

PRIORITIES IN AGRICULTURAL EDUCATION - SHARING EXPERIENCES OF



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Content

- Rationale to return at agriculture. Trends. Common Agricultural Policy
- Specific problems
- Rationale to return at agriculture
- General information about AGROSH+ project
- OSH for Agriculture
- Occupational Medicine in Agriculture
- AGROSH+ courses' conclusions
- To take home



Agriculture trends

- The relative weight of agriculture, forestry and fisheries in the EU-28 economy has been in almost perpetual decline over the last 50 years.
- From 2000 to 2013 the share of agriculture, forestry and fisheries in the EU-28's total economic activity (as measured by gross value added) *fell from 2.1 % to 1.7 %*.
- **In this context:**
 - **Is agriculture a industry which must be taken in consideration?**
 - **Is it an our days' priority?**
 - **How is the actual EU policy and which are the next years priorities?**
 - **Agriculture is a future industry?**

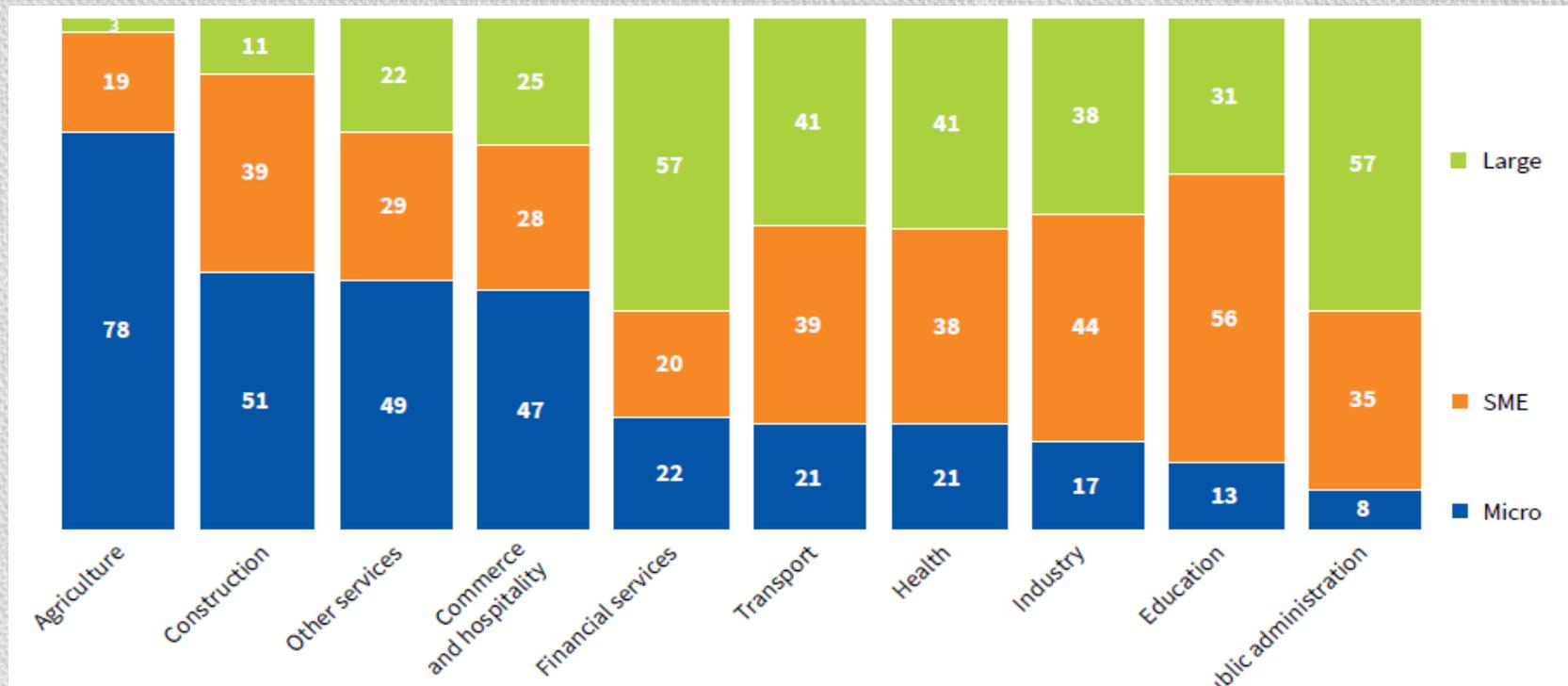
Common Agricultural Policy



- The Common Agricultural Policy (CAP) is the agricultural policy of the EU.
- Its main objectives are
 - to ensure a decent *standard of living* for farmers,
 - to provide a stable and safe food supply chain at *affordable prices* for consumers, and
 - to ensure the *development of rural areas* throughout the EU.
- A June 2013 reform of the CAP focused on the *sustainable management of resources*.

Distribution of workers across economic sectors, by company size, EU28 (%)

- Family farms accounted for almost 97 % of the farms in the EU.
- Across all of the farms in the EU-28, family farms provided 86.2% of the regular agricultural labor force.
- Source: Agriculture, forestry and fishery statistics, Statistical books, 2014, EUROSTAT



Source: Eurofound (2016), Sixth European Working Conditions Survey – Overview report, Publications Office of the European Union, Luxembourg.

Work and workers in agriculture

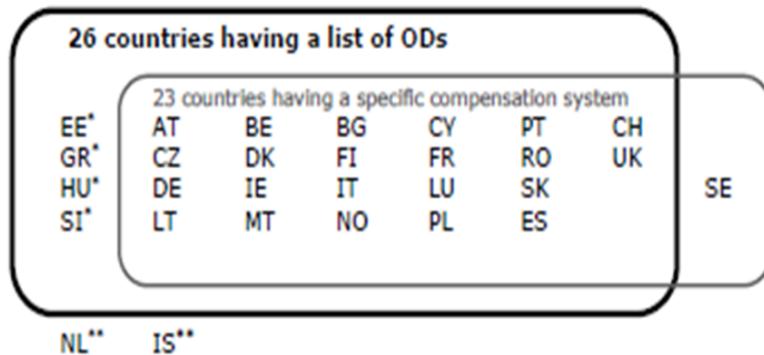
- Agriculture - one of the three most hazardous sectors of activity (along with construction and mining)
- Non-standard employment (NSE) is dominant, as day laborers, migrant workers, temporary jobs, seasonal fluctuations.
- Agriculture is recognized as a low-wage sector.
- In these conditions, health surveillance and recognition of occupational diseases are deficient; statistical data are poor, making difficult to analyze and compare EU countries situation.
- To prevent occupational diseases is necessary to recognize them and to analyze the structure of occupational illnesses based on feasible statistical data, to identify and make a hierarchy of the most important problems that must be solved.
- In family farms workers are not beneficiary of OSH services.

OD are a problem ? (1)

National systems of recognizing and compensating occupational diseases

Source: Report on the current situation in relation to occupational diseases' systems in EU Member States and EFTA/EEA countries, in particular relative to Commission Recommendation 2003/670/EC concerning the European Schedule of Occupational Diseases and gathering of data on relevant related aspects, 2013

- There is a great heterogeneity among the 23 specific systems for compensation of occupational diseases.
- Insurance organizations can be public/private, territorial/sector-based organization, and their management methods differs.
- The insurance coverage differs with the existence or not of separate regimes for self-employed workers, farmers, public-sector employees, etc.



* these 4 countries have a list of ODs just for recognition and recording (no specific benefits for the victim)

** no list, no specific compensation system

Rationale to return at agriculture

Why?

- 9.6 billion people are going to inhabit the planet by 2050 (FAO predicts)
- food production must increase by 70% by 2050

This has to be achieved in spite of

- the limited availability of arable lands,
- the increasing need for fresh water (agriculture consumes 70% of the world's fresh water supply),
- other less predictable factors, such as the impact of climate change

OD are a problem ? (2)

- Some Member States are against dissemination of national data on Eurostat's web site.
- In reality, occupational disease cases are under-reported, countries use different definition, some not deliver fatal cases, do not apply post mortem recognition, etc.
- There are variations in concepts, using different terms, as “recognized cases” or “reported cases”. Under-reporting of occupational diseases is a consequence of variations in reporting practices and in recognition systems, starting with the content of national lists and the recognition criteria (considering, or not, the intensity of exposure) .
- Country's economic activities (agriculture, industry, services) determine the number and the type of the reported and recognized occupational diseases

Source: Report on the current situation in relation to occupational diseases' systems in EU Member States and EFTA/EEA countries, in particular relative to Commission Recommendation 2003/670/EC concerning the European Schedule of Occupational Diseases and gathering of data on relevant related aspects, 2013

Problems and perspectives in agriculture

- Populations will continue to grow
- Climate changes, global warming
- Water availability will become more precarious
- Large-scale monoculture, culture rotation, industrial agriculture
- Soil Erosion
- Irrigation
- Agriculture and the Loss of Genetic Diversity
- Chemical Contamination. Pollution of groundwater and surface water (nitrate, pesticides)
- Pesticide resistance
- Residues on food (ex. DDT)
- Mitigation of effects of petroleum shortages
- Food security
- Genetically modified organisms (?)
- Risk of crop failure and food shortage.
- Sustainability
- Energy-intensive mechanization, fertilizers and pesticides
- Mitigation of effects of petroleum shortages
- Challenge: to produce 50% more food by 2020



General information about AGROSH+ project (1)

Project title: *“OSH+ for the European Agriculture sector - Stimulating growth in rural areas through capacity building for providers (and beneficiaries) of occupational medicine and OSH services” – AGROSH+*

The general objective: To enhance the knowledge and expertise of those OSH experts (safety engineers and occupational medicine doctors) who are in charge with providing OSH services (occupational safety & occupational health) to enterprises working within the agriculture sector (multiple sub-sectors comprised).

Funding: ERASMUS+ Programme: 2016 Call - implemented by National Agency for Community Programs in the Field of Education and Training (ANPCDEFP) www.anpcdefp.ro;

Duration: 24 months - from 01.09.2016 to 31.08.2018.

General information about AGROSH+ project (2)

Project Partners

- P1 - ROMTENS Foundation – *applicant organization* – ROMANIA;
- P2 - PROLEPSIS - Institute of Preventive Medicine Environmental and Occupational Health – GREECE;
- P3 - FCBZR - Foundation "Center for Safety and Health at Work" – BULGARIA;
- P4 - UMFVBT - Victor Babeş University of Medicine and Pharmacy Timisoara – ROMANIA;
- P5 - WRC - Work Research Centre Ireland Ltd – IRELAND



General information about AGROSH+ project (3)

Main outputs

- Course 1 - OSH for Agriculture (safety engineers)
- Course 2 - Occupational Medicine for Agriculture (OM physicians)
- E-learning platform (www.agrosh.ro)
- Guideline for OSH practice within the Agriculture sector

Course 1 - OSH for Agriculture (safety engineers)

- The training "OSH for Agriculture" was held between the 2nd and 6th of July 2018 in Bucharest.
- The participants were 14 experts working in the field of Occupational Health and Safety from Romania, Bulgaria and Ireland.
- The course was considered by both lecturers and learners, very interactive and highly applied to the field of OSH with a very good mixture of theoretical and practical training.

Course 1 – Case-studies, modules

- Introduction to course OSH for Agriculture
- Case-studies:
 - Greenhouse
 - Sheep slaughter house
 - Fish farm
 - Poultry farm – eggs' production
 - Forestry
 - Farm
- Poultry farm-broilers
- Economic Subsectors in agriculture
- Risk Assessment in agriculture
- Occupational diseases in agriculture
- Preventive measures in agriculture
- Vulnerable groups in agriculture

Course 1 - Feedback from the trainees

- **Worked well:**
- „presentations of the case studies”
- „excellent group work with a lot of interaction”
- „calculating the risks and putting measures to eliminate the risk factors, was the most important and best part of the Case Studies”
- “the working groups, the level of presentation, the case studies, very good organization”
-
- **Did not worked well:**
- “not enough time to finish some exercises”
- “very high pace of the course”



Course 2 - Occupational Medicine in Agriculture

- The course "Occupational Medicine for Agriculture" was held between 20th to 25th of November 2017 in Bucharest.
- **Trainees:** 16 occupational physicians: 14 from Romania and 2 from Greece
- **Trainers:** 7 specialists in various topics covered by 16 Modules of the curriculum
- **Accreditations:** UEMS-EACCME - Continuous Medical Education (CME) 37 credits and EUROPASS Mobility Certificates
- **Training materials:** Manuals, PowerPoint presentations, Individual exercises for each one of the 16 Modules, Collective exercise, other types of resources available on the e-learning platform (www.agrosh.ro)
- **Evaluation:**
 - Trainers' Assessment: Trainers' questionnaires (end of each module)
 - Satisfaction Assessment: Trainees' questionnaires (end of course)
 - Learning Assessment: Trainees' questionnaires (pre-post)
 - Skills Assessment: Final Projects

Course 2 - Modules

- Agriculture and Work – Occupational Medicine an WHP perspective
- Economic sub-sectors within agriculture
- Professional Risks - Risk Assessment in Agriculture
- Occupational accidents in Agriculture – statistics in the countries of the project
- Occupational diseases in Agriculture – statistics in the countries of the project
- Skin diseases for employees working in Agriculture
- Respiratory diseases for employees working in Agriculture
- Infectious diseases for employees working in Agriculture
- Extreme temperatures in Agriculture - health challenges
- Chemical substances & Poisoning & Toxicology in Agriculture
- Mental health and wellbeing in the agriculture sector
- Cardiovascular diseases for employees working in Agriculture
- Diseases of the eyes and ENT (ear-nose-throat) for employees working in Agriculture
- Musculoskeletal diseases for employees working in Agriculture
- Occupational cancer - practical aspects
- Vulnerable groups working in agriculture

Few AGROSH+ courses' conclusions

- General positive feed-back.
- Correct evaluation (both parts) of “what did not go well” and needs to change.
- The improved courses must be addressed for more trainees.
- Similar courses for OSH exerts and OM physicians – positive
- A Guideline for OSH practice within the Agriculture sector
- The AGROSH+ e-learning platform will continue to exist to serve interested parties.

To take home (1)

- Lecturer's experience in agricultural field is compulsory. Practice and skills of teachers in agriculture are needed.
- The course language must be well mastered by all participants
- To obtain results in agriculture is necessary to train first the decision makers, managers, experts, physicians who are working in rural areas / in agriculture. They are models and can form the workers.
- Blended education including face-to-face contacts and a participatory approach are preferred, to avoid monotony and to maintain the attention
- Learning by doing increase the chance to obtain results
- Provided information must be adapted at the local specific
- The volume of information must be appropriate for each group of participants
- Flexibility

To take home (2)

- Education in occupational safety and health is needed in agriculture
- Occupational risk recognition, evaluation, management, etc. – the base to understand the consequences of risk exposure
- In this circumstances, workers will start to work properly, to use personal protective equipment and to apply hygiene principles. All must be correct presented, too.
- Good understanding – higher acceptance



Thank you!

