
Session 6: Inspectors training harmonization and refreshment

Inspector's training and influence on the quality of inspections. An overview of training organization in EU

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Abstract

Inspector's training represents one of the most important factors affecting the effectiveness of the process. It is important to guarantee a well-trained inspector to offer a clear, objective and useful service to the farmers. But not only inspector's training is important for the success of the global process. In order to guarantee a good dissemination of the knowledge, CHAFEA (Consumers, Health and Food European Agency) launched BTSF training courses (Better Training for Safer Food) focused on inspection and calibration of pesticide application equipment. This paper shows the experience and results after 12 three-days training courses where more than 400 official stakeholders have been trained.

Great differences have been observed in the last years in the organization, contents and procedure of the inspector's training at different EU members. In order to have an objective overview of the situation, a survey was conducted among all the EU members, through more than 200 attendants to BTSF training courses. Results will be presented in this paper.

Introduction

Mandatory inspection of sprayers in use became mandatory in Europe since the official publication of the European Directive for a Sustainable Use of Pesticides (EC, 2009). From the technical point of view, the official procedure for the inspection is very well defined after the publication of the harmonized standard EN ISO 16122 (ISO, 2015). This standard series covers the most important pesticide application equipment and establishes the technical procedure for a complete inspection. This fact, however, implies two important actions: the first one is related to the knowledge and expertise on international standards for those officially involved. The new harmonized SO 16122-series establishes the technical procedure for the mandatory inspection of sprayers in use. However, its knowledge is not very well extended among the expertise and responsible bodies; the second aspect to be considered is related with technical knowledge among the official responsible in all the EU members concerning the use-phase of pesticides, it means, technical aspects related with spray technology (nozzles, air assistance, drift reduction techniques...) and with the calibration process, one of the most important aspects included in the European Directive linked to a safe and efficient use of pesticides.

These two important aspects, technical and legal requirements concerning inspection of sprayers in use, and calibration process, have been the two main topics included in the official call launched by CHAFEA (Consumers, Health And Food European Agency) through BTSF (Better Training for Safer Food) program: CHAFEA/2014/BTSF/02: "*Organisation and implementation of training activities on inspection and calibration of pesticide application equipment in professional use under the Better Training for Safer Food initiative*". The call covered the organisation and implementation of training activities on inspection and calibration of plant protection product application equipment in professional use in compliance with the provisions of Directive 2009/128/EC under the Better Training for Safer Food initiative. Once again, this official initiative launched by the European Commission demonstrates the importance and interest of training as one of the most important tools for an adequate accomplishment of the European legislation.

This paper presents a global overview after the organization of twelve three-days training courses organized in five different countries with more than 200 attendants from all EU members.

Attendants from all EU Members

More than 200 official stakeholders attended the twelve training courses that have been organized Universitat Politècnica de Catalunya (Spain), University of Turin (Italy), IRSTEA (France), JKI (Germany) and SKL (The Netherlands). All the EU Member States (28) have been widely represented during the training courses, including some representatives from third countries as Norway, Bosnia & Herzegovina, Albania, Kosovo and Switzerland (Figure 1).

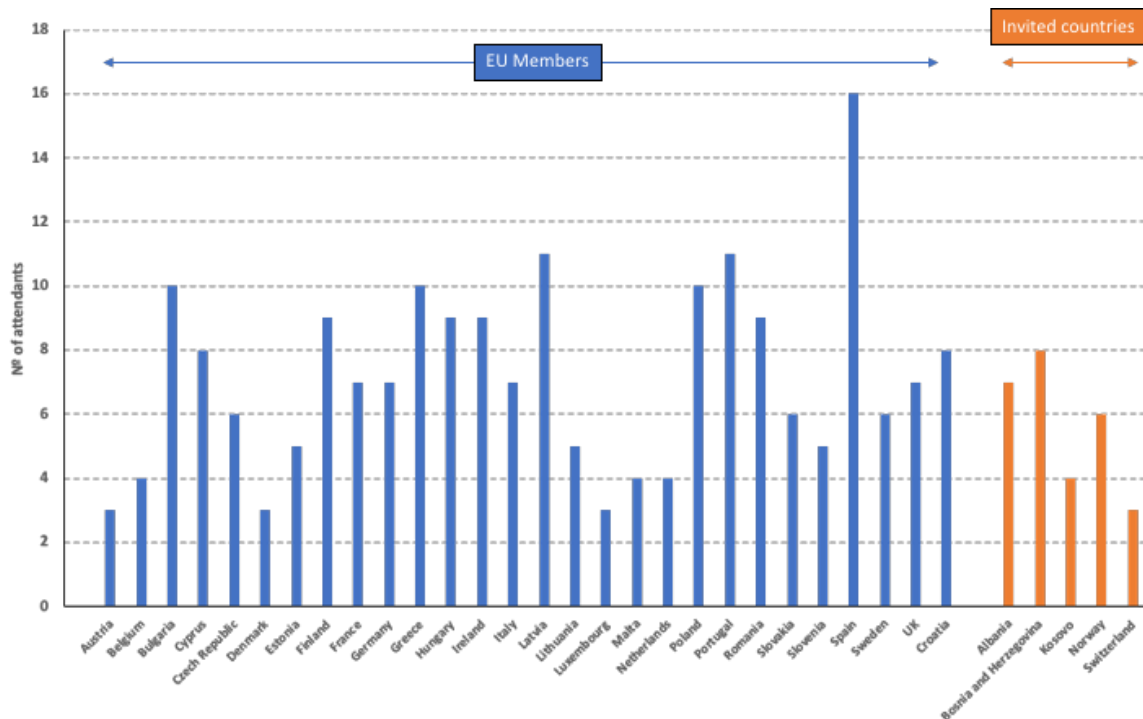


Figure 1. Distribution of the attendants to BTSF training courses, including all 28 MS and 5 invited countries

In global terms, the background of the attendants was wide, ranging from authorities' bodies, technical and administrative responsible of the inspection program, advisor bodies and academia.

Before and after questionnaire

As requested by the European Commission, an anonymous questionnaire was developed in order to evaluate the technical knowledge of the group. The main objective of the questionnaire was to evaluate and to quantify the efficiency of the training course. Fifteen multi-answer's choice were arranged, combining both technical and legal/administrative aspects. Results (Fig. 2) indicated an important increasing of number of attendants able to pass the exam (at least 50% of questions were asked correctly).

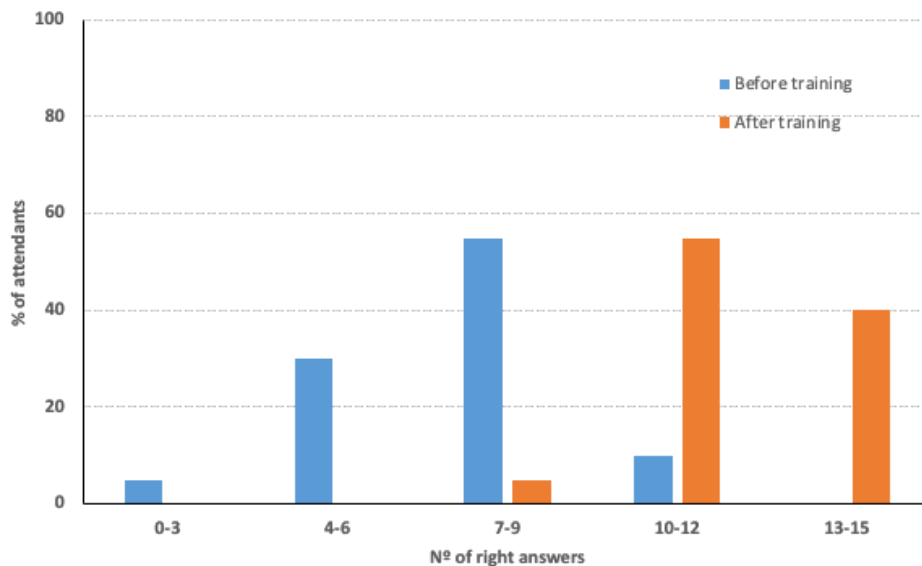


Figure 2. Percentage of attendants with number of positive answers before and after the training

Results on Fig. 2 indicated clearly the positive effect of training. Before the training courses, only 55% of the attendants were able to pass the exam. Results after the training courses increased up to 100%.

A detailed analysis of the results (Fig. 3) allows to identify big problems related with technical aspects of the sprayers or spraying application process. The 7 questions dedicated to technical aspects (Fig. 3 left) showed a great increment on success. This is especially important and allows to remark a clear default in knowledge on technical aspects related with inspection and calibration of pesticide application equipment.

However, not only technical aspects showed improvement in knowledge. Also, important improvements were detected in aspects directly related with international standard's knowledge. Important gaps were detected in knowledge concerning procedure and interpretation of inspection protocol.



Figure 3. Percentage of positive answers before and after the training, classified according the type of question (technical or legal/administrative)

Expected benefits from the training course

A general survey was also sent to attendants before every course, with the aim to identify the most important expectations by attending the training. From a large list of answers received, it is important to remark the followed extracted aspects, directly pointed by the attendants:

- Information from experienced countries
- New contact with experts on this subject
- Information about practical aspects to implement inspections and training
- Exchange of experiences/opinions concerning PAE inspection
- Information and better understanding about new regulations/standards
- To see inspection procedure not only in the room, but in the workshop
- New ideas for inspection/calibration PAEs other than boom/orchard sprayers

In general, these expectations can be directly linked with the results obtained after the preliminary questionnaire, where most of the selected topics showed important deficiencies in terms of knowledge.

Identified problems at different Member States

The same preliminary survey was used with the aim to identify the most important problems detected by the attendants at their own countries. Here enclosed is the selected list of the most important issues addressed:

- We are expecting many problems in process implementation this program, because we don't have properly knowledge and experience.
- Not all the sprayers are covered by standards and all sprayers must be inspected
- Lack of knowledge about inspections
- Management of the transition process from old to new rules, especially in training and authorization
- EU does not lay down uniform requirements for PAE inspectors
- Farmers are not interested in the inspection before deadline December 2016
- Difficulties to implement the standards (EN 13790)
- Inspections are expensive for farmers and cheap for workshops
- Absence of practical information (n° of sprayers to be inspected)
- Acceptance of mandatory inspection for farmers
- Competition between private workshops and workshops owned by Farmer's Associations, Cooperatives...
- Difficulties to guarantee whole coverage of the zones (low benefits)

A quick reading of the selected answers indicated a clear importance of training activities as the organized by BTSF training courses. Most of the expected benefits and encountered problems at different Member States can be clearly addressed through a clear and objective training program, both at European or national level. Training has been clearly identified as one of the most, if not the most, tools to guarantee the success of the mandatory process, with no differences among EU members.

Inspector's training course: one of the most appreciated activities

As a practical example of the organization of the BTSF training courses, it can be selected as one of the most appreciated by the attendants, the one focused on the organization and implementation of training courses for the official inspectors. This topic has been identified as one of the most influencing on the success of the program. Every MS should guarantee an objective, clear and efficient training program for their inspectors. During the course, the corresponding lecture focused on this topic was followed by a practical activity in groups, where attendants were in charge to organize a complete

training course. Discussions concerning the main topics to be included, practical and theoretical balance and background of the attendants were the most discussed aspects. In general, inspector's training was clearly identified as one of the key points for the success of the process.

Conclusions

After the organization of twelve three-days training courses, the most important conclusions derived can be listed as follows:

- Combination of practical and theoretical activities represents one of the most appreciated aspect of the courses. The possibility to put in practice the aspects previously explained in lectures gave the attendants a very well appreciated opportunity to complete the training process.
- BTSF training courses allowed a good opportunity to share problems, difficulties and experiences among different Member States, being a clear advantage specially for those MS less experienced in the inspection procedure.
- Great differences among MS were observed, both in terms of inspection's organization and in legal and administrative aspects. It was detected also that, even if deadline for mandatory inspection program was already overpassed, still there are some MS where process must still be arranged.
- Difficulties on interpretation and application of harmonized international standards were detected
- Special interest was detected concerning the inspection procedure for other minor pesticide application equipment other than boom sprayers and orchard sprayers.
- Material, experience and knowledge acquired after the training course attendance have been positively appreciated by the attendants. Also, a good European network has been started among the attendants from different EU MS.
- Accurate information focused on farmers was really identified by most of the attendants, in order to convince them about the interest and benefits of mandatory inspection. Training was selected as one of the most profitable investments to guarantee the success of the process.

The experience, in general, has been very well appreciated by the attendants. According to the survey conducted after the training courses, most of them gave a very positive opinion about the courses, being one of the most valuable aspects the possibility to practice with real devices and the relationship among other experts from other MS.

References

EC/128. Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides; 2009 [Of. J. EU, 24.11.2009, L 309/71].

http://ec.europa.eu/chafea/food/tender-02-2014_en.html