

# Factors affecting occupational safety and health of foreign farm workers in Nordic countries









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# Preface

Nordic agriculture has become dependent on foreign labour, and integrating foreign workers into the Nordic working life has become a challenge. Employers are legally responsible for the safety and health of their employees. Employees are responsible for their safety as well, and both must act together to maintain and improve safety in the workplace.

Earlier studies have shown that short employment periods, insufficient language skills, unfamiliar working environment, different attitudes towards safety, different management cultures and social stress can make communication and co-operation a challenge. This study further emphasized the need for better communication. Concerted efforts are needed to clarify the responsibilities of each individual in the workplace. It is even more important to foster a climate where the suggestions and contributions of foreign workers are encouraged and valued. It is necessary to find ways to communicate, avoid misunderstandings and address safety and health issues as they arise.

Maximizing earnings was clearly the first priority for workers. While they are motivated to extend their workdays, it is important for employers to monitor working hours so that safety is not compromised. Experienced workers can train new workers, if this practice is supported and monitored closely by the employer. Homesickness was a special stress factor which can be alleviated to some extent by inviting workers to activities in the local community.

Overall, the increasing role of foreign workers is the new reality in agriculture. Continued efforts are needed by the authorities, local communities and employers to better integrate this new workforce into the Nordic working life. Developing new tools to enhance safety communication between people from different cultures is one area where progress can be made.

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# Summary

An increasing amount of farm work in the Nordic countries is done by foreign workers. Finland had about 15,000, and Norway as many as 27,000 foreign farm workers in 2007. Agriculture is one of the most hazardous industries worldwide, and many studies have concluded that foreign workers have higher risk for occupational injuries than native workers.

Both an employer and employees should act together to maintain and improve safety on the farm. Open dialog and co-operation are critical for safety. However, short employment periods, insufficient language skills, unfamiliarity with agricultural work and health and safety rules, new production methods, different management cultures and social stress can make this co-operation challenging.

We used weekly diaries (n=14) and interviews (n=54) of foreign farm workers to identify factors that affect their health and safety. Communication was identified as one of the main issues. It is complicated by diverse attitudes towards safety among workers. Other issues were an unclear role of safety as the responsibility of each individual, lack of language skills, lack of work experience and awareness of safety hazards, shyness and cultural differences leading to misunderstandings and underreporting of incidents.

Homesickness was a special stress factor among foreign workers. Making money was clearly the first priority, and workers were motivated to work long days to increase their earnings. This can compromise safety. A common practise of experienced workers guiding and training newcomers can be used effectively if the employer monitors that safe working procedures are followed. We also found that discussion of health and safety issues can be activated and encouraged by use of educational materials and practices. Supporting the wellbeing of workers in general, like efforts to ease homesickness, may have a positive effect on safety as well.



# 1. Background

## 1.1 Introduction

Nordic agriculture has become dependent on foreign labour and the numbers of foreign workers have increased. Nordic countries face similar challenges in integrating foreign migrant and seasonal labour into the workplace. In this project we aimed to identify challenges, share experiences and find universal solutions to improve the health, safety and working conditions of migrant workers in Scandinavian agriculture.

An employer has the responsibility for occupational safety and health of employees, which includes sufficient training and guidance in performing all work tasks. Employees are also responsible for their safety. The Nordic occupational safety laws put both an employer and an employee under the obligation to act together in maintaining and improving safety of the workplace. However, short employment periods, lack of knowledge and sufficient language skills, new and unfamiliar production methods, different attitudes towards safety, different management culture, as well as social stress, can make communication and co-operation quite challenging. According to recent studies in Europe, the economic importance of the earnings and immigrant status put foreign workers in a vulnerable position. They easily abstain from criticizing their working conditions in any way (Ahonen et al. 2009; Rye and Andrzejewska 2010). Open dialog and constructive cooperation might be difficult to achieve.

The long-term goal of this project was to improve the occupational safety and health of foreign farm workers and to reduce their risk of occupational injuries. The specific aims of this project were to identify essential factors affecting occupational safety and health of foreign farm workers, to build Nordic collaboration, and to disseminate results to the agricultural community in the Nordic countries.

## 1.2 Statistics

The exact number of foreign workers in Nordic agriculture is uncertain. Different sources and statistics operate with different numbers. Table 1 below contains numbers from the Finnish Information Centre of the Ministry of Agriculture and Forestry (Tike) which estimated that there were about 15,000 foreign farm workers in Finland in 2007 (Tike 2008). In Norway, the survey "Trender i norsk landbruk", conducted by the Centre for Rural Research, concluded that there were 27 000 foreign

farm workers in 2007. Their average working time was 2.5 months, compared to 40 days per person in Finland. Hiring foreign labour force appears more common in Norway; 16% of all farms had foreign labour in 2007, compared to 3% in Finland.

Danish statistics indicate that there were 2,400 non-Western immigrants and 3300 western immigrants in Danish agriculture, forestry and fishing in 2007.

Iceland Statistics has figures for the number of migrant worker in agriculture only up to 2005.

It has not been possible to obtain information about the number of migrant workers in Swedish agriculture from other sources than the OECD statistics.

**Table 1. Foreign farm workers in the Nordic countries**

	Reports	National Bureau of Statistics	OECD (1)
Finland	14 670 (2)	–	6500
Norway	27 000 (3)	–	14 904
Sweden	–	–	52 615
Denmark	–	9450	26 299
Iceland	–	270	–

(1) Source: OECD, Data extracted on 06 Dec 2011

(2) Source: Tike, Farm Structure Survey

(3) Source: Centre for Rural Research

### 1.3 Aim of the study

The objective of this project was to identify essential factors affecting occupational safety and health of foreign workers in the Nordic countries. This information is needed in developing occupational safety and health programs, educating farmers and employers and finding strategies to improve safety communication.

In a literature study, our aim was to identify what is already known about occupational safety and health of foreign agricultural workers in Europe and the Nordic countries. In addition to the assessment of the present level of occupational safety and health, we aimed to identify approaches that have been used in investigating this insufficiently characterized primarily short-term work force.

With the cultural probes method, we aimed to document experiences and thoughts of foreign farm workers about factors affecting occupational safety and health in the workplace.

## 2. Methods and material

### 2.1 Literature study

Ahonen et al. (2007) conducted a systematic literature review of work and occupational health of immigrant populations. They found 48 relevant studies from years 1990–2005, most of these carried out in the US. Four studies had target populations in Europe, and in addition, one had some European data included. Ten studies concentrated on agricultural workers, but none of those were European studies. However, one Italian study (Capacci et al. 2005), which was published in 2005 and involved all sectors, was included into our review as well.

New searches from PubMed, Google Scholar, and ISI Web of knowledge produced some more recent studies that focus on occupational safety and health of foreign farm workers in Europe. We searched for journal articles published through 2000–2010 in the English language. Searches were completed between 29 July – 8 September 2010. Used search terms were farm, agriculture, horticulture, immigrant worker, foreign worker, migrant worker, immigrant labour, foreign labour, migrant labour, migrant farm workers, foreign labour force, immigrant work\*, seasonal farm\*, safety, safe\*, occupational safe\*, health, occupational health\*, work ability, injury, accident, risk factor, sick leave, burn-out, suicid\*, and work environment.

### 2.2 Cultural probes

The Cultural probe method is widely used in user/consumer studies and is based on self-documentation by participants. With this method it is possible to gain qualitative information and rich stories about the local cultural context (Gaver et al. 1999). Our aim in using this method was to create fresh real-life based content for our suggestions for training and education initiatives. We documented experiences and thoughts of foreign farm workers about factors affecting safety and health when working on horticulture farms in Norway.

The probing is an interactive step by step process. The method has been described and used in the PhD-studies of Mattelmäki (2006) and it involves five steps 1) tuning in, 2) probing, 3) first interpretation, 4) deepening, 5) interpretation and ideation. The first phase in our study involved designing the probes in accordance with the study aims. The main element of our probe was a weekly diary, which each participant

filled in during five days. Other elements supported the use of the diary (English-Polish dictionary, coloured pencils, sharpener etc., Picture 1).

**Picture 1. The Probe kit**



The second phase involved probing i.e. self-documentation by participants expressing their personal thoughts, experiences etc. in the diary. In our study, we had two weekly probing periods. During the first period, the diary was only in English, but we noticed that even if we gave dictionaries to participants, they did not fully understand all the tasks/questions. For the second probing period, we translated some questions/tasks into Polish and shortened the list of questions (see the diary in Attachments). In the diary we asked some background information including gender, education, working history etc. We included questions about motivation to take this present job, as well as questions about daily time schedules and work tasks, expectations etc. Each day we had also one alternating question about physical or mental stress, social atmosphere, environmental factors, and occupational risks or safety deficiencies. Further, every day we asked participants to illustrate factors that helped them cope with work and enjoy life. Regarding occupational safety, we asked them to read and indicate their agreement/disagreement with arguments about safety awareness, teamwork, pride, commitment, honesty, communication, leadership and supervision on the farm, innovation, training, safety effectiveness and facilities, machinery and tools. The list was modified from the Idaho Safety Norm Survey (Ostrom et al. 1993).

In the third phase, we prepared preliminary interpretations of participant responses to be discussed and clarified with them in interview sessions. In the fourth phase we interviewed each participant to deepen our understanding of issues and to affirm that our interpretations correctly represent what the workers were thinking. In the last phase we prepared the final interpretation of the findings, conducted an ideation in workshops, and continued sharing the results in publications and presentations to various audiences.

### 2.2.1 Participants

We had 14 foreign workers participating in our study, 7 of them were women and 7 were men (see Table 3). Their average age was 31, minimum being 23 and maximum 42 years. Most were seasonal workers, who had been working previously on the same farm or greenhouse in Norway.

**Table 3. Foreign workers participating in probes**

Total sample	N= 14
<b>Gender</b>	
Female	7
Male	7
<b>Age</b>	
Average	31
Min	23
Max	42
<b>Citizenship</b>	
Poland	14
<b>Type of contract</b>	
Seasonal	11
All year	3
<b>Experience on this farm</b>	
First-timers	1
Repeaters	13
<b>Agricultural studies</b>	
Yes	5
No	9

## 2.3 Workshops

The research team conducted workshops to analyze and interpret data, to create suggestions based on the findings and to plan publication of results. We had four (4) workshops during the project. During analysis and interpretation of data, the research team applied affinity analysis (as described by Beyer and Holzblatt, 1998) to categorize, combine and refine data from probes into common themes (Picture 2). This exercise, combined with re-listening of the group interview recordings and discussion among the research group yielded the probing results.

Picture 2. Example of the affinity analysis exercise.



## 2.4 Evaluation

To evaluate our findings and suggested improvements we collected feedback from participating farmers and experts from the Nordic countries. During the project we initiated a Nordic collaboration group on occupational safety and health of migrant and seasonal workers. This group had informal discussions during conferences and email exchanges related to migrant and seasonal worker issues. We shared information about our project and other ongoing projects in the Nordic countries. This collaboration group was asked to provide evaluation feedback for our study. Their responses are summarized in Results.

## 3. Results

### 3.1 Literature

There have been many studies about migrant farm workers in the United States, but in this study we focused on what has been done in Europe in this research area. In our literature searches we used terms US, United States, Mexican, and Hispanic to exclude US studies. We used inclusion terms Europe and single European country names (Finland, Sweden, Spain, Italy etc.) to identify European studies.

These searches identified 556 articles for further consideration. Authors, title and abstract of each article was reviewed. Full articles of potentially relevant articles were then reviewed in detail. We accepted only articles that focused on occupational safety and health of foreign farm workers in Europe or made reference to this population. With these criteria we included eight articles.

In addition to online searches, we used personal contacts and our network of researchers to find more studies. This resulted in three more articles and reports (one in Norwegian language). Our final review included eleven studies (Table 2). While many studies addressed issues related to immigrant workers in Europe, very few focused on farm workers.

**Table 2. Articles about occupational safety and health of foreign farm workers in Europe after year 2000**

Author	Year	Country	Type of study	Sample size	Safety and health indicators	Results, notes
Capacci et al.	2005	Italy	Literature study/ description of the situation in Italy	Concerns also agricultural workers	Occupational diseases, injuries	Immigrants are likely to risk their safety and health when pursuing their goals. Occupational diseases among immigrants are not well known. In 2003 foreign workers represented 3% of total workforce but more than 10% of fatal accidents in Italy.
Agudelo-Suárez et al.	2009	Spain	Interview	84 immigrant interviews, and 12 focus groups (74 participants), some farm workers were involved	Experience of discrimination on workplaces	Participants had experienced discrimination e.g. racism, mistreatment, and precarious working conditions. Experiences of discrimination can affect mental health, and e.g. access to health care services.
Lyon et al.	2008	UK	Immunization program among poultry workers, testing and developing practices.	88 persons were vaccinated in clinics, 131 at farms. Some were immigrant workers. Overall uptake rate 32%; however, the true proportion of at-risk population vaccinated remained unknown, because the database of eligible workers was incomplete.	Participation in seasonal flu immunization	On-site vaccination during working hours was the most effective method. Strategies for engaging smaller farms, immigrant and non-registered workers need to be developed.
Cross et al.	2008	UK	Four different instruments were used SF-36 EuroQoL EQ-5D Visual Analogue Scale (VAS) Short Depression Happiness Scale (SDHS)	605 foreign horticultural workers (mainly migrant workers)	Self-reported health and well-being status	Comparison between organic and conventional farms: workers on organic farms were happier, but no other significant differences in health status. The self-perceived health status of workers was significantly lower than population norms for a number of health scales.
Alexe et al.	2003	Greece	Person interviews based on injury data recorded by the Emergency Department Injury Surveillance System	4,326 injuries, during years 1996–2000, data included also migrant workers	Occupational and leisure time injuries	Migrant workers are one of the risk groups (as are older women). Occupational farm injuries were more severe/ required hospitalization more often among migrant workers.
Guerin et al.	2005	Norway	Case study	Two cases + two asymptomatic carriers; strawberry pickers	Salmonellosis outbreak	Preparedness plans should be improved to deal with contagious pathogens. Social rights and health care of migrant workers needs special attention.
Johansson et al.	2010	Sweden	Literature Review	31 relevant articles about piece rate work, some concerning agricultural work	Effect of piece rate work on safety and health	Piece rates have in many situations a negative effect on health and safety.
Ahonen et al.	2009	Spain	Semi-structured focus group and individual interviews	158 immigrant workers (22 farm workers)	Immigrant workers' perceptions of working conditions	Poor working conditions, low pay and health hazards were described; undocumented workers described poorer conditions. Hazards were described especially by construction and farm workers. All felt vulnerable because of their immigrant status and economic need.
Rye et al.	2010	Norway	Interviews	54 farm migrants	Social processes (beyond the fact that labour regulations do not translate into actual practices at farm level)	Poor working conditions of migrant farm workers come from two sources: disempowerment and weak negotiating position of migrant workers, and the fact that they accept a poor wage level because it is better than at home. Conclusion: instruments closer to the farm level are needed.
Riiber, S.	2009	Norway	Interviews and participatory observations	8 female immigrant workers, 2 employers, one agricultural officer	social relationships, employment continuity, uncertainty of the future	Uncertainty of life ahead was evident, long period of migration leads to a certain "rootlessness"; a meaningful relationships are of great importance, as are relations to the surrounding society.
Alijosiute, I.	2005	Finland	Case study (incl. questionnaire, interviews, and personal experience)	Questionnaire n=46 respondents, interviews n=4	Cultural processes; how local people accept foreign farm workers etc.	

According to the literature, occupational health and safety risks and problems among migrant/foreign farm workers are numerous. Studies found in this review had varying approaches, but all studies found factors risking the safety and health of foreign farm workers. The most common research method was an interview. Either single subjects or focus groups were interviewed. The richest primary material was collected using participatory observations together with interviews. Standardized health survey forms were used to collect specific indicators, such as health and well-being scores and psychometrically-based physical and mental health summary measures.

### ***3.1.1 Risk of occupational injuries in agriculture***

Agriculture is a hazardous industry worldwide. In addition to health and social work sectors, work-related health problems occur most often in agriculture, mining and quarrying; and accidents are most common in agriculture, manufacturing and construction sectors in the EU (De Norre 2009). The rate of agricultural fatalities was 9.1/100,000 workers in 2007 (Eurostat 2009).

The 2010 Nordic Meeting on Agricultural Occupational Health in Norway discussed some positive trends in the development of safety in the agricultural sector. Fatal injuries of farmers have decreased, but they are still far from zero, which is the goal in the Nordic countries. In 2009 there were 3 fatal injuries in Denmark (including children), 5 in Finland, 7 in Norway and 8 in Sweden (The Asker declaration against fatal injuries and occupational diseases in agriculture 2010). In comparison, agriculture had the highest fatality rate in the US in 2009: 26.0 fatalities per 100,000 workers in agriculture and 3.3/100,000 in all industries (CFOI 2010).

The risk of injury varies by production sector. In Finland, animal, greenhouse, vegetables and special crops production all have increased injury risks compared to growing cereal crops (Rautiainen et al. 2009). Especially raising horses, pigs, goats and dairy had high injury risks. A study conducted among 3,000 farmers in Norway showed that farmers below 30 years of age with milk, cattle or pig production were most prone to injuries (Skadefri bonde Oddfrid Aas et al. 2011). Horticulture and animal production are the most common agricultural production sectors where foreign farm workers are employed in Finland and Norway.

### **3.1.2 Injury risk among foreign farm workers**

Many studies addressing different industry sectors and populations have analyzed injury risks of immigrant workers compared to native workers, but the results of these studies differ. Some studies have concluded that foreign workers have higher risk for occupational injuries than native workers (e.g. Alexe et al. 2003; Ahonen & Benavides 2006; Blom & Henriksen 2009). In Italy, Capacci et al. (2005) reported that in 2003, foreign workers represented 3% of the total workforce but more than 10% of fatal accidents. A recent study from Norway (Blom & Henriksen 2009) reported that the incidence of injuries is higher among immigrant workers when compared with the entire workforce. Exposure to physical, chemical, mechanical and psychosocial strain was also higher among immigrants based on their own experience. However, contradictory results also exist. Döös et al. (1994) found no support for the view that immigrants would be at greater risk than native workers.

Henriksen (2009) studied the working environment of immigrants in Norway. According to this study, immigrants are less exposed to poor indoor climate, but they have more ergonomic problems (e.g. heavy lifting and repeated motions), less control over their work, more accidents, bullying and teasing, and they feel a greater degree of mental strain at work. Occupational injuries were three times more common among immigrants, when compared with employed persons in general. Henriksen (2009) commented that the differences between immigrants and all employees are at least partly due to disparities in the breakdown of occupations; immigrants are overrepresented in occupations which have higher injury risks (Mathisen 2009; Henriksen 2009). In the same occupation and same circumstances, the occupational injury risks for foreign workers do not differ from those of native workers (McKay et al. 2006; Garcia et al. 2009; Salminen et al. 2009). Salminen et al. (2009) analyzed injuries of bus drivers in Finland, and noticed that foreign-born bus drivers were not significantly more often involved in occupational injuries than Finnish-born drivers.

Alexe et al. (2003) analyzed characteristics of farm injuries in Greece. They found that immigrant workers are one of the high risk groups, and occupational injuries of foreign farm workers were more severe. Ahonen et al. (2009) interviewed 158 immigrant workers in Spain (22 worked in agriculture). According to them, workers had experienced safety deficiencies especially in construction and agricultural work. Safety deficiencies were related to falls, cuts, fallen objects, tools, sharp objects, poorly maintained equipment and carrying heavy objects. Some mentioned exposure to dust and chemicals as well. Workers described poor organisational

conditions i.e. long working hours with few days off, known entry but not exit time from work, hurry and pressure to work faster at the cost of ergonomics and safety, and lack of training and personal protective equipment. Hard work with long working hours and long commuting times without enough rest caused severe fatigue with difficulties to sleep, or maintain physical and mental energy (Ahonen et al. 2009).

In practise, foreign workers are likely to face more risk factors, and this puts them at a higher risk of accidents and illnesses at work. In addition to working in high risk low quality jobs, workers prolong their working hours because of economic reasons (Ahonen et al. 2009; Garcia et al. 2009, McKay et al. 2006). Their ability to communicate safety and health information as well as lack of training and experience increase their injury risk (McKay et al. 2006). Language skills (Corvalan et al. 1994) and short duration of residence are important factors affecting safety at work (Corvalan et al. 1994; Salminen et al. 2009). Salminen et al. (2009) also found that migrants who have been working less than five years had injuries more frequently than migrants that have been working five years or longer. Corvalan et al. (1994) suggested that different work practices and social stress, such as isolation and insecurity might be risk factors for accidents. Patussi et al. (2008) found that temporary work, regardless of nationality, is a major risk factor for occupational injury. Finally, piece rate work often seems to have a negative effect on health (Johansson et al. 2010).

### ***3.1.3 Lack of safety training and open communication***

In the Nordic countries, an employer has the responsibility for occupational safety and health of workers, and is responsible for giving sufficient training and guidance for work tasks. In practise, employers tend to give farm workers simple routine tasks where safety hazards are not obvious. These are often manual labour tasks that are easy to learn without good language skills or education and working experience, for example planting, weeding, picking and harvesting fruit and vegetables. The risk of injury increases when more complicated machinery work tasks are assigned to workers. Machinery, animal handling and other more demanding tasks require good training and guiding. In Finland at least two fatal injuries have occurred to foreign farm workers during machinery work. One worker fell under the tractor wheel when trying to enter the moving tractor (TOT-report 17/2005). Another worker was operating a riding lawn mover when he stuck against a branch of an

apple tree. He was pinched between the seat and the tree branch (TOT-report 21/07).

Employees are also responsible for safety in the workplace. Nordic occupational health and safety laws require that both employers and employees act together in maintaining and improving the health and safety of the workplace. However, short employment periods, insufficient language skills, unfamiliarity with agricultural work, new production methods, different attitudes towards safety, different management cultures and social stress can make communication and co-operation quite challenging. According to recent studies in Europe, foreign workers strongly rely on their work income and their immigrant status puts them in a vulnerable and precarious situation. They easily abstain from criticizing their working conditions in any way (Ahonen et al. 2009; Porthé et al. 2010; Rye and Andrzejewska 2010). In this situation, open dialog and constructive cooperation might be difficult to achieve, which also prevent or slow down the development of working conditions and increase risk of injuries.

#### **3.1.4 Occupational health and sick leave**

In Europe, there are few studies on health and safety of migrant/foreign agricultural workers. However, in the United States, numerous studies have been conducted. These studies have shown foreign agricultural migrant and seasonal labour to be at an increased risk of developing tuberculosis, sexually transmitted diseases, parasitic diseases, diabetes and skin diseases. These outcomes are related to poor housing conditions, sanitation and nutrition. Musculoskeletal, dental, and eye problems and headaches are also common (Butler 2007; Zuroweste & Fortuna, 2004). Migrant labor in the United States comes primarily from Mexico, where the standard of living is lower. Both the country of origin and country of residence have an effect on the income, health and well-being of workers. Often the health of migrant workers is relatively good as this is a self-selected group of younger able-bodied workers (Smith et al. 2000, Malin & Gissler 2006). In the United States, migrant workers are typically 18–34 years of age, about five percent are under 18 years of age, and some are even younger than 15 years of age (Butler 2007, Zuroweste & Fortuna, 2004). Studies in Scotland (Whelton & Jentsch 2005) also found that about 80% of the employed foreign nationals are under 34 years old, and about 40% were under the age of 25.

No Finnish studies emerged in our search addressing seasonal agricultural workers' health status, but issues related to immigrants coming

from the same areas as short-term labour, have been studied to some extent. Pohjanpää et al. (2003) study shows that immigrants living in Finland (from Russia, Estonia, Somalia and Vietnam) had a variety of symptoms such as headaches, back pain and inability to sleep. Their dental health was poor compared to Finns on average. The majority (90–70%) of immigrants reported good health, with the exception of the Russians of whom only 55% considered their health to be good. Similar results were found by Giorgiani & Brothers (2007). Their study shows that the majority of the immigrants were in good health compared to others their age, again the Russians reporting more mediocre health status. Vartia & Giorganin (2007) studied workers in Finland representing various nationalities (no agricultural workers). Their reasons for entry were different, those from Russia were primarily Ingrian returning residents, Somalis were refugees or asylum seekers, and most Estonians had come to Finland to work or seek employment. The background, demographics and health status of immigrants may differ from migrant and seasonal agricultural workers. Seasonal agricultural workers come from a very wide area. In many countries of origin, for example, in Russia or Poland, diseases like tuberculosis and salmonella are more common than in Finland. Therefore health providers should have clear instructions for the treatment and prevention of infectious disease cases. Cases of Salmonella (*Salmonella Enteritidis*) have been reported in strawberry pickers in Norway (Guerin et al. 2005).

Cross et al. (2008) studied occupational health of foreign farm workers in the United Kingdom. The self-perceived health status of foreign farm workers was significantly lower than population norms in UK, even if the recruiting system used among horticultural business tries to select workers that are physically in good conditions. Cross et al. (2008) also compared conventional and organic horticultural farms, and noticed that workers on organic farms were happier, but there were no other significant differences in health status. Differences in Short Depression Happiness Scale were related to the range and number of work tasks. Based on the results authors suggested that assigning a varied range of tasks could be one simple way to improve well-being.

Soler-González et al. (2008) studied sick leaves of native and immigrant workers in Spain. There were no differences in causes of disabilities, but sick leaves were less frequent among immigrants, and sick leave periods were shorter compared to natives. Disability risk of Dutch and Turkish construction workers was compared by Elders et al. (2004). Turkish workers experienced disability 2, 48 times more often than native Dutch workers (adjusted by age). There were no differences in di-

agnosis, except for a minor difference in cardiovascular disease. Working conditions were the same for Turkish and Dutch workers, and the pre-employment health selection criteria were same for both groups.

Health troubles of migrants may be at least partly due to their lower entitlements in society, like difficulties in accessing health care (Bollini & Siem 1995). Castañeda (2009) studied in Germany how the legal status of unauthorized migrants affects illness experiences, medical treatment and recuperation. Illnesses of unauthorized immigrants were typical for their age groups, but illegal status resulted in four areas of disparities: limits to the quality and quantity of care for mothers and infants, difficulties in accessing regular medication for chronic illnesses and immediate help for injuries or other acute health concerns, and deficiencies in mental health care.

A satisfactory working condition is highly significant determinant of worker's health (Gupta & Kristensen 2008). Agudelo-Suárez et al. (2009) found in their interview study in Spain that workers had experienced discrimination in their community and working life e.g. racism, mistreatment and precarious working conditions. Rye and Andrzejewska (2010) stated in their study in Norway, that foreign farm workers are the most disempowered actors in labour markets; they have low wages, poor labour conditions, and their position to negotiate or improve their situation is weak. In Spain Porthé et al. (2010) found that immigrant workers, and especially undocumented workers, experience greater precariousness in their jobs than native workers. Precariousness is characterized by high job instability, a weak negotiating power and defenselessness against high labour demands. Immigrant workers described insufficient wages, long working hours, limited social benefits, and difficulty in holding on their rights. Porthé et al. (2010) stated that extreme precariousness experienced by immigrant workers may have an impact on the physical and mental health of these workers but this link is not well known. Others have found that difficult situations at home or other sectors of life might have even a stronger impact on distress than issues related to migration (Leavy et al. 2007).

## 3.2 Cultural probes

### 3.2.1 Motivation and wellbeing

In our study of migrant/seasonal workers on Norwegian greenhouse and vegetable farms, we found that the main motivational factors for taking the job were money, followed by desired for new experiences and good working conditions. Other strong motivators included that the farmer/employer appreciated their work and recommendation by a friend. The motivating factors are averaged for the 14 interviewed workers in figure 1 below (5=highest motivator, 1=lowest motivator).

While our study aimed to collect qualitative data (rather than quantitative data with specified statistical power) there seem to be differences between younger (under 31 years) and older (31 years and older) workers. New experiences, travelling and perceptions conveyed by a recruiting agency were stronger motivators for younger workers (See Figure 2). In turn, liking the work and low income or hard living conditions at home were stronger motivators for older workers.

**Figure 1. Motivating factors of foreign farm workers (N=14) to take the job, 5=highest motivator, 1=lowest motivator**

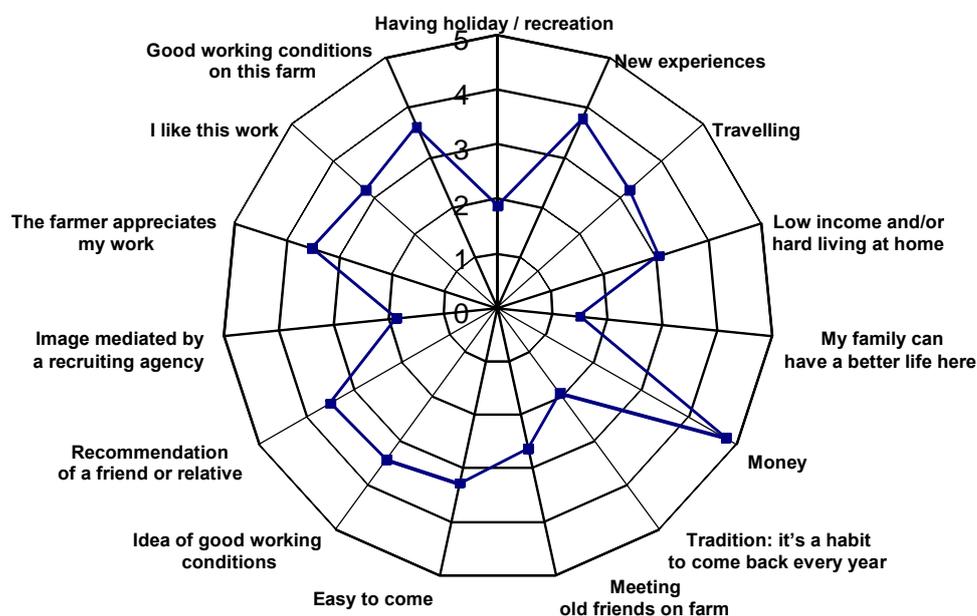
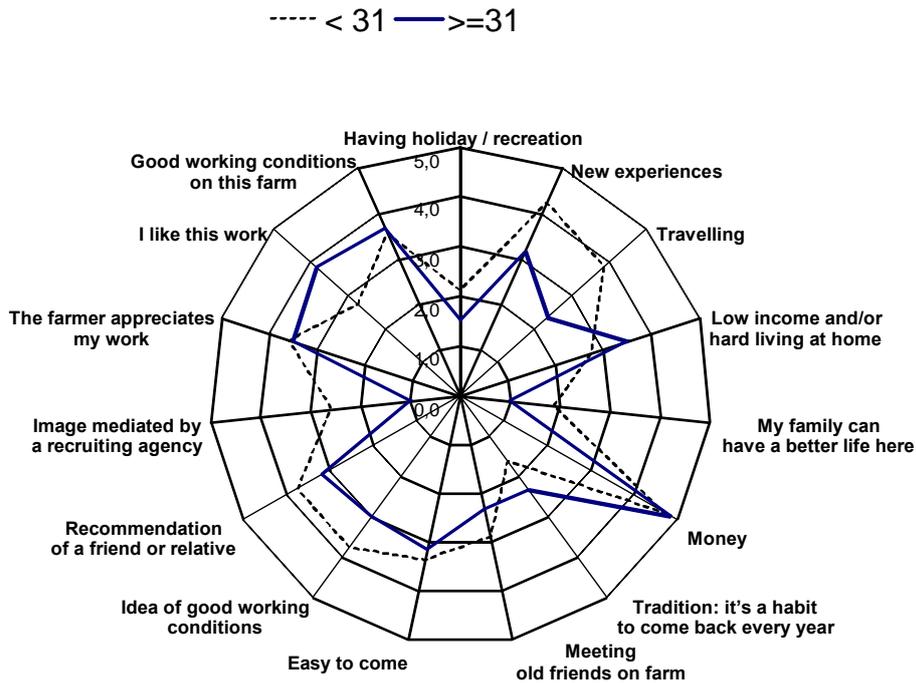


Figure 2. Motivating factors of foreign farm workers (N=14) to take the job divided by age, 5=highest motivator, 1=lowest motivator.



Those who had recurring work periods on the same farm valued meeting old friends, tradition and money, whereas new experiences, travelling and “a better standard of living” were less important motivators. For those who were on the farm for the first, second or third time, the recommendation of a friend or relative played an important role for taking the job.

### 3.2.2 Sources of strain

In our sample, average working hours per person per day varied from 6 to 14 hours, maximum being even 15 hours per day. Some of the working tasks were very repetitive and monotonous, and workers described

muscle pains. They also told that they are very tired because of extremely long working hours. However, the situation was temporary (because of high seasonal production at the time).

Other physically straining factors were working fast and carrying heavy loads. Pressure to work fast was also mentioned as a mentally straining factor by some workers. Other mentally straining factors were related to the contacts with workmates or manager, and working conditions (like working on higher elevation or working outdoors during rainy days). Some workers felt it was also stressful to live with workmates; however for others, friends and workmates were a coping resource. About environmental exposures, low and high temperatures, dust, noise and chemicals were mentioned. Overall, many straining factors were mentioned. On the other hand, some participants did not mention any stressful factors or occupational safety risks.

**Table 4. Length of working days in hours**

Worker ID	Day 1	Day 2	Day 3	Day 4	Day 5	On average
D	14:00	8:00	11:30	14:00	11:00	12
E	14:00	10:30	10:00	13:00	9:00	11
F	14:00	11:30	10:00	11:00	14:00	11
G	14:00	6:30	10:00	14:00	9:00	11
H	12:30	9:00	9:00	10:30	9:00	10
I	8:30	8:00	6:00	6:30	5:00	7
J	8:30	8:30	6:00	6:00	8:00	7
K	8:30	8:30	8:00	8:30	6:00	8
L	6:30	8:00	6:00	6:30	5:00	6
O	14:00	13:00		14:00	14:00	14
P	15:00	13:00		14:00	14:00	14
Q	14:00	14:00	14:00	14:00	14:00	14
R	8:00	9:00	10:00	10:00	10:00	9
S	14:00	14:00	14:00	8:30	13:00	13

### **3.2.3 Coping with work and life**

The workers were asked to keep a daily record of life events by marking icons which represented randomly chosen examples of recreational activities like biking, taking a nap, gardening, dancing, or calling friends etc. In addition they could write comments or draw new icons to the collage, representing events and ways to cope that day.

The results were analyzed and ways of coping could be categorized in nine major groups:

- Rest
- Recreation
- Food & Drink
- Money

- Meeting friends
- Keeping in contact with friends & family
- Close relationships
- Entertainment
- Other

The need for rest and sleep was evident due to long average daily working hours (avg. 10.5 hrs, n=68 recorded days). The common way to recover from daily work stress and strain was getting some rest between work shifts. The thought of an upcoming days off also helped some workers cope with work demands. Various recreational activities like walks, short trips and mushroom picking were mentioned.

Good food was often indicated as a way to make life more enjoyable. Besides incorporating a hedonic element, it may also indicate significance of social activity in coping with work stress and strain. Other ways of social coping were meeting friends and keeping in contact with remote friends and family. Having a close relationship (to spouse/significant other) was an important way of coping for some, even if the persons were separated for the working season.

The factors that motivated workers to take the job included money as the clear number one factor. However, money played a very limited role in coping with work stress and strain.

Various forms of entertainment, like shopping, puzzles, reading books, watching television and movies, and surfing the internet were listed as usual pastime activities. Some of them involve social activity with peers while others provide a means for individuals to take a break from being with workmates. The stress source survey indicated that some workers suffered from social stress because workers stay closely together both during work and leisure.

Other coping methods included taking a bath and a general positive attitude.

### **3.2.4 *Fatigue and recovery***

The Norwegian National Institute of Occupational Health (NIOH) conducted a literature study of possible health and safety effects of different work hours. Long working hours increases the risk of accidents, and there was a gradual decrease in function/performance after “normal” workday. Long working hours also increase the risk of psychological problems, and probably musculoskeletal disorders and cardiovascular disease (STAMI, 2008).

Participants in our study were asked to document their daily start and end times of the work shift, and tick their feelings in the morning before work started and at the end of the day after the work shift. The marking was done on a continuous line from totally exhausted to totally recovered. For data analysis, the line was divided into seven segments, on an even scale from 1=totally exhausted to 7=fully recovered.

The participants' (N=14) working days were quite long, on average 10.5 hours per day. Only four workers had a mean working time of 8 or less hours. There was considerable variance in the magnitude and even direction of change in the feelings between morning and evening ratings. After a 10 hour day, the worker could still feel fully refreshed in the evening, even if in the morning she/he had felt totally exhausted. Individual responses to stress and strain, as well as endurance and other physical and psychological background factors (that were not measured) may affect fatigue outcomes.

### **3.2.5 Safety awareness**

In general, the interviewed workers thought that they are quite well aware of safety hazards and careful to minimize and avoid them. However, they were able to mention only a few safety hazards and many workers were not able to identify any occupational safety risks on the farm. The ones that were mentioned included chemicals (1), slip, trip and fall hazards (2), dropping or falling object (2), forklifts (1), and cuts from knives (4). They thought, perhaps too optimistically, that there are no other dangerous places or tasks on the farm.

They generally felt comfortable talking about safety with workmates and the boss. They expressed that while in some situations it could be difficult, they could refuse to do dangerous work, but such work situations had not emerged. However, some workers also expressed a team responsibility for getting the job done: *"If someone is scared of doing a job we change and let another person do it."* This indicates giving high priority to completion of work tasks. Certain hazardous work tasks (chemical application) were assigned to specific trained workers only. It was also mentioned that *"You should make the workers think more of safety."*

### **3.2.5 Teamwork**

According to Norwegian laws, both the employer and employees should act together in maintaining and improving safety on the farm. Open dialog and co-operation are the bases of farm safety. However, short employment periods, insufficient language skills, unfamiliarity with agricultural work and health and safety rules, new production methods, different attitudes towards safety, different management cultures and social stress make communication and co-operation challenging.

According to our interviews, to some extent, workers see safety as the responsibility of each individual, but this role is not self-evident for all; some were a doubtful to say that they could significantly influence safety on the farm. Some workers thought that it is better to solve a problem without disturbing their employer. Some had also earlier experiences of co-workers who had taken unnecessary high risks and were stopped or corrected by other workers. While this shows good initiative by employees, it may also reflect reluctance to bring up safety issues with the employer or manager.

### **3.2.6 Pride, commitment and honesty**

Workers thought that helping each other and working safely is a team responsibility. They answered that safety rules were followed even if they were not watched. Some expressed that the safest way to work is usually also the fastest way to work, which is high priority for them. Injuries could cause interruptions which result in losses to the worker and employer. Sometimes, however, it was a challenge to feel common responsibility in workplaces where everybody is doing different tasks.

### **3.2.7 Communication**

The participants appreciated common meetings where safety, accidents and near misses were discussed. Inexperienced workers are not always aware of farm hazards. Language difficulties, shyness and cultural differences can lead to misunderstandings and underreporting of incidents. On-the-job training when starting a new task was seen as a good practice. Warning signs, which are commonly required for specific hazards in the workplace, did not seem to be well utilized in places where workers could see them.

### **3.2.9 Training and effectiveness**

Sometimes experienced workers were expected to guide and train the newcomers. This is good practice, given that the experienced worker follows safe working procedures and has sufficient knowledge about safety and health issues. However, training numerous new workmates during the summer season is very challenging. A worker, who has training responsibilities, needs help and supporting materials.

### **3.2.8 Other points**

Regarding wellbeing at work, homesickness was reported frequently. As one of our participants stated, people are different. Someone can handle this well, and another never gets used to being abroad and separated from his/her family: *“usually it takes 1–2 months to adapt and not feel homesick”*, but as noted, people react in different ways. If the worker feels homesickness and does not have social and recreational activities, it may lead to tiredness and stress which may affect and weaken risk awareness. Language problems and lack of experience were other factors mentioned, affecting the well being.

Some participants felt that this job abroad will not help them in their future careers because most had a different occupation at home. However, learning good safety procedures, ideas and methods could be a transferable skill that they can use back home in other job settings.

## **3.3 Evaluation**

### **3.3.1 Methods**

The project team requested evaluation feedback from the Nordic collaboration group on agricultural health and safety of migrant and seasonal workers which was established during this project. Three Nordic institutions responded. These institutions have expertise in research and labour issues related to migrant and seasonal workers in agriculture. We provided draft final reports and articles from the project to the collaboration group and asked them to examine the reports and provide feedback. We used an open-ended question design rather than a structured questionnaire. We assured that the evaluators' comments would be kept anonymous. References to specific countries and organizations were removed and replaced with unidentifiable information (in brackets) in this report. Following is a summary of the feedback provided by three

evaluators. First, we present comments related to specific reports of the project, and at the end, overall comments about the project.

### **3.3.2 Evaluation of reports**

*Health and safety of foreign agricultural workers project (Preliminary Report).* Comment: Good and concrete recommendations for farmers who want to become better at creating a good working environment for their migrant workers. As well, the recommendations are relevant for some of the consultants arranging the contact between employers and migrant workers.

*Seasonal migrant workers are a challenge to safety (Article).* Comment: The article's coverage of the migrant workers' opinions and experiences is very representative of the migrant workers in (our country), I believe. The article provides some good ideas for what the farmers and their families can do to promote their migrant workers' well-being – especially in the first months after their arrival to the country. These messages can be spread again and again, since we as human beings are often relapsed and need a refresher.

*Factors affecting occupational safety and health of foreign farm workers (NJF poster).* Short and concrete presentation of the results from the interviews and diaries. The figure is a fine way of dissemination since it is illustrative. It does, however, require a closer reading if you are to understand more of the message.

### **3.3.3 Overall evaluation of the project**

This is good, valuable and interesting material that you are presenting. The method, by using a diary for the individual migrant workers is a great way of achieving personal information giving them time to think and reflect about the questions and their answers. Information about their perception of homesickness is interesting – an often neglected or forgotten issue. Safety awareness – as you say – maybe too optimistic views. Challenging to handle your recommendations about education materials, but lot of inspiration can be collected from North America (as my impression of previous projects in US & Canada). Team work – interesting! Communication – as well as in (our project) (about to start), we believe this is very important and a key to many aspects.

(Farmers' organization) believes that the issues of seasonal workers in agriculture is important and must be more investigated. Foreign workers are exposed to more risks caused by language difficulties and

other valuations. It is important that all persons engaged in agriculture have a safe and healthy working environment. It is important for the attraction, growth and profitability in the industry. We are pleased that this Nordic project examined these relationships and look forward to receiving the final report.

It would be relevant to publish the project results in a couple of articles (in our language). The target audience would be farmers.

In conclusion – a very important project which gives us a good “base-line” for actions, education & further research.



## 4. Summary of findings

Agriculture is one of the most hazardous industries worldwide, and many studies have concluded that foreign workers have higher risk for occupational injuries than native workers. Both an employer and employees should act together to maintain and improve safety on the farm. Open dialog and co-operation are critical for safety. However, short employment periods, insufficient language skills, unfamiliarity with agricultural work and health and safety rules, new production methods, different management cultures and social stress can make this co-operation challenging.

We used weekly diaries (n=14) and interviews (n=54) of foreign farm workers to identify factors that affect their health and safety. Communication was identified as one of the main issues. It is complicated by diverse attitudes towards safety among workers. Other issues were an unclear role of safety as the responsibility of each individual, lack of language skills, lack of work experience and awareness of safety hazards, shyness and cultural differences leading to misunderstandings and underreporting of incidents.

Homesickness was a special stress factor among foreign workers. Making money was clearly the first priority, and workers were motivated to work long days to increase their earnings. This can compromise safety. A common practise of experienced workers guiding and training newcomers can be used effectively if the employer monitors that safe working procedures are followed. We also found that discussion of health and safety issues can be activated and encouraged by use of educational materials and practices. Supporting the wellbeing of workers in general, like efforts to ease homesickness, may have a positive effect on safety as well.



## 5. Suggestions

### 5.1 Suggestions for future studies

Based on our work we have found that communication is one of the critical areas that needs improvement, both from the employers' and the employees' standpoint. The research group has received funding from Finland for further research on communication issues and from Norway to develop a tool for workers and employers to be used in improving the communication of safety issues. These projects will utilize results of the current study. We will continue dissemination of the results from this project and learning of other efforts conducted by members of the Nordic collaboration group on agricultural health and safety of migrant and seasonal workers. Further research is needed to deepen the knowledge of the safety and health communication context on farms with foreign workers. This information is critical for developing tools and approaches that can help communication and reduce injuries and illnesses among migrant and seasonal agricultural workers in the Nordic countries.

### 5.2 Suggestions for prevention

*Homesickness.* An employer could provide or support some activities for workers and promote their contacts with family/relatives or other workers to prevent adverse effects of homesickness.

*Materials to promote discussion of safety issues.* Some participants thought that when thinking through the safety and health questions in the diary and responding to statements, it resulted in more discussion about health and safety among workers. Similar tools and educational materials could be provided to workers to help with introduction to health and safety among new workers.

*Team approach in training.* Employers should introduce general health, environment and safety (HES) rules to workers and provide supervision and means to ensure that workers are not taking unnecessary risks. Prohibition of working alone in potentially hazardous job situations, and information about who is allowed, certified, assigned and trained to do potentially dangerous jobs should be included in the safety

introduction. Rewarding the whole team for good safety initiatives and ideas could activate thinking, discussing and contributing to improving work processes. It might help workers understand that everybody is responsible for safety. Not only for their own safety, but the safety of the whole work team depends on the way how each individual acts.

*Work rotation.* Work rotation may increase the understanding of importance of team responsibility.

*Use of warning signs.* Warning signs should be placed where needed. Sign(s) with emergency contact information should be easily accessible. Utilizing employees' peer experiences during intro and safety training (=group training) makes training more credible and interesting. It also gives the farmer feedback on prevailing attitudes and working methods.

*Training schedule.* Introduction and orientation material should be available to workers. Not to make orientation in the first days overwhelming, there should be a schedule how training and orientation is provided in manageable pieces. A specific checklist could be developed for the farm to provide consistent training for all new workers.

*Safety as part of recruiting and human resources management.* The recruiting materials describing the farm and farm work, work agreement, training etc. should include information about the importance of health, environment and safety. Worker evaluation, compensation, and letters of reference provided to the worker could clearly state the specific safety training and skills obtained during the farm work period. This could set the tone for high safety awareness from the beginning, and guide workers to obtain safety knowledge and skills that they can use in their future careers, or when returning back to the same farm or other farms in the next growing season.

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- Zuroweste, E. & J.A. Fortuna (2004), Presentation at National safety Council meeting  
in San Diego 2004.
- Magna, Sed et Victoria Nee (2004), Quisque non nulla. Integer eu dolor id vol 33 (4):  
401–404.

## 7. Sammendrag

En økende mengde gårdsarbeid blir utført av utenlandske arbeidstakere i de nordiske landene. Finland hadde ca. 15 000 og Norge ca. 27 000 utenlandske arbeidstakere innen landbruket i 2007. Over hele verden er landbruk regnet som et av de farligste yrkene, og mange studier har konkludert med at utenlandske arbeidstakere har høyere risiko for ulykker enn innfødte arbeidere.

Arbeidstakere og arbeidsgivere er pålagt å samarbeide for å opprettholde og forbedre sikkerheten på arbeidsplassen. Åpen dialog og samarbeid er en forutsetning for å ivareta sikkerheten. I praksis oppleves det at for midlertidig utenlandsk arbeidskraft, er det faktorer som manglende språkkunnskaper, kort ansettelsestid, ukjent med landbruksarbeid, ulike holdninger til sikkerhetskultur, vant til en annen ledelseskultur og sosialt stress som gjør dette samarbeidet utfordrende.

For å identifisere faktorer som hadde påvirkning på helse- og sikkerhetsarbeidet, fikk arbeidstakerne (n=14) utlevert dagbøker som ble fylt ut for en arbeidsuke, i tillegg ble det gjennomført intervjuer (n=54) av utenlandske arbeidstakere. Kommunikasjon ble nevnt som en av de viktigste faktorene for å ivareta sikkerheten, men er komplisert på grunn av forskjellige holdninger til sikkerhet i ulike kulturer. Andre faktorer som manglende språkferdigheter, skyhet, uklarhet rundt den enkeltes ansvar og manglende bevissthet om farer kan føre til misforståelser og underreportering av hendelser.

Hjemlengsel ble pekt på som en spesiell stressfaktor blant utenlandske arbeidere. Den største motivasjonen for å ta arbeid utenlandsk er å tjene penger. Dette medfører i enkelte tilfeller at noen jobber svært lange dager, noe som kan kompromittere sikkerheten. Noen steder blir erfarne arbeidstakere satt til å lære opp nykommere. Dette kan være en god måte under forutsetning av at de erfarne arbeidstakerne har de rette holdninger til helse, miljø og sikkerhet og at arbeidsgiver overvåker, støtter og har opplæringsmateriell for den som skal gi opplæring. Vi fant også at diskusjon om helse og sikkerhet kan aktiveres og oppmuntres dersom det finnes materiell og arenaer som legger til rette for dette. Tilrettelegging for velferdstiltak og kontaktmulighet med familie og venner i hjemlandet kan også ha en positiv effekt på sikkerheten.



## **8. Appendices**

Appendix 1. The Cultural Probe Diary

**Factors Affecting Occupational Safety and  
Health of Foreign Farm Workers**

A research project funded by the Nordic Council  
of Ministers

in joint cooperation with  
Landbrukets HMS-tjeneste, Norway  
MTT Agrifood Research, Finland  
Lantbrukarnas Riksförbund, Sweden

# DIARY

## Basic Info



Gender:



Age: .....

Home country .....

Language skills .....

Education.....

Working history.....

Are You for the first time on this farm?

Yes

No, I've been on this farm ..... times before

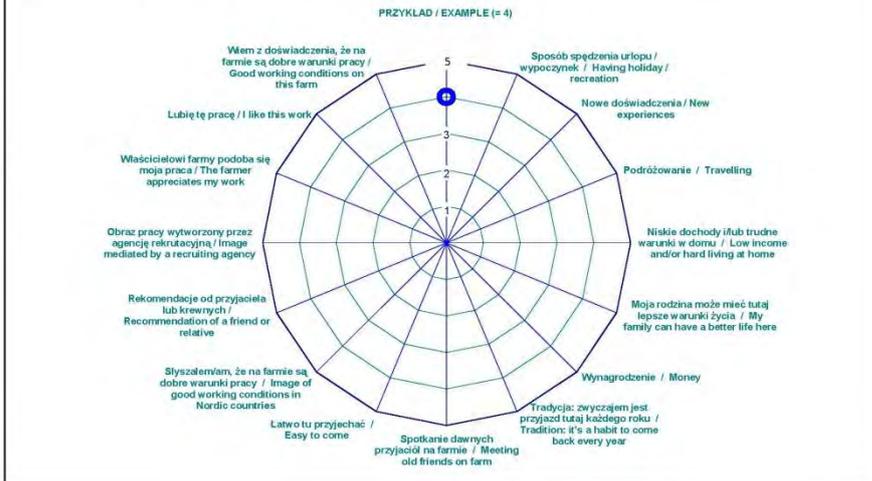
Are You working

Seasonally

All year

Określ swoje umotywowanie do podjęcia pracy, wybierając cyfrę od 0 do 5 dla każdej z 15 możliwości (zob. PRZYKŁAD 0 = nie stanowi dla mnie motywu; 5 = najważniejszy motyw)

Indicate Your motivation to take this job by ticking a number on each of the 15 scales (see EXAMPLE 0 = not a motive for me; 5 = most important motive)



# Day 1

Date \_\_\_ / \_\_\_ 20\_\_\_



Start of day: \_\_\_\_\_

How are You feeling this morning?



End of day: \_\_\_\_\_

How do You feel this evening?

How many breaks did You have today: .....

What did You do today? What was the concrete result of Your work today?

.....  
.....  
.....

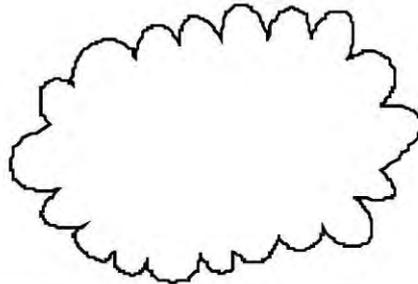
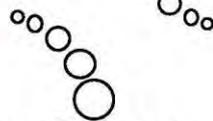
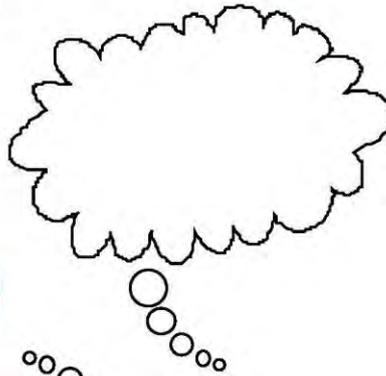
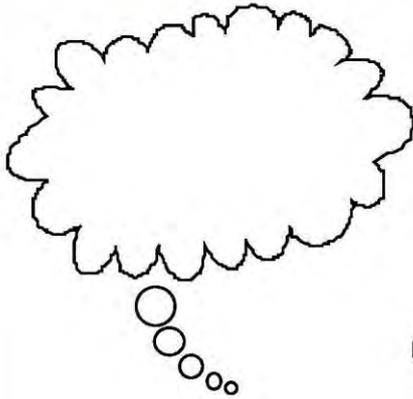
Expectations for the next day, other notes: .....

.....  
.....

What was the **physically** most stressing task today? How did it affect You?

.....  
.....  
.....  
.....

What factors helped You to cope with the work and to enjoy life today? Please indicate/circle all icons that apply. You can also write or draw into the empty "thought clouds".



# Day 2

Date \_\_\_ / \_\_\_ 20\_\_\_



Start of day: \_\_\_\_\_

How are You feeling this morning?



End of day: \_\_\_\_\_

How do You feel this evening?



How many breaks did You have today: .....

What did You do today? What was the concrete result of Your work today?

.....  
.....  
.....

Expectations for the next day, other notes: .....

.....  
.....

What was **mentally** stressing today?

.....  
.....  
.....  
.....  
.....

What factors helped You to cope with the work and to enjoy life today? Please indicate/circle all icons that apply. You can also write or draw into the empty "thought clouds".

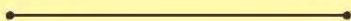
# Day 3

Date \_\_\_ / \_\_\_ 20\_\_\_



Start of day: \_\_\_\_\_

How are You feeling this morning?



End of day: \_\_\_\_\_

How do You feel this evening?



How many breaks did You have today: .....

What did You do today? What was the concrete result of Your work today?

.....  
.....  
.....

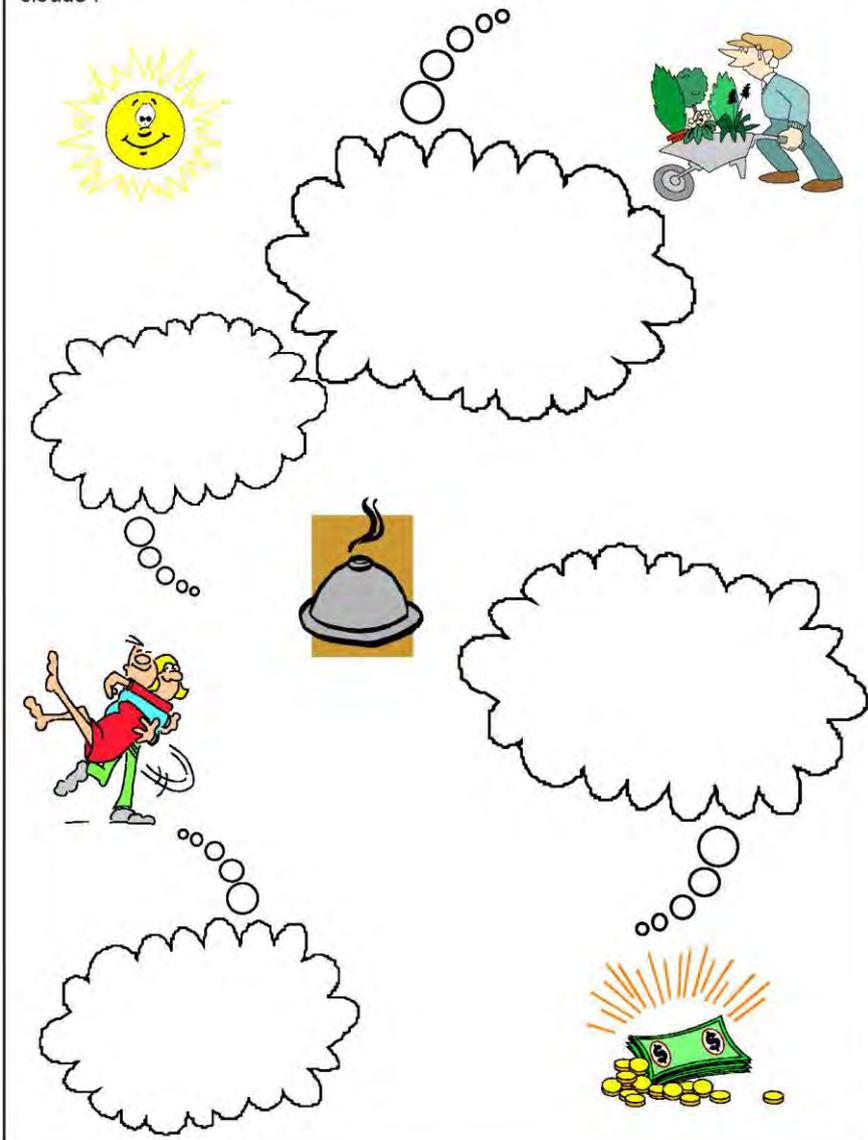
Expectations for the next day, other notes: .....

.....  
.....

Describe the **social atmosphere** among the work community on this farm.

.....  
.....  
.....  
.....

What factors helped You to cope with the work and to enjoy life today? Please indicate/circle all icons that apply. You can also write or draw into the empty "thought clouds".



# Day 4

Date \_\_\_ / \_\_\_ 20\_\_\_



Start of day: \_\_\_\_\_

How are You feeling this morning?



End of day: \_\_\_\_\_

How do You feel this evening?



How many breaks did You have today: .....

What did You do today? What was the concrete result of Your work today?

.....  
.....  
.....

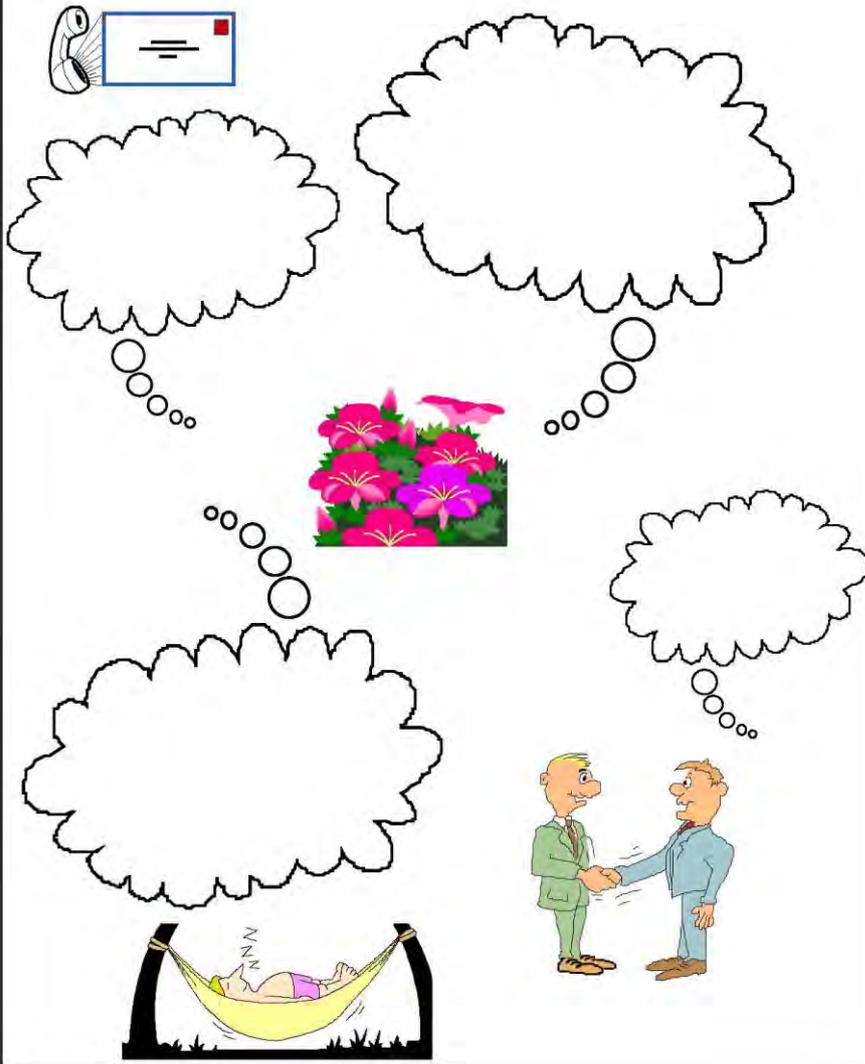
Expectations for the next day, other notes: .....

.....  
.....

What **environmental factors** (high or low temperatures, humidity, vibration, noise, dust, chemicals, etc.) affected You today? .....

.....  
.....  
.....  
.....

What factors helped You to cope with the work and to enjoy life today? Please indicate/circle all icons that apply. You can also write or draw into the empty "thought clouds".



# Day 5

Date \_\_\_ / \_\_\_ 20\_\_\_



Start of day: \_\_\_\_\_

How are You feeling this morning?



End of day: \_\_\_\_\_

How do You feel this evening?



How many breaks did You have today: .....

What did You do today? What was the concrete result of Your work today?

.....  
.....  
.....

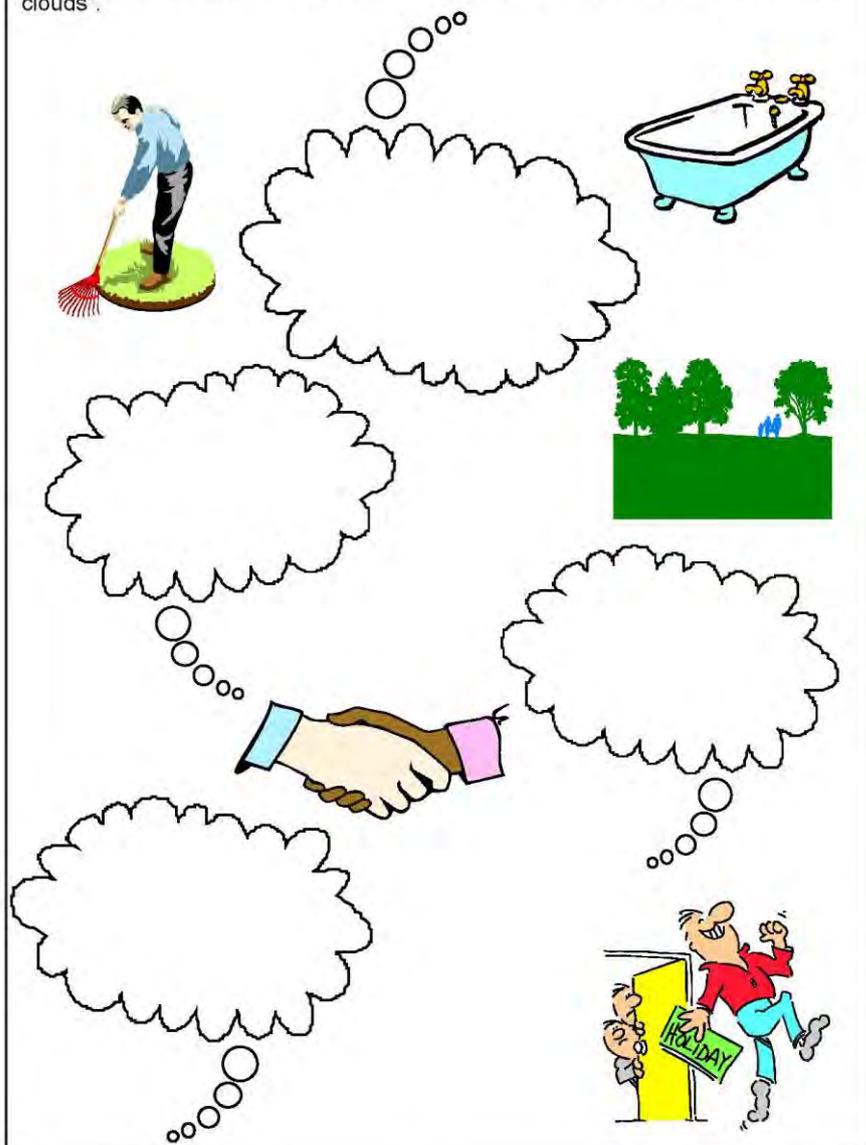
Expectations for the next day, other notes: .....

.....  
.....

What **risks or safety deficiencies** have You observed? What **accidents** could occur on this farm?

.....  
.....  
.....  
.....

What factors helped You to cope with the work and to enjoy life today? Please indicate/circle all icons that apply. You can also write or draw into the empty "thought clouds".



ARGUMENT / Odpowiedź		Do you agree with the argument? Czy jesteś tego samego zdania?								
		NO NIE	1	2	3	4	5	YES TAK		
EXAMPLE		NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
PRZYKŁAD		NO NIE							YES TAK	<input checked="" type="radio"/> Not applicable Nie dotyczy
100	Workers pay attention to hazards in their work area and are careful to avoid risks. Pracownicy zwracają uwagę na zagrożenia bezpieczeństwa w swoim środowisku pracy i zachowują niezbędną ostrożność.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
800	On this farm, people think more about production than safety. Na tej farmie ludzie myślą więcej o produkcji niż o bezpieczeństwie.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
700	If I am asked to do work that I think is very dangerous, I would not be afraid to refuse. Jeżeli poproszono by mnie o wykonanie pracy, która moim zdaniem jest bardzo niebezpieczna, to nie bałbym/bałabym się odmówić.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
500	On this farm, workers can easily ask their manager if they have a problem with safety. Na tej farmie pracownicy mogą łatwo poradzić się przełożonego, jeżeli mają jakiś problem związany z bezpieczeństwem.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
400	We learn about safety mainly from co-workers who teach us how to do the job safely. Dowiadujemy się o problemach bezpieczeństwa głównie od współpracowników, którzy uczą nas jak wykonywać pracę w bezpieczny sposób.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
200	I sometimes have to do dangerous work alone. Czasami muszę wykonać niebezpieczną pracę sam/sama.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
100	I take pride in how safely work is done on this farm. Jestem dumny z warunków bezpieczeństwa pracy na tej farmie.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy

ARGUMENT / Odpowiedź		Do you agree with the argument? Czy jesteś tego samego zdania?								
		NO NIE	1	2	3	4	5	YES TAK		
EXAMPLE		NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
PRZYKŁAD		NO NIE							YES TAK	<input checked="" type="radio"/> Not applicable Nie dotyczy
3200	On this farm, people/workers see safety as the responsibility of each individual. Na tej farmie ludzie traktują bezpieczeństwo jako sprawę, w której każdy z nas ponosi odpowiedzialność.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
900	The manager cares about the safety of workers. Przełożony troszczy się o bezpieczeństwo pracowników.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
800	On this farm, workers work safely, even when the manager is not looking. Na tej farmie pracownicy pracują bezpiecznie, także wtedy, kiedy przełożony nie patrzy.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
900	On this farm, we always use personal protective equipment where they are needed. Na tej farmie zawsze używamy wyposażenia ochronnego tam, gdzie jest ono niezbędne.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
800	On this farm, workers are very willing to follow safety rules and regulations. Na tej farmie pracownicy bardzo chętnie przestrzegają zasad i przepisów bezpieczeństwa.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
900	On this farm, we do not report minor injuries and near misses. Na tej farmie nie zgłaszamy niewielkich uszkodzeń ciała ani wydarzeń, które mogłyby spowodować wypadek.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
1200	On this farm, safety hazards are not discussed openly. Na tej farmie zagrożenia bezpieczeństwa nie są powszechnie omawiane.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy
1300	On this farm, we have safety signs and posters in all places where they are needed. Na tej farmie są widoczne oznaczenia i plakaty dotyczące bezpieczeństwa w miejscach, w których są one potrzebne.	NO NIE							YES TAK	<input type="radio"/> Not applicable Nie dotyczy

ARGUMENT / Odpowiedź		Do you agree with the argument? Czy jesteś tego samego zdania?							
		NO NIE	1	2	3	4	5 YES TAK		
EXAMPLE PRZYKŁAD		NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
		NO NIE						YES TAK	<input checked="" type="radio"/> Not applicable Nie dotyczy
15103	On this farm, workers are asked if they have ideas and opinions about safety in their work area. Na tej farmie pracownicy są pytani o pomysły i opinie dotyczące bezpieczeństwa w ich miejscach pracy.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15104	On this farm, work is organized so that you can do the job safely. Na tej farmie praca jest tak zorganizowana, że może być wykonywana bezpiecznie.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15105	Managers are often not available to answer health and safety questions. Przełożeni często nie są dostępni, aby odpowiedzieć na pytania dotyczące zdrowia i bezpieczeństwa.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15106	My manager has discussed many safety and health issues with me. Mój przełożony rozmawiał ze mną o wielu problemach bezpieczeństwa i zdrowia.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15107	On this farm, management gives special recognition to people who work safely. Na tej farmie kierownictwo daje specjalne dowody uznania dla pracowników pracujących z zachowaniem środków bezpieczeństwa.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15108	On this farm, people try all the time to do things more safely. Na tej farmie ludzie starają się cały czas pracować z większym zachowaniem środków bezpieczeństwa.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15109	On this farm, people are encouraged to express new safety ideas and suggestions. Na tej farmie ludzie są zachęceni do zgłaszania swoich pomysłów i propozycji w sprawach bezpieczeństwa.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy

ARGUMENT / Odpowiedź		Do you agree with the argument? Czy jesteś tego samego zdania?							
		NO NIE	1	2	3	4	5 YES TAK		
EXAMPLE PRZYKŁAD		NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
		NO NIE						YES TAK	<input checked="" type="radio"/> Not applicable Nie dotyczy
15110	On this farm, work is done safely enough, and there is no need for improvement. Na tej farmie prace są wykonywane wystarczająco bezpiecznie i nie ma potrzeby wprowadzania nowych środków bezpieczeństwa.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15111	When I started working here, I received good training about safety. Wraz z rozpoczęciem pracy na tej farmie zostałem/am dobrze przeszkolony/a w zakresie bezpieczeństwa pracy.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15112	On this farm, safety training does not handle real problems in our work. Na tej farmie szkolenie w zakresie bezpieczeństwa pracy nie obejmuje rzeczywistych problemów w naszej pracy.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15113	Everyone knows just how to respond if there is an emergency situation, like injury, fire, etc. Każdy wie, jak należy się zachować w sytuacji nagłego wypadku, jak np. uszkodzenia ciała, pożaru itd.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15114	Workers here are sometimes uncertain how to do new tasks in a safe and correct way. Pracownicy tutaj zatrudnieni nie zawsze wiedzą, jak wykonać nowe zadanie.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15115	On this farm, there are clear rules and instructions for doing all work tasks safely. Na tej farmie są w użyciu jasne zasady i instrukcje dotyczące bezpiecznego wykonywania prac.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
15116	On this farm, there is a culture to always follow safe procedures at work. Na tej farmie panuje kultura przestrzegania procedur bezpieczeństwa w pracy.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy

ARGUMENT / Odpowiedź	Do you agree with the argument? Czy jesteś tego samego zdania?							
	NO NIE	1	2	3	4	5 YES TAK		
EXAMPLE	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
PRZYKŁAD	NO NIE						YES TAK	<input checked="" type="radio"/> Not applicable Nie dotyczy
2509 We sometimes have to take risks to get the work done on schedule. Czasami musimy podejmować ryzyko, aby wykonać pracę w terminie.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
4199 On this farm, we always take the time that is needed to get the job done safely. Na tej farmie zawsze zużywamy tyle czasu, ile potrzeba, aby wykonać pracę w bezpieczny sposób.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
4200 On this farm, some safety problems remain, even if they have been mentioned several times. Na tej farmie niektóre problemy bezpieczeństwa pozostają nierozwiązane, jakkolwiek była o nich mowa wiele razy.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
4201 The physical conditions on this farm make it difficult to work safely. Fizyczne warunki na tej farmie nie utrudniają wykonywania pracy w sposób bezpieczny.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
4400 We have good work routines for maintaining the machinery, buildings and tools in safe condition. Mamy dobre doświadczenie w zakresie utrzymywania maszyn, budynków i narzędzi w bezpiecznym stanie.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
4700 Workers tend to keep their work areas clean and orderly. Pracownicy starają się utrzymywać swoje miejsce pracy w czystości i z zachowaniem porządku.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy
1100 On this farm, there are some fire, electrical or chemical hazards that should be corrected. Na tej farmie istnieje kilka zagrożeń w zakresie pożarów oraz zagrożeń związanych z elektrycznością i chemikaliami, które powinny być usunięte.	NO NIE						YES TAK	<input type="radio"/> Not applicable Nie dotyczy

Based on your experience, what kind of information could help workers when they are making arrangements, before going to work in a foreign country for the first time?

- related to health, safety, working and living conditions, or other issues.

.....

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.....

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Based on your experience, what kind of information could help adjust to working and living in a new country, after the worker has arrived?

- related to health, safety, working and living conditions, or other issues.

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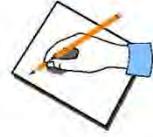
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Free space for Your comments and feedback



*Thank You for Your valuable  
contribution to our research!*

*For questions and feedback on this research,  
please contact:*



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DK-1061 København K  
www.norden.org

TemaNord 2012:530

## Factors affecting occupational safety and health of foreign farm workers in Nordic countries

This report is the result of a project financed by the Working Environment Committee of the Nordic Council of Ministers with the purpose to identify essential factors affecting occupational safety and health of foreign agricultural workers in the Nordic countries. The aim is that this information will be used in developing national occupational safety and health programs, educating farmers and employers and finding strategies to improve safety communication in the agricultural sector in all the Nordic countries. This project and report intends to contribute to the combatting of social dumping among migrant workers in the Nordic countries.

