

Collecting good practices in agriculture, challenges ...

VEERLE HERMANS, David O'Neill,
Roeland Motmans, Peter Lundqvist,
Danuta Roman-Liu, Agnès Luyckx



Faculty of
Landscape Planning, Horticulture



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw



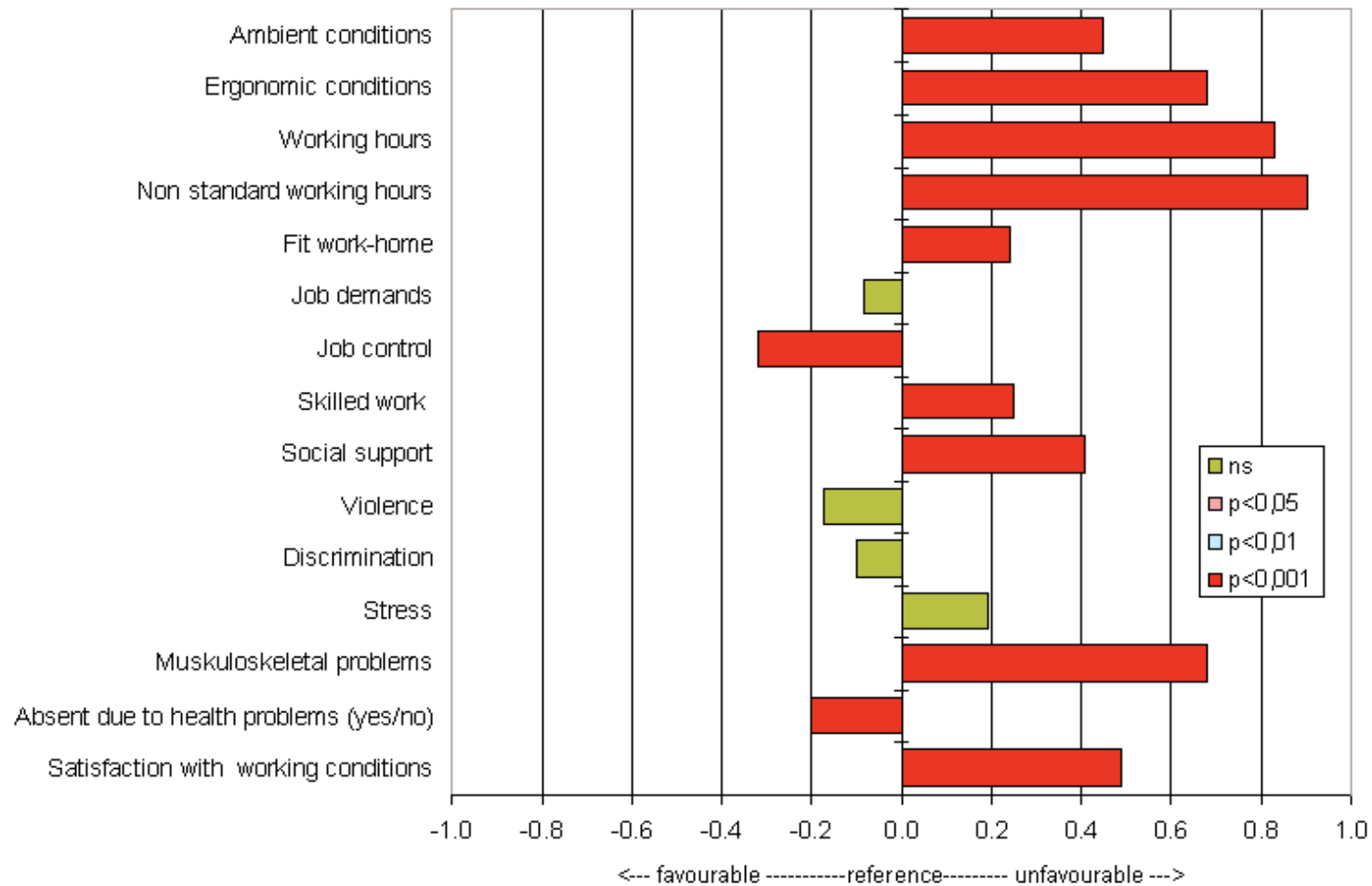
Loughborough
University

CIOP PIB

CENTRAL IN
- NATIONAL

Introduction

European Foundation for the Improvement of Living and Working Conditions, Dublin 2007
 Agriculture, hunting, forestry, and fishing



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.

Introduction

MSD risks/tasks in the sector:

- Manual handling (production of crops)
- Whole-body vibrations (tractor driving)
- Awkward postures (harvesting or milking cows)

Introduction

Joint declaration of EFFAT and COPA-GEOPA (2005): to engage in sectoral negotiations on MSD with the aim of formulating a number of concrete proposals on the reduction of workers' exposure to the risk of work-related MSDs



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.

Objectives

“Good practices in agriculture: social partners participation in the prevention of musculoskeletal disorders”

→ To develop a methodology to collect today's good practices of the social partners in prevention of MSD

→ DG Employment, social affairs and equal opportunities, call for proposal VP/2008/001



idewe

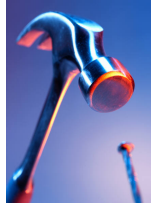
Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.

Methodology, challenges

- Development of the partnership
- Involvement of the social partners
- Definition of good practices
- Definition of agricultural tasks
- Collection of good practices
- Dissemination of the information
- Administration

Methodology, challenges



- Development of the partnership
 - Important links with national social partners' organisations
 - Academic partners and/or experienced partners with the agricultural sector
 - Network partner



Faculty of
Landscape Planning, Horticulture

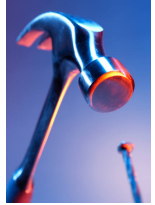


CENTRAL INSTITUTE FOR LABOUR PROTECTION
- NATIONAL RESEARCH INSTITUTE



© IDEWE. Confidential.

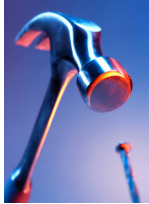
Methodology, challenges



- Involvement of the social partners
 - At EU level: cooperation member states
 - At national level: contact with the field
 - At farm level: interview, good practices document



Methodology, challenges



- Definition of good practices

- <http://osha.europa.eu/en/practical-solutions>

- > not necessarily basic research information

- > not policy information

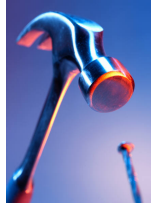
- > not general knowledge

- Kramer et al. (2010): innovations that have the potential for preventing MSDs

- Acceptable to the prevailing cultural conditions (€)

- Kogi (2011): low-cost solutions learned from local good practices

Methodology, challenges



- Definition of agricultural tasks

- NACE 01.1 & 01.2

- Milking cows

- Tractor driving

- Ground level manual crops

- Pruning

- Sorting

- Harvesting

- Meetings national social partners + at EU level

- Visits + standard document



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.

Small chair

Task Description:

Many tasks related to milking cows involves squat body posture. Such body position is uncomfortable and can create fatigue. This body posture is adopted during such tasks as cleaning udder, attaching/detaching the milking machine, observation of the milking process.



Preparation tasks for milking cow

Comments of the employee:

- 'When I squat I feel discomfort in arms, knees and back'
- 'I very often feel pain in lower back and knees'

MSD risks:

- Squat posture involves musculoskeletal load in knees
- Bending in back and arms put foreword create body posture with high musculoskeletal load

Exposed area:

- Neck/Shoulder
- Lower back
- Lower limbs
- Upper limbs

Solutions:

- Change posture during preparation tasks for milking cows by using small chair, when not used fastened with belt to the hip.



Using small chair preparation tasks for milking cow

Comments after implementing good practice solution:

- Performing this kind of task involves high load especially in knees and lower back, due to uncomfortable body posture
- In order to decrease lower back load during preparation tasks you need to support your body, which can be achieved by using small chair

Robot

Task Description: Milking cows

Milking cows by hand does not occur anymore Belgium. Most of the work is done by milking machines. After cleaning the udder the farmers puts the claws on the teats. A tie-stall has been taken as reference.

Comments of the employee:

- 'Continuously repetition of the same gestures: at least one hour'
- 'Work height not in accordance with posture: cow on floor level'
- 'No comfortable standing posture: squatting down'
- 'Loads too heavy: milking machine of 8 kg'
- 'Opportunity to have a break: milking as fast as possible'

Comments of the employer: motivation regarding solution:

- Physical load too heavy, walking distance too high and time consuming

MSD risks:

- Posture
- Force
- Frequency/duration

Exposed areas:

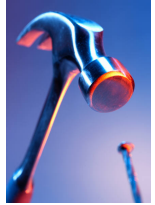
- Neck/shoulder
- Arm/wrist
- Lower back
- Lower limbs

Solutions:

- Robot – Automatic milking system.
Advantages: no physical load, 15% higher milk production, more quality time, detailed overview cows
Disadvantages: Expensive, new habit of milking, lay-out of barn important, contact cows (?), cows summer and winter in barn



Methodology, challenges



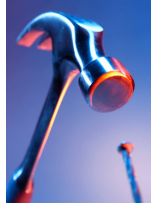
- Collection of good practices

- 103 company visits
- 55 additional reports

→ 143 GP's :

- Milking cows 59
- Tractor driving 29
- Ground level manual crops 15
- Pruning 7
- Sorting 16
- Harvesting 16

Methodology, challenges



- Dissemination of the information

- At EU level:

- 6 brochures in English
- Website (after 2010?)

- At national level:

- Translations in Swedish, Polish, Dutch & French
- Fairs
- Schools
- Magazines, journals



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.

Dissemination of information

Milking cows



Good practices in agriculture: social partners participation in the prevention of musculoskeletal disorders.



Ground level crops production



Good practices in agriculture: social partners participation in the prevention of musculoskeletal disorders.



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.



Musculoskeletal problems in Agriculture

Prevention by Social Partners

[Introduction](#)

[Background of the sector](#)

[Project](#)

[Good Practices](#)

[Other information](#)

[Download testpage](#)



Introduction

This website is part of the project "Good practices in agriculture: social partners participation in the prevention of musculoskeletal disorders", funded by the European Commission, DG Employment, social affairs and equal opportunities, call for proposal VP/2008/001.

Goal of the project is to implement the European social partners' agreement of GEOPA-COPA and EFFAT by developing prevention policies and good practices to reduce musculoskeletal disorders in agriculture and to disseminate the results.

The following partners participated in the project:

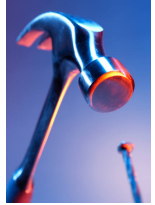
....

For the following tasks good practices are presented:

- [Milking cows](#)
- [Tractor driving](#)
- [Ground level manual crops](#)
- [Pruning](#)
- [Sorting, grading, packaging](#)
- [Harvesting](#)

www.agri-ergonomics.eu

Methodology, challenges



- Administration

- Tight deadline: one year ...
- Tight budget: travel costs
- Coordination 4 countries
- Reporting for DG Employment

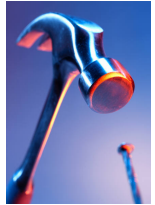


idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.

Methodology, challenges



- But rewarding !

And next ?

If interested, contact:
veerle.hermans@idewe.be



idewe

Externe Dienst voor Preventie en Bescherming op het Werk vzw

© IDEWE. Confidential.