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ACTION / SUBPROGRAM:	Key Action 2 / Strategic Partnerships
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”
Intellectual Output :	O4 – Course 1-Safety Experts – Training Materials – Case Study 5

AGROSH+

**C3 / Training Course for Safety Experts in
Agriculture**

CASE STUDY 5 – Forestry

Bulgaria

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HOW THE CASE STUDIES WILL BE USED

Main features of the Case Studies

There will be five (5) Case Studies, namely two (2) from Romania, one (1) from Bulgaria, one (1) from Greece, and one (1) from Ireland).

Each one of these Case Studies will have to be designed, developed and documented based on an existing company, located in each of the countries mentioned above, working in the Agriculture economic sector, in any of the economic sub-sectors which are usually part of agriculture, namely:

- Aquaculture,
- Beekeeping – apiculture,
- Mollusk farming,
- Pisciculture (fish farming),
- Sericulture,
- Animal husbandry – Aviculture (poultry farming),
- Animal husbandry – Cattle,
- Animal husbandry – Sheep farming,
- Animal husbandry – pig farming,
- Horticulture,
- Forestry (Silviculture).

One of the main roles of the Case Studies is to serve as a “host” for collective exercises part of the training course for safety experts. Therefore due to pedagogical reasons there will be one (1) collective exercise based on each of the Case Studies, hence there will be 5 collective exercises. Each of these collective exercises will actually consist of multiple tasks assigned to the 3 groups of trainees that will attend the training course for safety experts; the reasoning behind this split/allocation of trainees in 3 groups is purely pedagogical, the overall number of trainees (15-20) will be split in smaller groups (5-7 trainees per group) so as to favor practical group work. Therefore it is necessary that the information provided for each Case Study is reach enough so as to inform the collective exercises. This could mean as well that some of the data within each Case Study will have to be made up so as to feed the various aspects of the collective exercises.

Roles and uses of the Case Studies

The five (5) Case Studies which are going to be developed are having mainly two very different roles.

1. Their first role is to be part of the second training course to be developed under the AGROSH+ project, namely the Training Course for Safety Experts providing services to companies in agriculture, are going to be part of the training materials of this training course. Therefore they should be considered as pedagogical material on which 5 collective exercises are going to be developed for the trainees which will attend the Training Course for Safety Experts.
2. On the other hand these five (5) Case Studies will also be a part of the Intellectual Output 10 “Guideline OSH”. Therefore their second role is to display features of Models of Good Practice in terms of preventative actions (related to both health and safety) taking place in companies within the agriculture economic sector. Therefore these Case Studies should be structured similarly, should definitely propose sound preventive programs, hence they should have a marketing / communication approach.

It is however obvious that for each of the five (5) Case Studies there will be two different versions, each one serving the purpose of fulfilling the two roles these Case Studies have, namely:

1. An extended version, rich in information, even enclosing “made up” sections of text (so as to better accommodate collective exercises).
2. A shorter version, more marketing oriented, to be agreed with the companies themselves, so as to be published in the “Guideline for OSH in Agriculture”.

Objectives of the Case Study

Each of the five (5) Case Studies will have to achieve the following objectives:

- 1) To provide enough background information so as each one of the Case Studies serves as the basis for a complex, comprehensive, and multiple-tasked collective exercise;
- 2) To provide enough information regarding the employees (and all related Human Resources matters) so as the Case Studies are well articulated on the companies’ workforce;
- 3) To provide enough information on all the hazards and risks, aiming to describe the applicable situation of the particular company for each of the risk factors categories (physical, chemical, ergonomic, biological, and psycho-social ones); Particular

information needs to be given to each of these hazards/risks since they have the potential to be one of the richest sources of material and data for the Case Studies;

- 4) To provide enough information for existing or planned preventive programs and initiatives hosted in the company;
- 5) To be developed using the template provided further on in this document, so as an acceptable level of comparability between the 5 Case Studies is achieved, facilitating therefore the process of developing three (3) collective exercises for each of the Case Studies;

What additional resources should be made available together with the Case Study

For each of the Case Studies there is necessary to provide multiple categories of data, of which some could be already available at the moment of the visit of the AGROSH+ project partner at the company, while some data will need to be gathered with the occasion of the visit/s. These categories of data could be the following (without being limited to them):

- Risk Assessment reports;
- Health Reports;
- Any other types of analysis reports concerning the workforce, or the working conditions (risk factors, etc.), ergonomics analysis, etc.;
- Pictures and videos displaying the working conditions (however respecting the privacy rules decided by the company);

CASE STUDY – FORESTRY

Introduction

A summary of the Case Study in which the most prominent features should be presented. Forestry Zlatograd is a company engaged in the Forestry sector. The main activity is forest control in the Smolyan region. The management of the company is in Zlatograd. There are territorial subdivisions in Nedelino and Madan.

A subcontractor is being contacted for the activities of cutting trees, loading and transporting timber, as the Forestry is observing the process.

General features of the company

Name of the company	Forestry Zlatograd	Subcontractor XX
Type of the company (LLC, etc.)	State enterprise – territorial direction	Ltd.
Is the company a branch of a larger corporation	Yes- National company	No
Address of the company	33 “Georgi Sava Rakovski” str., 4980 Zlatograd	4980 Zlatograd
Types of accreditations & certifications the company has (ISO for Quality, for OSH, for Environment, others)	no	No information

Please provide a general photo here.

<http://dgszlatograd.ucdp-smolian.com/aboutdgs.php>

Human Resources related data

Total number of employees	42	5
Breakdown of employees per age / Less than 18 / 18-55 / older than 55	0 less than 18 5 older than 55	0 less than 18 0 older than 55
Breakdown of employees per gender / Male-Female	Male – 33 Female - 9	Male – 5 Female - 0
Other relevant Human Resources related data: number of	There are two people with permanent working disabilities.	No

employees with disabilities, number of employees known to be suffering of chronic diseases & taking daily medication, etc.	They are determined by special Medical commission.	
Types of personnel per profession / specialization	Director / manager Deputy Director Chief accountant Cashier – host Human resources specialist Forester Technical leader on the site logging Forest guard Car mechanic – driver Security Hygienist	Manager Harvester - 2 Driver – 2
Working time / Night shifts / Irregular work (seasonal work, temporary workers for some peculiar operations like in vineyards, etc.)	8.00 – 12.00 Lunch break 13.00 – 17.00 No night shifts, no working on Saturday, Sunday or official holidays in Bulgaria	8.00 – 12.00 Lunch break 13.00 – 17.00 No night shifts, no working on Saturday, Sunday or official holidays in Bulgaria
Absenteeism data (medical absenteeism, not-justified absenteeism)	For year 2017 – 238 calendar days In Bulgaria the days of medical absenteeism are included in the calendar days	No information

Please provide reports assessing the workforce (if available) – not available

Economic sector and sub-sector in which the company works / types of operations, of equipment and of professions within the company

Economic sector and sub-sector in which the company is working / Agriculture / Any of the following subsectors (Aquaculture, Beekeeping – apiculture, Mollusk farming, Pisciculture (fish farming), Sericulture, Animal husbandry – Aviculture (poultry farming), Animal husbandry – Cattle, Animal husbandry – Sheep farming, Animal husbandry – pig	The company is operating in the Forestry sector	The company operating in the Forestry sector
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farming, Horticulture, Forestry (Silviculture))		
NACE codes held by the company	0220	
Main administrative divisions of the company (departments, productive areas, offices, etc.)	Administration Forestry industrial sectors - 3	
Number of employees per administrative divisions	Administration – 14 Sector Zlatograd – 12 Sector Nedelino – 7 Sector Madan -9	
Most important operations & working processes performed by the company (per administrative division if it is relevant only) For each of these operations the seasonal / time dependence should be given, should it be relevant	Management, security and control of the forests. These operations are seasonal – winter season is not relevant because the weather is inappropriate.	Cutting trees; Loading and transport of wooden material; These operations are seasonal – winter season is not relevant because the weather is inappropriate.
Most important pieces of equipment / tools / instruments used by the company for performing its operations	Equipment in the offices – computers, printers, etc. Other hand tools	Trucks, machines for cutting /chainsaw/, hand tools.
Most important professions of the employees performing the operations of the company, peculiar areas of expertise they possess (should this be applicable or relevant)	Forester - Technical leader on the site logging Forest guard These people are working in the forests and they control all activities. Their job is to observe and check for nonconformities in the cutting process. Some companies and people, as well, usually go in the forests and cut the trees for the furniture industry or they may perform sanitary cutting or would sell wooden material for different purposes. So, the control from specialists from the Forestry is important – so that they check the documents for permission of work, for the whole process of cutting and they also place marks on the material, which must be loaded and	Harvester Preparing the site and cutting the tree. Driver Loading and transporting the wooden material to wherever necessary. (see more information below)

	<p>transported outside the forest.</p> <p>They may come across some poachers and other people without documents – which is illegal cutting of trees.</p> <p>Car mechanic – driver</p> <p>They must have a driving license and document for being a mechanic. This is important because the cars must be checked and ready for the heavy road in the forest.</p>	
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Please provide photos here

OSH services

How is OSH managed (internal service / external service / both)	Both	Both
Is there an OSH committee set up (give details)	<p>Yes – in the companies with number of employees from 5 to 50 there must be established a Group for working conditions.</p> <p>The group consists of 2 people – 1 of them represents the employer, the other 1 represents employees. The Group is being established for a 4-year period. Workers' representatives are elected to a workers' meeting. Employer's representatives are defined with an internal document by the Director. When the Group has a first meeting, the members make Plans for work. One month after their first meeting they must have their First training which must be 30 hours according to 2 regulations – RD 07-2 for training and instructions and No.4 for training of members of the committees and groups for work conditions. There should be developed a</p>	There is a group for working conditions – (see the other column)

	<p>program for the training with all important questions (topics, issues) for risk assessment, work conditions, safety equipment and etc. Once per each year from this 4-year period, they must undergo an annual training for 6 hours and they must examine the new moments and new requirements in the health and safety area.</p> <p>The Group works with internal and external specialists, who review Risk assessment, the analyses from illness report, perceive information from workers and check the lists for special equipment /safety clothes, shoes etc./.</p> <p>If the Company has registered an accident, the Group must check all circumstances and write a protocol with the results.</p> <p>The Group must plan and realize their meetings 4 times per year.</p>	
<p>Are there employees 'representatives in the OSH committee (give details)</p>	<p>Yes. In the group there is one worker who is selected in the meeting among all workers with protocol.</p>	
<p>Number of work-related accidents / Number of fatalities / Number of First Aid Cases / Number of near misses</p>	<p>0</p>	<p>0</p>
<p>When has the last comprehensive Risk Assessment been performed / What method of Risk Assessment was used (please PROVIDE DETAILS as to what measurements were made, who did them, how, etc.)</p>	<p><u>29.06.2017</u></p> <p>The Risks assessment methodology is based on 3 indicators of different dangers: weight, probability, exposure. The risk assessment process in steps is:</p> <ul style="list-style-type: none"> - Selection of specialists from the Company and external specialists for development of risks assessment; - Defining work process; - Discovering dangers; 	<p><u>No information for exact date</u></p> <p>The Risks assessment methodology is based on 3 indicators of different dangers: weight, probability, exposure. The risk assessment process in steps is:</p> <ul style="list-style-type: none"> - Selection of specialists from the Company and external specialists for development of risks assessment; - Defining work process;

	<ul style="list-style-type: none"> - Establishing the points criteria for every danger for all jobs according to methods and the amount of risk - Weight x Probability x Exposure - Planning a for control and minimizing of risks with terms and responsible people. - After execution of the program, the group of specialists must make a review and actualization of risk assessment. <p>The process is continuous in time. Actualization of Risk assessment is needed if some reasons are fact (there are present some certain circumstances):</p> <ul style="list-style-type: none"> - changes in legal requirements or standards; -new equipment or new working sites; -new standpoints and information from workers /in the Group for work conditions/; -new measurement of factors of working areas; -new working resources – chemicals etc. -accidents -medical analyses -by management decision - as a result of an inspection from Labour Inspectorate -on every 5 years 	<ul style="list-style-type: none"> - Discovering dangers; - Establishing the points criteria for every danger for all jobs according to methods and the amount of risk - Weight x Probability x Exposure - Planning a program for control and minimizing of risks with terms and responsible people. - After execution of the program, the group of specialists must make a review and actualization of risk assessment. <p>The process is continuous in time.</p> <p>Actualization of Risk assessment is needed if some reasons are fact (there are present some certain circumstances):</p> <ul style="list-style-type: none"> -changes in legal requirements or standards; -new equipment or new working sites; -new standpoints and information from workers /in the Group for work conditions/; -new measurement of factors of working areas; -new working resources – chemicals etc. -accidents -medical analyses -by management decision - as a result of an inspection from Labour Inspectorate -on every 5 years
<p>Which are the most relevant hazards and risks which have been assessed in the company.</p>	<p>Fire danger – in the forest it is easy to set a fire, because many people go there and make</p>	<p>Harvester: Traveling to the working site with transport /cars, trucks/</p>

<p>Please be VERY exhaustive here and provide details per each category/sub-category of hazards and risks:</p>	<p>different activities (including setting fire) for their rest and picnic. Also, fire in the forest may happen because of cigarettes and playing with flame.</p> <p>A reason can be also weather - meteorological condition – lightning and flash.</p> <p>When in the forest a fire situation occurs, it becomes very dangerous. Depending on the season, place of fire, wind, temperature and etc.</p> <p>Electrical danger – there are several reasons for electrical accidents: working with machines and working in places with electricity power lines. When we cut trees, we must be sure that we have enough free space checking up the height of the trees.</p> <p>Mechanical danger – working with machines, tools, loading, cutting of trees and etc.:</p> <ul style="list-style-type: none"> - gripping - crackling - shearing - detachment - strike - superficial injury - clamping - hitting by a falling or swinging object 	<ul style="list-style-type: none"> - Transport accidents - Dangerous roads in the mountain <p>Moving around the territory of the forest</p> <ul style="list-style-type: none"> - Tripping or slipping on the same ground level - Tripping or slipping on the same ground level or on different ground levels <p>Unloading of machines and tools for working. Lifting and carrying of weights.</p> <p>Working position - reclined</p> <p>Working position - squatting</p> <p>Working position - standing</p> <p>Dynamic effort – pressure</p> <p>Dynamic effort – working with weights</p> <p>Static effort - holding</p> <p>Physical factor - noise</p> <p>Physical factor - dust</p> <p>Physical factor – vibration hand - shoulder</p> <p>Factor –stress</p> <p>Meteorological factors – wind, rain, temperature, humidity</p> <p>Risk of fire – forest fire</p> <p>Risk of fire - lightning</p> <p>Biological risks – allergic reaction</p> <p>Electricity danger</p> <p>Injury danger</p> <p>Danger coming from hitting</p> <p>Risk of insufficient Illumination</p> <p>Driver:</p> <p>Traveling to the working site with transport /cars, trucks/</p>
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		<ul style="list-style-type: none"> - Transport accidents - Dangerous roads in the mountain Working with special loading device Stability of the machine /truck Working position Dynamic effort – working with weights Static effort Physical factor - noise Physical factor - vibration Factor –stress Meteorological factors – wind, rain, temperature, humidity Risk of fire – forest fire Risk of fire - lightning Biological risks – allergic reaction; Electricity danger Injury danger Danger coming from hitting Risk of insufficient Illumination
<p>Chemical risks (types) - please provide details</p> <p>How many employees and what professions are exposed to this risk category</p>	According to the Risk assessment	According to the Risk assessment
<p>Physical risks (temperatures, noise, light, air, electricity, etc.) - please provide details</p> <p>How many employees and what professions are exposed to this risk category</p>	<p>temperature, noise, light, air, electricity</p> <p>42 – employees who work outside the offices are exposed on direct meteorological atmosphere – sunshine, wind, rain, snow and etc.</p>	According to the Risk assessment
<p>Biological risks-please provide details - please provide details</p> <p>How many employees and what professions are exposed to this</p>	According to the Risk assessment	According to the Risk assessment

risk category		
<p>Ergonomic risks - please provide details</p> <p>How many employees and what professions are exposed to this risk category</p>	<p>According to the Risk assessment</p>	<p>According to the Risk assessment</p>
<p>Psycho-social risks-please provide details - please provide details</p> <p>How many employees and what professions are exposed to this risk category</p>	<p>Conflict - when executing the duties, especially during a situation of illegal cutting and transportation of the trees</p>	<p>According to the Risk assessment</p>
<p>Are safety induction information sessions being offered regularly to employees (provide details who is doing them, how often, what topics are usually approached, are there additional materials being used)</p>	<p>Yes, the process has been organized with documentation and programs for induction trainings:</p> <ul style="list-style-type: none"> - First training - when starting to work in the company – individually - Second training – at the site – examining the rules and requirements – individually or in a group, if the employees are hired on one and the same job role - Periodical training – on every three months on groups by professions/ job roles - Emergency training – after accidents, after long period of absence caused by illness / more than 45 days/; at new equipment; in special situations and etc. <p>The Employer must issue a document on the basis of Regulation RD 07-2 with types of instructions and specialists that are directly responsible. These specialists must go to a training /validity is 1 year/ for 6 hours and they shall be aware of the legal requirements in Bulgaria and their responsibility for workers.</p> <p>The instructional process is very</p>	<p>Yes</p>

	important and there must be a Plan and Instructions for different activities in the company. When the instruction has finished, the worker and the specialist (safety professional) must sign a special “book” for instruction according to a sample from the abovementioned Regulation.	
Any other preventive OSH programs / projects / actions / initiatives organized in the company (provide details)	<p>Instruction for machines and process</p> <p>Regular inspection of work conditions</p> <p>Personal safety clothing</p> <p>Personal safety shoes</p> <p>Personal safety resources – gloves, helmet, masks, ear muffs, vests and etc.</p>	<ul style="list-style-type: none"> - Safety and health instructions at work - correct equipment checked and maintained periodically - trained staff - use of personal protective equipment - observance of rest time - use of appropriate workwear according to the season

Please provide photos especially of the employees exposed to the various risks mentioned

Occupational medicine services

How are the occupational medicine services managed (provide details: is it an independent office of occupational medicine, a clinic, a large provider of occupational medicine services, etc.)	<p>Contract with external Occupational Medical Services (OMS) with license from Ministry of Health in Bulgaria.</p> <p><i>The OMS consists of minimum 3 specialists – Doctor, Engineer and technical assistant</i></p>	<p>Contract with external Occupational Medical Services (OMS) with license from Ministry of Health in Bulgaria.</p>
Is there medical staff (doctor or nurse or hygienist) on the company premises / Is there a medical office on the company premises / Are there First Aid boxes on the company premises	<p>No</p> <p>There are aid boxes placed in the cars and the staff has been trained to provide first aid</p>	<p>No</p> <p>There are aid boxes placed in the cars and the staff has been trained to provide first aid</p>
Number & type of occupational diseases diagnosed in the company / Number & type if work related diseases diagnosed in the company	no	
Pre-employment & Regular medical check-ups	The new employees come with medical document for health	The new employees come with medical document for health

	<p>availability for the work.</p> <p>Regular medical check-ups – every year for each employee. This is made by schedule from OMS by specialists according to the risks at work.</p>	<p>availability for the work.</p> <p>Regular medical check-ups – every year for each employee. This is made by schedule from OMS by specialists according to the risks at work.</p>
<p>Are health information sessions being offered regularly to employees (provide details who is doing them, how often, what topics are usually approached, are there additional materials being used)</p>	<p>Yes, after regular medical check-ups. Employees receive information for their health and must go to the GP (General Practitioner) for continuing of medical treatment if it is necessary.</p>	<p>Yes, after regular medical check-ups. Employees receive information for their health and must go to the GP (General Practitioner) for continuing of medical treatment if it is necessary.</p>
<p>Any other Occupational Medicine & Workplace Health Promotion programs / projects / actions / initiatives organized in the company (provide details)</p>	<p>No information</p>	<p>No information</p>
<p>Any other preventive actions performed in the company</p>	<p>No information</p>	<p>No information</p>