

Finnish farm worker orientation studies and guidelines to the farm managers considering the vulnerable populations

Sacurima COST Action WG3 workshop - How to improve safety culture and risk management in vulnerable populations in agriculture? April 25, 2019, Magnus University, Kaunas, Lithuania

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Sacurima COST Action - Background

Towards better safety culture in agriculture



Agriculture has been third in non-fatal work accidents numbers after mining and construction industries. In year 2013 there was 135 000 non-fatal work accidents in agriculture in EU.

How to define what is good worker safety culture in Agriculture?

Agriculture has been one of the worst fatal accident records of any major employment sector – over 50 % of fatal work accidents worldwide (in EU~ 12-15 %)

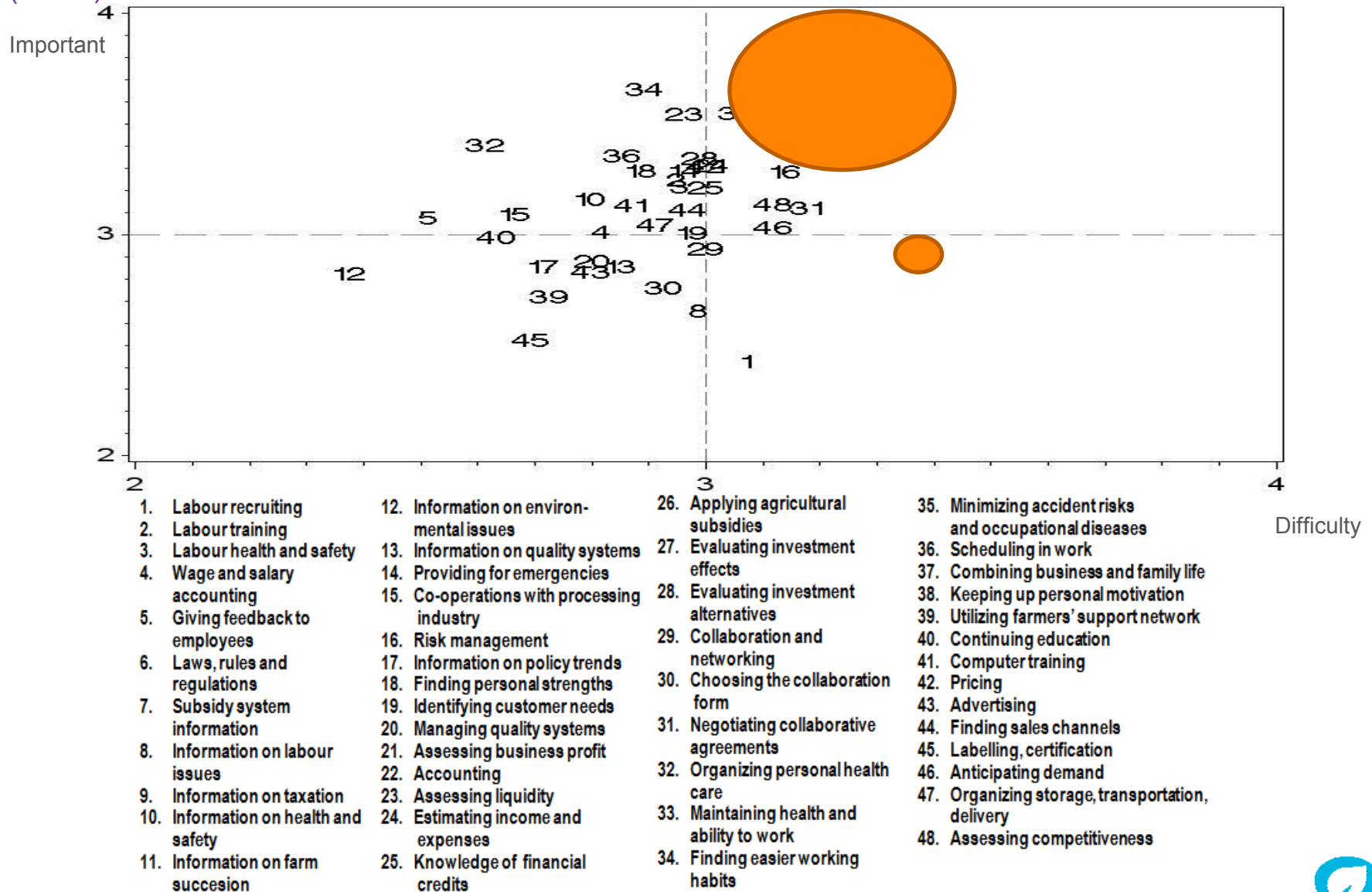


Farm worker management and orientation studies in Finland

- Farmers' perceptions of necessary management skills in year 2007
- Farm safety and security management, year 2008
- Employee orientation guide in agri- and horticulture, year 2010
- Factors affecting occupational safety and health of foreign farm workers in Nordic countries, year 2012
- Farm worker management and welfare at work in agriculture, year 2013
- Farm machinery safety risk study, year 2015
- Systematic risk management on farms, year 2016 (Doctoral study)
- Machinery safety guide in agriculture, from 2017
- Safety culture and risk management in agriculture (Sacurima COST Action), from 2017 –
- Pilot study of farm relief workers safety culture and motivation, year 2018
- Safety culture message in agriculture, from 2018 –

Farmers' perceptions of necessary management skills

(n=130)



Mattila, T. E. A., Kaustell, K. O., Leppälä, J., Hurme, T. and Suutarinen, J. 2007. Farmers' perceptions of necessary management skills in Finland. *Journal of Agricultural Education and Extension* 13, 4: 287-300.

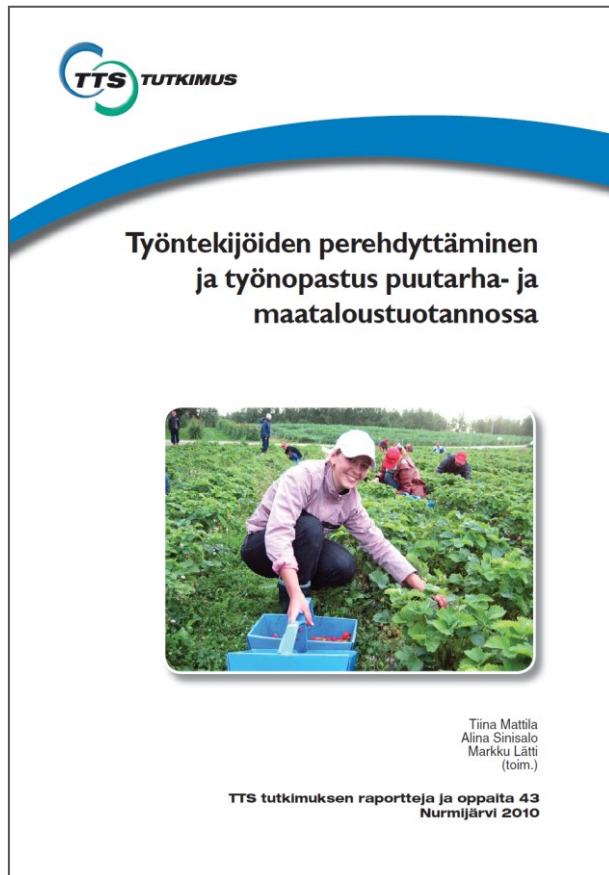
Jarkko Leppälä 2016

Farm safety and security management (N=590)

Injury event as dependent variable	Multivariable estimates			Final model estimates		
	95% Confidence Limits			95% Confidence Limits		
Group A	OR	LL	UL	OR	LL	UL
Respondent						
FOHS membership (vs. not membership)	1.49	1.00	2.22	1.29	0.78	2.10
Farm						
Farm size: field hectares < 40 (vs. ≥ 40)	0.26	0.09	0.80			
Beef cattle (vs. no beef cattle)	0.24	0.06	0.90			
Farm Management						
Quality management training (vs. no training)	1.46	1.00	2.12			
Computer used for farm management (vs. not used)	1.76	1.01	3.06			
Group B						
Risk perception; perceived risks: high (vs. low)						
Injury risk	1.61	1.07	2.42			
Dependence on one person	1.68	1.04	2.71			
Dependence on few suppliers	1.90	1.01	3.55	2.55	1.30	5.01
Risk perception; actual incident or close call during past 3 years: yes (vs. no)						
Physical strain risk	2.75	1.63	4.62	2.64	1.50	4.63
Risk on farm family members	5.31	2.49	11.30	6.13	2.78	13.52
Dependence on one person	2.52	1.28	4.98	2.71	1.30	5.66
Water or energy supply risk	2.31	1.35	3.94	2.24	1.27	3.95
Mental health problems (vs. no)						
		0.25	0.74	0.41	0.23	0.73

Employee orientation guide in agri- and horticulture

- In Finland 15 000 foreign workers yearly in agriculture on 2000 farms. About 28 000 seasonal workers (young people, less education etc.).



Orientation planning

Finding employees and recruiting

Employee reception and
orientation to the farm in general

Employee work orientation

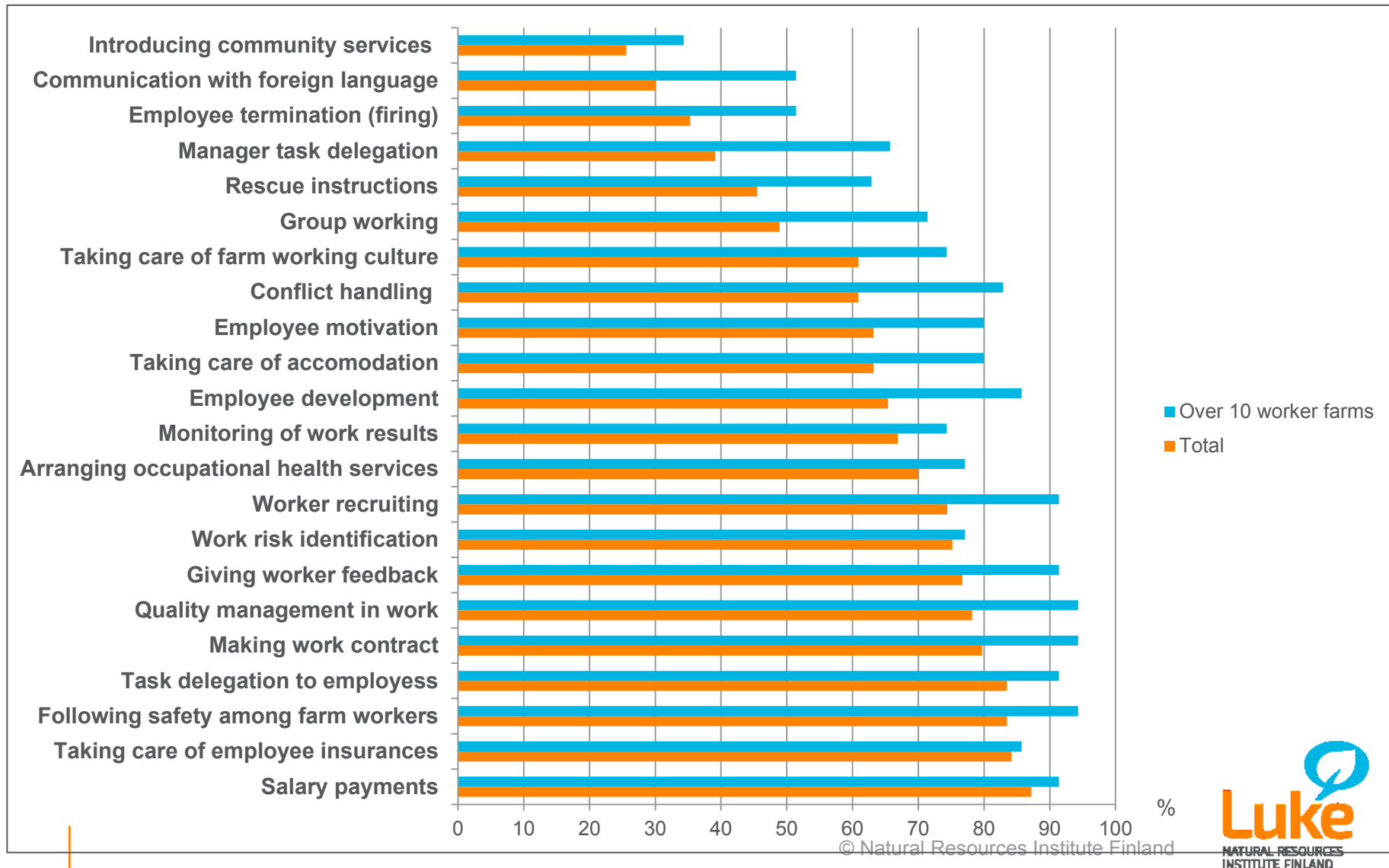
Monitoring of employee work



Management tools: contacts, addresses and phone numbers, orientation check list, machinery instructions and guidebooks, legislation books and documents, working contracts, salary calculators, quality and safety instructions, rescue instructions, services in nearby area, farm rules, health service contacts and instructions, internet services and information, social spaces, lockable closet for own stuff, instructions in employee's own language

Farm worker management and welfare at work in agriculture – have had difficulties in managing the task

- Inquiry to farm employers in year 2011. Totally 230 farm employers responded. Respond rate was 25 %.

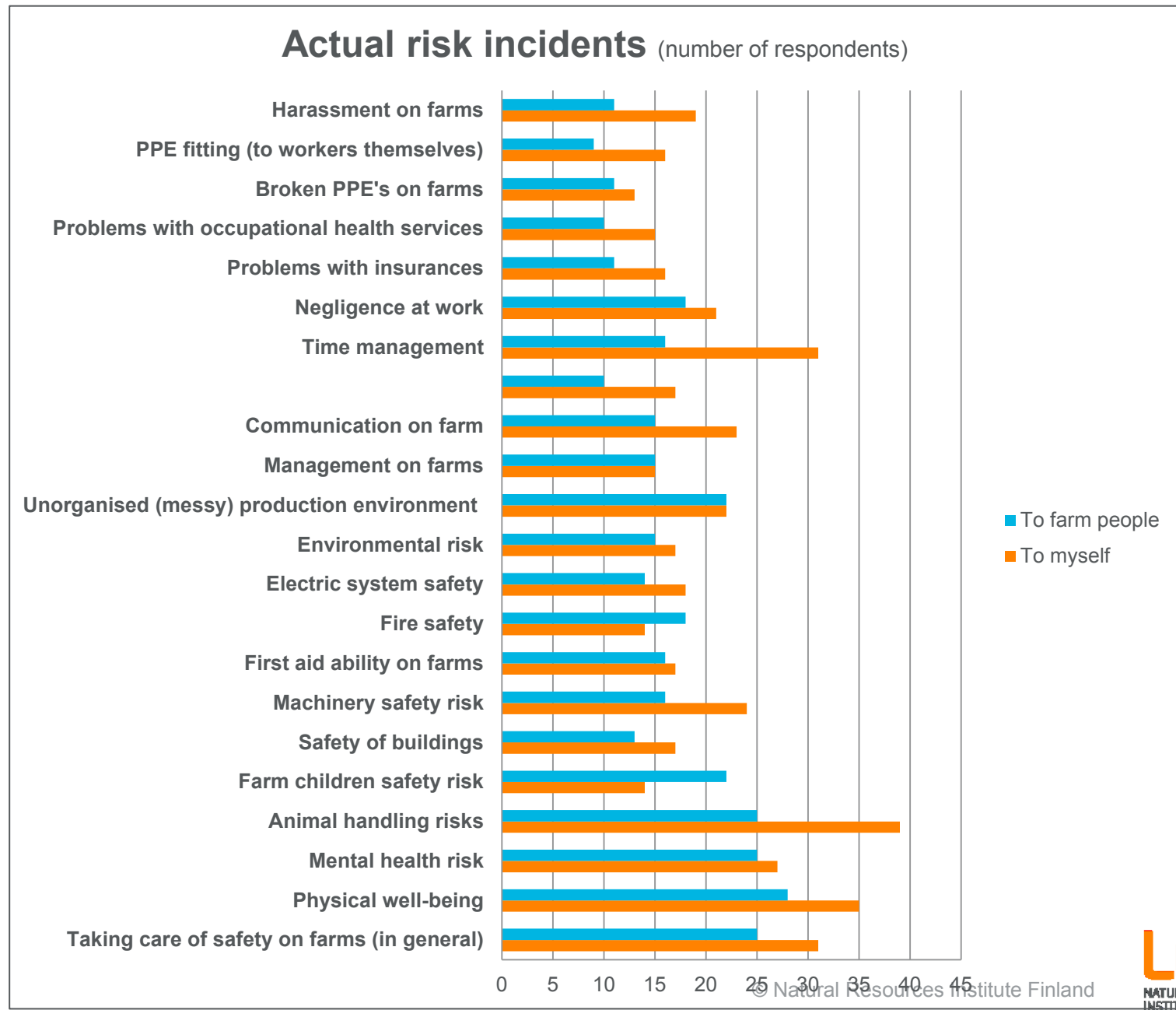


Factors affecting occupational safety and health of foreign farm workers in Nordic countries

(Heiberg, Mattila, Kaustell, Rautiainen 2012)

- Communication as a main issue. It is complicated by diverse attitudes towards safety among workers.
- Unclear role of safety as the responsibility, 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.
- Tips for farm managers: experienced workers guiding and training newcomers can be used effectively with employer monitors that safe working procedures are followed. Discussion of health and safety issues can be activated and encouraged. Supporting the wellbeing of workers in general, like efforts to ease homesickness, may have a positive effect on safety as well.

Pilot study of farm relief workers safety culture and motivation



Pilot study of farm relief workers safety culture and motivation

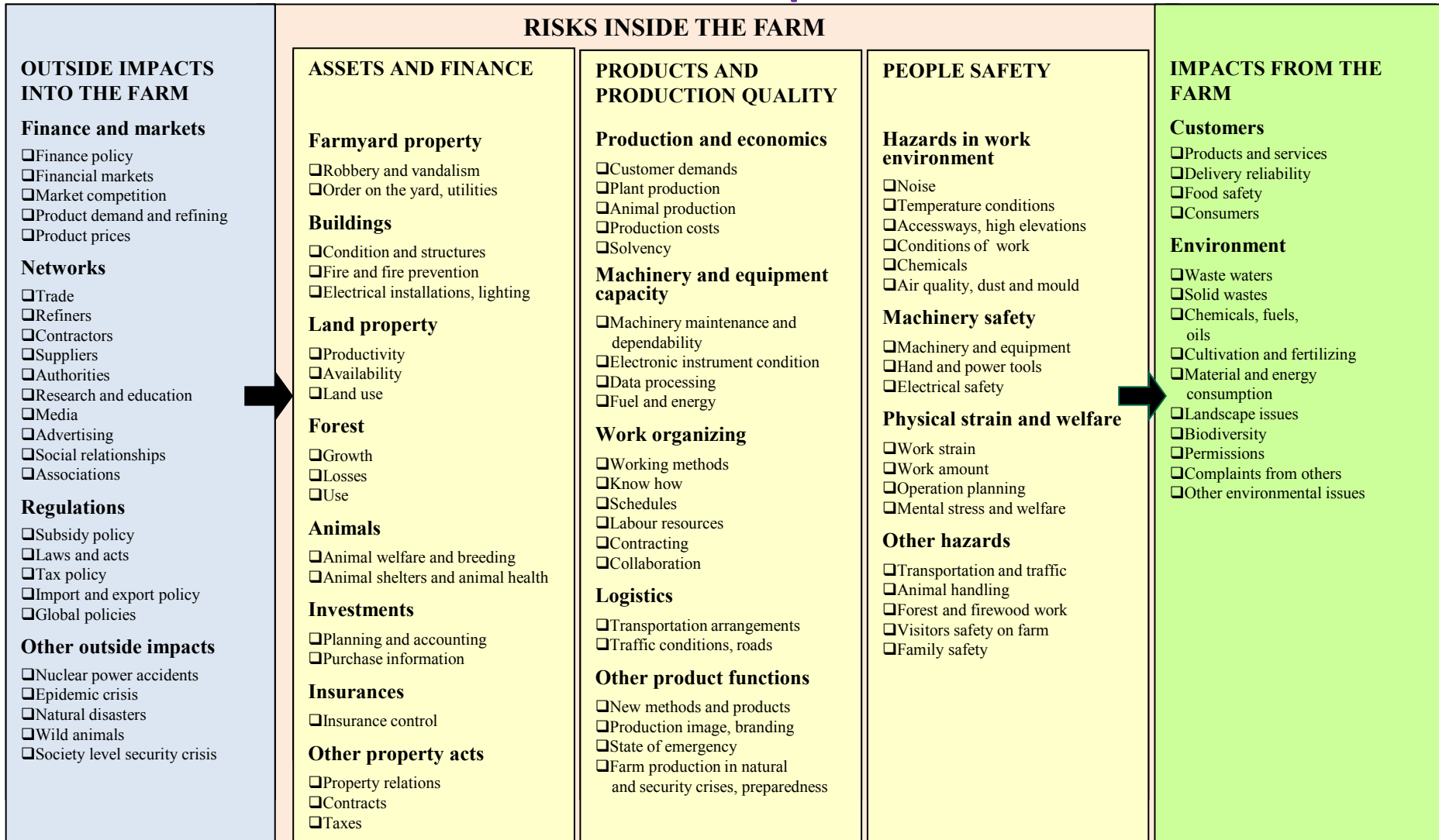
Farm work is physically stressing, which emphasizes the need to be in good health.

The greatest challenges and risks in farm relief worker work were busy work, tight work schedules, unsafe work environment in animal handling, negligence in work, poor communication on farm, poor safety management on farm, too long driving distances during the day, poor machinery and electric tool conditions and orientation on farms.

Orientation training on farms is increasingly important as technologies are changing, new automated systems are added, and if the farm relief worker and farmer have different native languages.

Farm risk map

(Leppälä, J. 2016. Systematic Risk Management on farms)



TOOLS FOR FARM MANAGEMENT AND RISK CONTROL

- | | |
|--|--|
| <input type="checkbox"/> Production planning | <input type="checkbox"/> Bookkeeping and cost management |
| <input type="checkbox"/> Farm risk management | <input type="checkbox"/> Financial and investment planning |
| <input type="checkbox"/> Farm quality systems | <input type="checkbox"/> Health and safety management |
| <input type="checkbox"/> Resource management | <input type="checkbox"/> Tax and insurance planning |
| <input type="checkbox"/> Task organizing | <input type="checkbox"/> Environmental management |
| <input type="checkbox"/> Decision making tools | <input type="checkbox"/> Etc.. |

Vulnerable populations and safety culture in Agriculture? - Discussion

- In Finland there are 15000 foreign workers working yearly in agriculture – no data on refugees in agriculture?
- In Finland women do more and more same farm works than men. Women injury rates have been half less than men.
- Big part of the farmers are coming old > farmers should start farming younger in the future. Average age of farmers is 51 in Finland. Machinery injury risk have found to be higher in starting/young farmers.
- Young workers or children on farms - How to measure or monitor these farm populations? Is there any data? How many child have died on farms last years?
- In UK 2-3 children dies every year



(https://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/Further_Information/Fatal_Accidents/)

Elements of safety culture

- The safety culture of an organisation is the product of
 - individual and group values, attitudes, perceptions, competencies, and patterns of behaviour
 - that determine the commitment to, and the style and proficiency of, an organisation's health and safety management.
- Organisations with a positive safety culture are characterised by
 - communications founded on mutual trust
 - shared perceptions of the importance of safety
 - confidence in the efficacy of preventive measures.”

ACSNI Human Factors Study Group: Third report - Organising for safety. HSE Books (1993)

Good safety culture on farms sets safety as high priority. It is seen in farm people behavior, attitudes, practices and work activities, which are adopted to farm and farm work in a safe manner.

Leppälä & Van den Broucke 2018

Implementing an effective safety culture involves

- Management commitment
- Visible management
- Good communications between all levels of employee
- Active employee participation
- Training
- Inspection
- Specific documents
- Learning organization - Enforcement and advice

ACSNI Human Factors Study Group: Third report - Organising for safety. HSE Books (1993)

Is this good Safety Culture?



Thank you !

Further information:

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