To some extent	59	53.2
Not much	9	8.1
Not at all	1	0.9
Don't know	4	3.6
TOTAL	111	100.0

11 How much would you support a 'Farm Worker' apprenticeship program?

Answer	#	%
Strongly	39	35.1
To some extent	59	53.2
Not much	9	8.1
Not at all	4	3.6
TOTAL	111	100.0

12 How many workers do you estimate you might send on 'Farm Worker' apprenticeship training over the next 3 years?

Answer	#	%
None	36	32.4
1 farm worker	40	36.0
2 farm workers	17	15.3
More than 2 farm workers	13	11.7
Don't know	5	4.5
TOTAL	111	100.0

13 Apprenticeship training would require some training to be done on the farm. Who is there on your farm that might – with appropriate training and support - carry out some of the training?
(NOTE: People could select more than one option affecting the total responses and percentages that do not add up to 100%)

Answer	#	%
Farm manager	36	32.4
Lead hand	12	10.8
Husband	7	6.3
Wife	4	3.6
Retiree	4	3.6
Farm owner	65	58.6
Other	15	13.5
TOTAL	143	NA

Other responses:

Supervisor (of the specific activity)

Supervisors

Foreman

Seasonal worker (he has been working on the farm for 20 years)

Sons (one of three would do it)

Sons or one of five Managers

Senior farmer

Other family members (each teaching their own specific skills)

Son

Self, father and full time hired man

No one is available to do it

Herdsmen

Brothers

Any others who have something to teach a worker

Any experienced person