

SPISE7



INSPECTION SYSTEM FOR IN-USE PESTICIDE APPLICATION
EQUIPMENT IN GREECE. FIRST THREE YEARS OF APPLICATION

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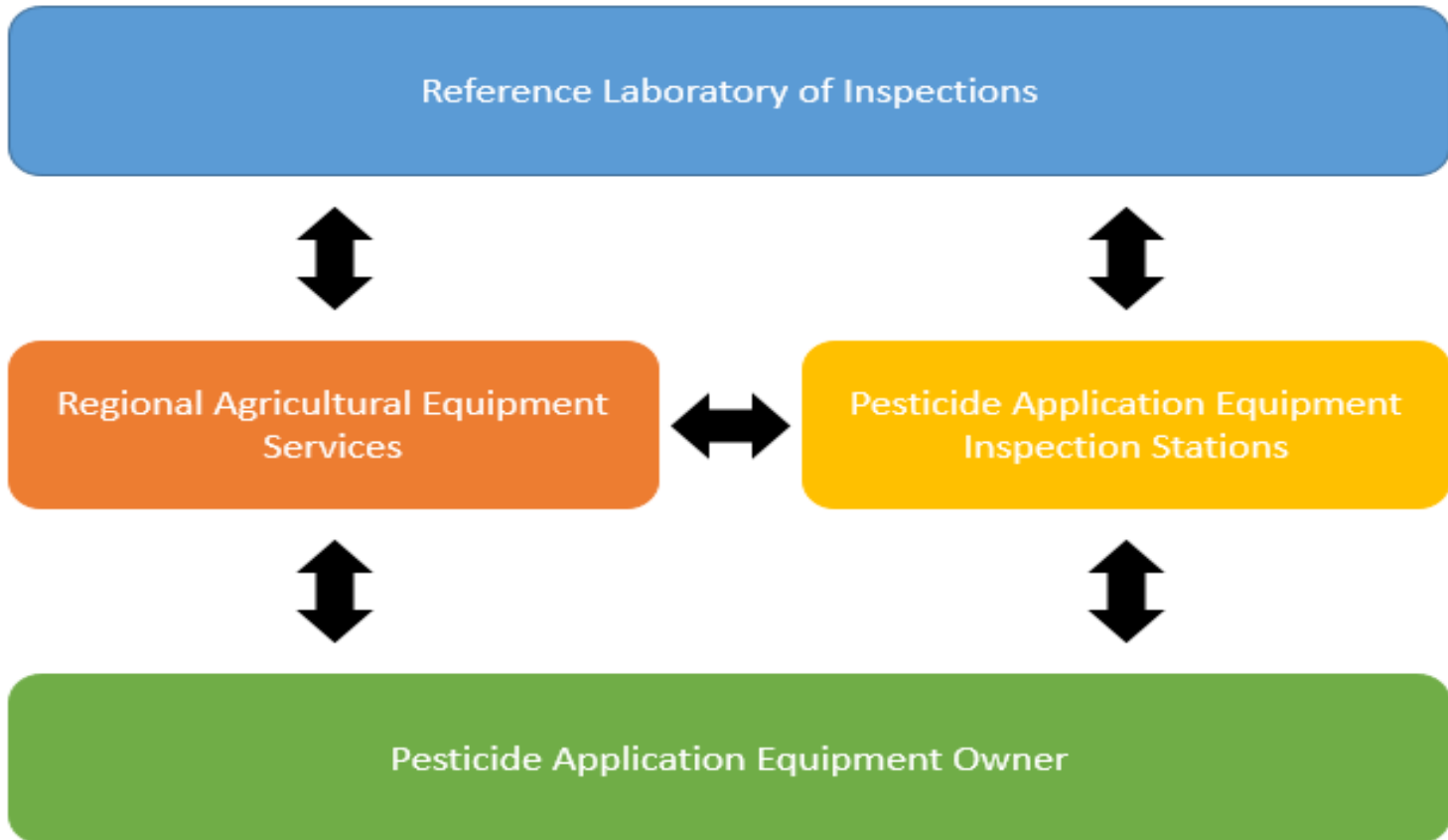
Agricultural University of Athens, Greece 26-28/9/2018

INTRODUCTION

- Directive 2009/128/EC was incorporated into Greek law in 2012 with Law 4036.
- However, the system of mandatory periodic inspection of in-use PAE **was actually introduced in Greece in 2015.**
- Between 2000 and 2015, **17 tests** of new machinery according to EN 12761 and **33 tests** of in-use PAE according to EN 13790 under the program **LIFE07 - EcoPest.**
- The first PAE Inspection Stations (PAEIS) was established in **September 2015** and the first inspections were made in **early 2016.**
- PAE inspected in 2016 will be re-tested in 2020 and then every three years, while PAE to be tested for the first time since 2017 and then will be re-tested every 3 years.

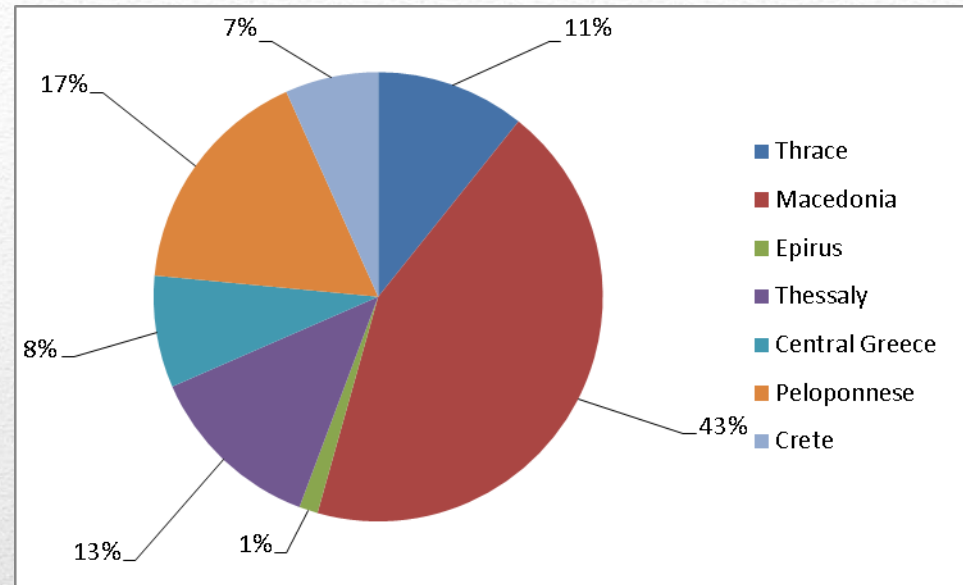
INSPECTION SYSTEM FOR PAE IN USE

Greek National Inspection System of In-Use Pesticide Application Equipment



NUMBER & DISTRIBUTION OF PAEIS

- The PAEIS approved (Sept 2015 to Feb 2018) are **149** and are established in **38 prefectures**.
- PAEIS exist in all the prefectures of Thrace, Macedonia, Thessaly, Peloponnese and Crete.
- No PAEIS in Thesprotia and Preveza in Epirus and Fokida and Evritania in Sterea Hellas, and in the Aegean and Ionian islands.
- Most PAEIS are located in the prefectures of Pella (17), Larissa (14), Imathia (10) and Serres (10).
- The majority of PAEIS (**43.6%**) are located in the Province of Macedonia.



TYPES of PAEIS

All PAEIS (**100%**) are mobile.

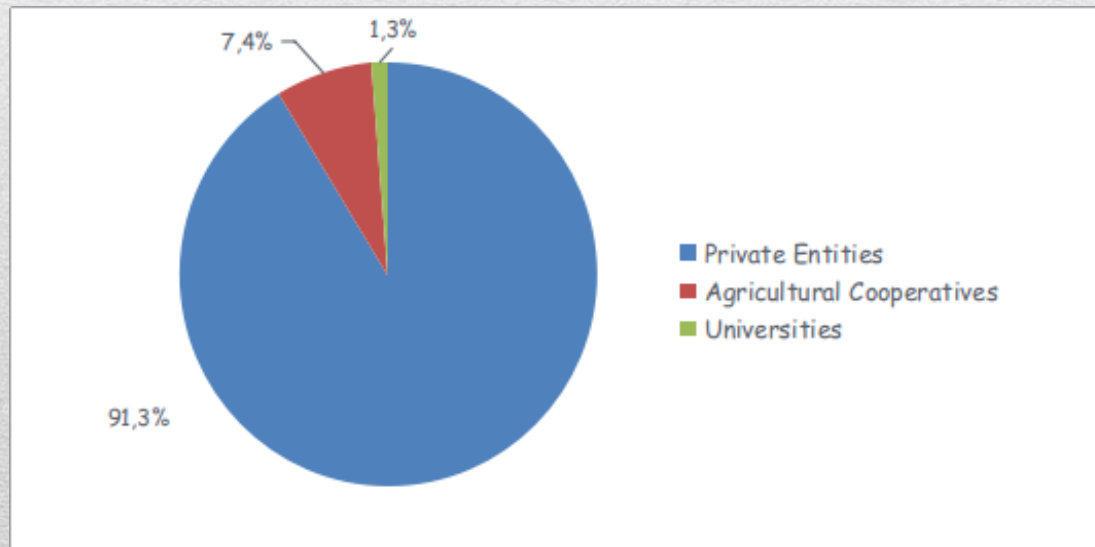
EQUIPMENT of PAEIS

The great majority of PAEIS (**98%**) use equipment of the least possible cost, avoiding high-tech devices.

OWNERSHIP OF PAEIS

The ownership of PAEIS in Greece is divided in the next categories:

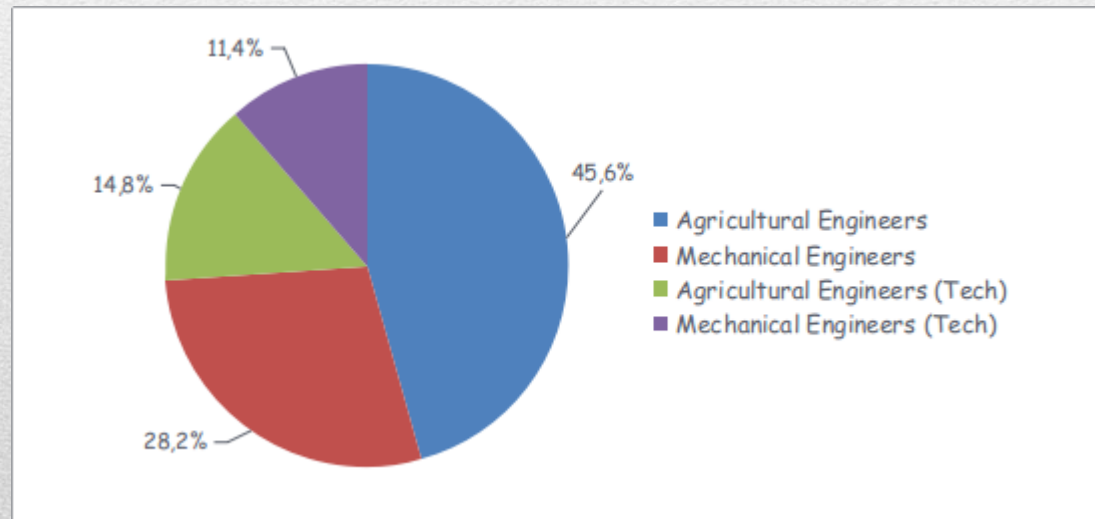
- **136 PAEIS** are private entities (71 are manufacturers-retailers of agricultural machinery).
- **11 PAEIS** are owned by Agricultural Cooperatives.
- **2 PAEIS** are under Universities command.



OWNERSHIP OF PAEIS

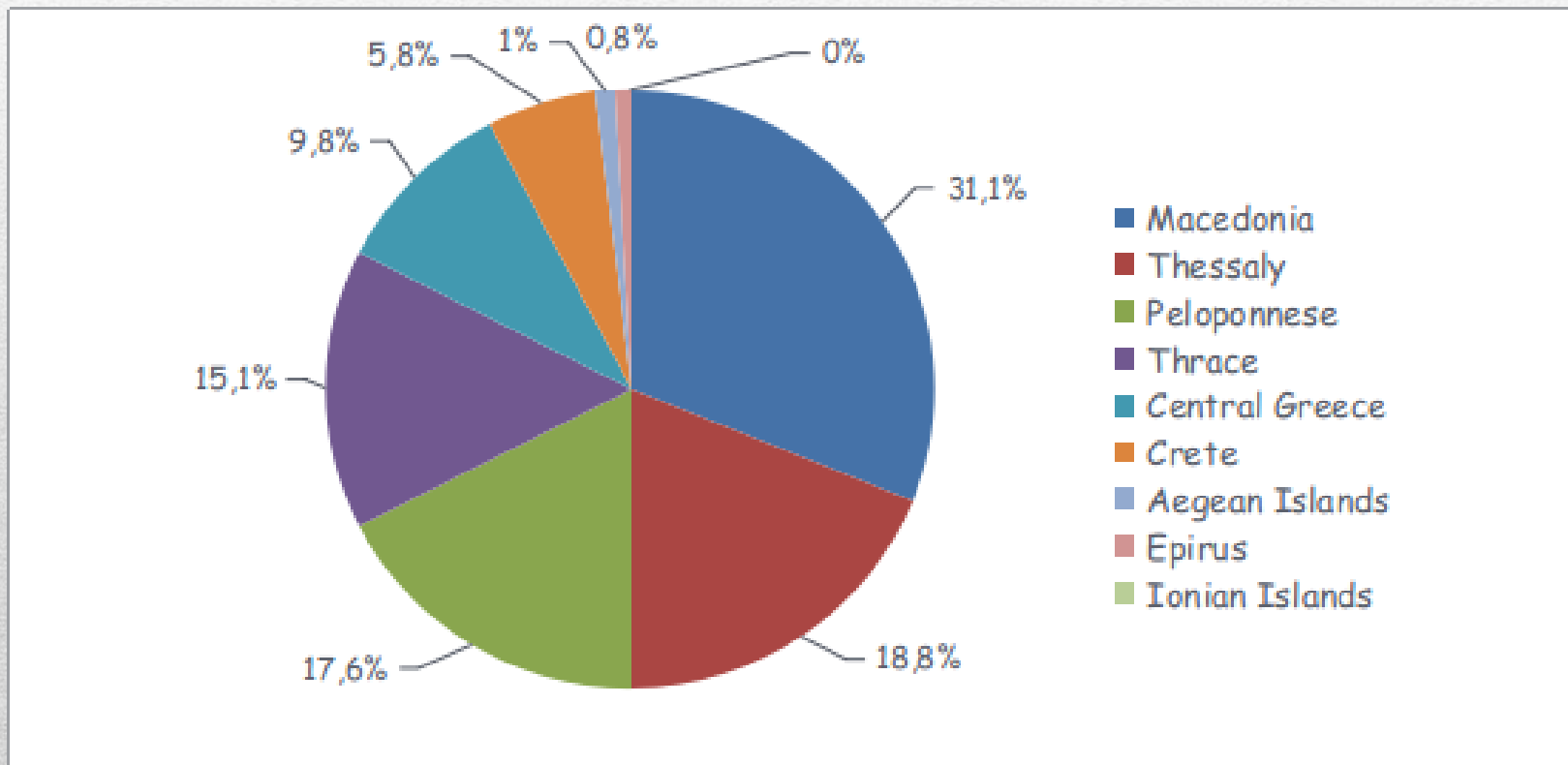
The majority of inspectors (**60,4%**) are Agricultural Engineers or Agricultural Engineers (Tech), but Mechanical engineers of both types are also active in this sector.

PROFESSION	NUMBER
Agricultural Engineers	68
Mechanical Engineers	42
Agricultural Engineers (Tech)	22
Mechanical Engineers (Tech)	17



NUMBER & DISTRIBUTION of PAE

The registered PAE in the RPAE are **139,283** by February 2018.



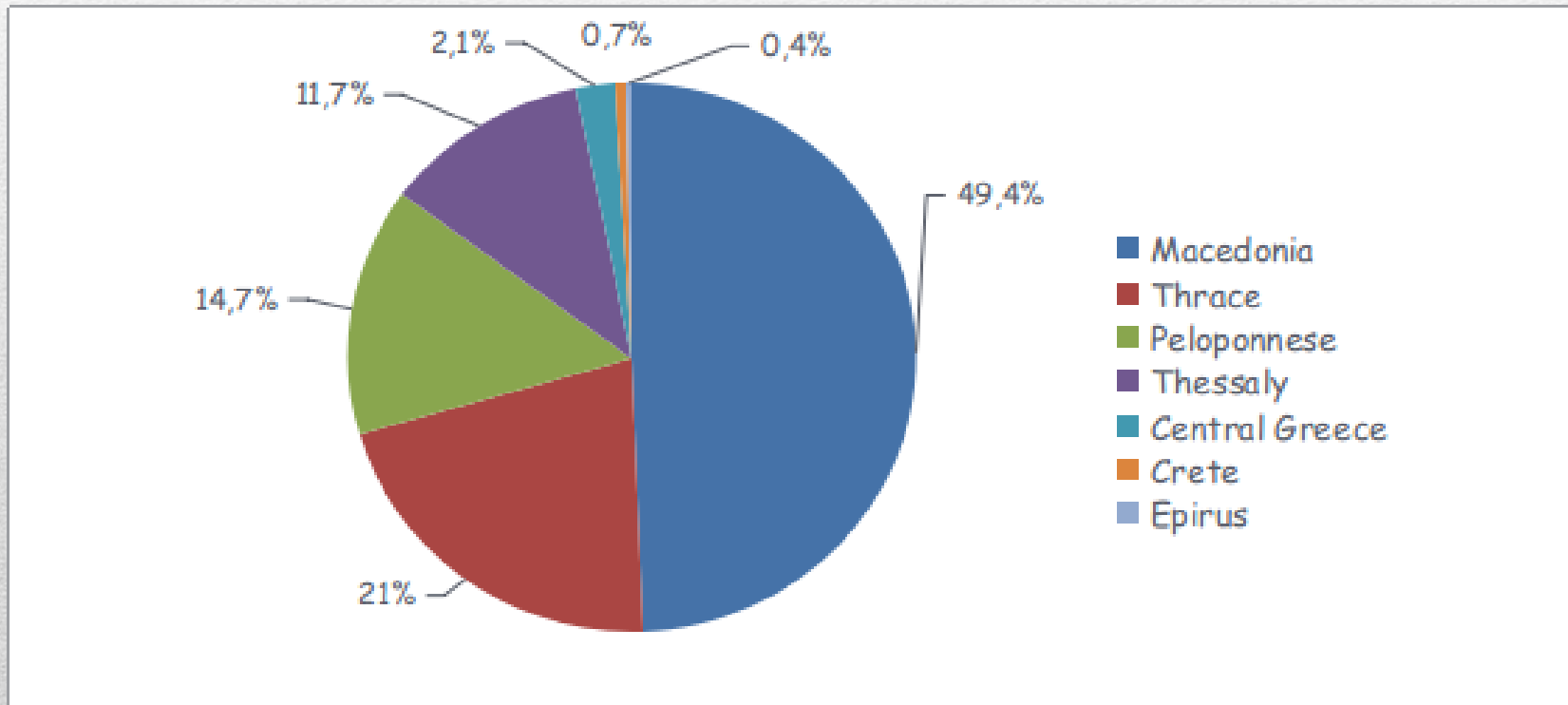
NUMBER & DISTRIBUTION of INSPECTED PAE

- From the equipment registered in the RPAE, the machinery to be inspected are **127,274**, as portable equipment is currently exempted from inspections.

Type of PAE	Number	PAE for Inspection
Air assisted tree and bush Sprayers	27,736	127,274
Boom Sprayers	76,993	
Sprayers with Lance	22,545	
Knapsack sprayers	11,921	
Fixed/semi-fixed sprayers	88	
Total	139,283	

TOTAL NUMBER of INSPECTED PAE

- The total number of the inspected PAE by February 2018 is **23,583** machines, i.e. **18.53%** of the total PAE (Bourodimos et al., 2018).



AVERAGE INSPECTED PAE per PAEIS

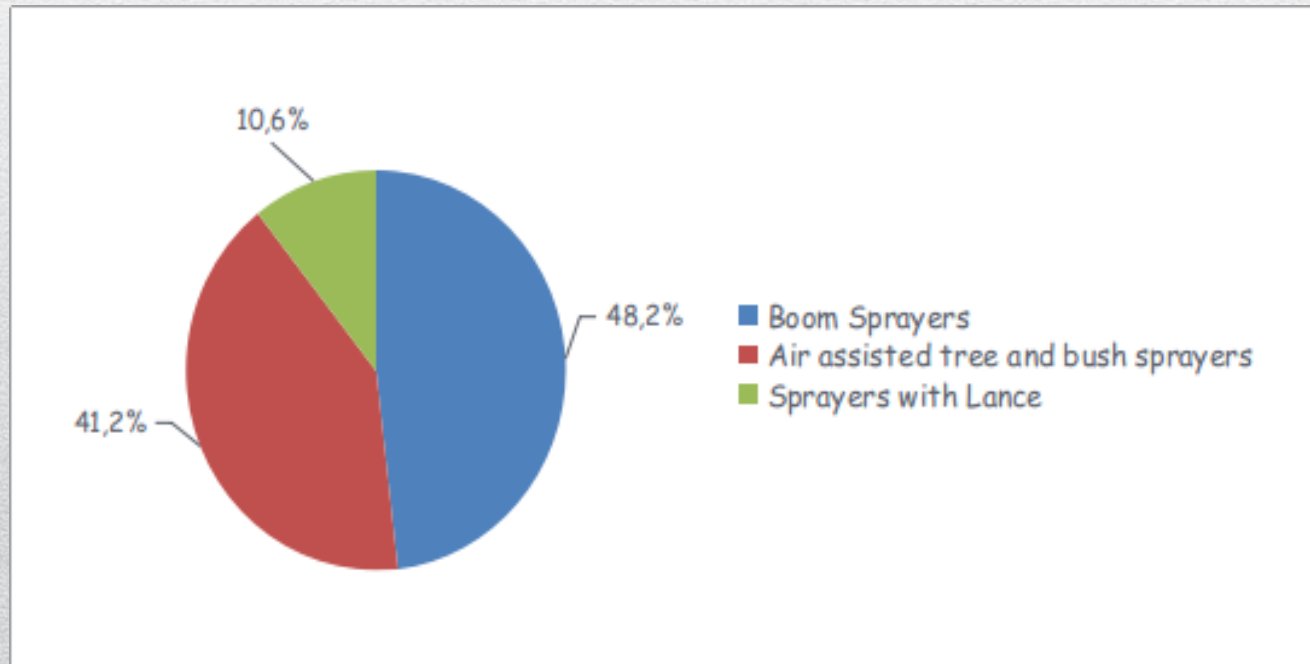
- The average tested PAE per PAEIS is **158.3**.
- The data is precarious, because many PAEIS are also active outside the geographic province they belong to.

Geographical Province	Mean Inspections per PAEIS
THRACE	310,1
MACEDONIA	179,4
EPIRUS	44
THESSALY	145,1
CENTRAL GREECE	42,3
PELOPONNESE	138,2
CRETE	15,5
AEGEAN/IONIAN ISLANDS	0

TYPE of INSPECTED PAE

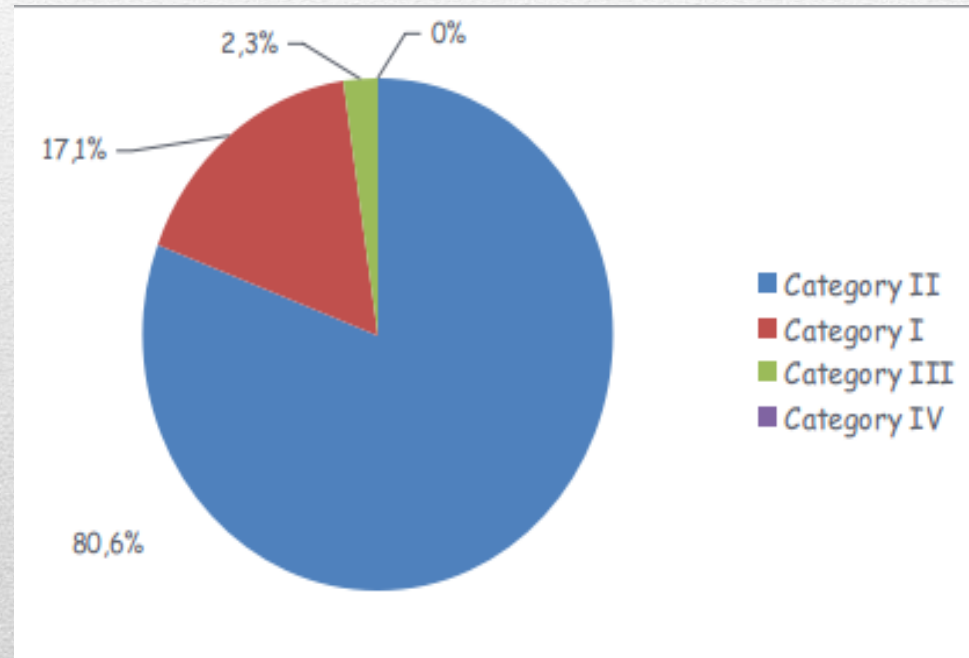
The inspected PAE was divided into 3 groups:

- Boom sprayers (**48.2%**).
- Air assisted tree and bush sprayers (**41.2%**).
- Sprayers with Lance, which accounted for (**10.6%**).



CLASSIFICATION of INSPECTED PAE

- **C I:** Equipment meeting the requirements.
- **C II:** Equipment with minor deviations to be corrected until the next inspection.
- **C III:** Equipment that presents significant deviations from the requirements. No sticker of compliance is issued and the PAE use until its successful inspection is forbidden.
- **C IV:** C III Equipment that its owner with a statement affirms that he wishes to delete it from the RPAE.



DISCUSSION - COCLUSIONS

- **Satisfactory** number and distribution of PAEIS
- **Lack of PAEIS** in areas with a small number of PAE (discourage investing).
- Since all PAEIS are **mobile**, the Reference Laboratory is trying to reach an agreement between the existing PAEIS to **cover these areas**.
- The majority of PAEIS were established with **low cost equipment**, which affects the **time** and **quality** of inspections.
- **Allegations** for PAEIS with inadequate inspections and the Reference Laboratory has begun sampling inspections.
- Particularly high proportion of machinery (**97.7%**) in Categories I and II:
 1. Any shortcoming **is repaired immediately** without sending the original Technical Inspection Reports to the Reference Laboratory.
 2. **Inadequate controls** of PAE by some PAEIS.
- **Inspected PAE are relatively few**, bearing audit should finish on Nov 2016.
- The Ministry is trying to address this situation by linking the **PPP purchases** and the **user certificates** with the PAE inspection certificates.
- **Need for systematic dissemination** to farmers about the periodic mandatory PAE inspections and the consequences of PAE misuse.

Thank you for your
attention!



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