



SIMA 2015- EurAgEng Seminar

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AXEMA members

- 230 french manufacturers, and importers providing machinery and equipments for arable and livestock farming as well as landscape maintenance:
- French branches of majors (AGCO, J Deere, CNH, Claas, Argo, SDF)
- Some mid-cap companies
- Many SMEs

French economics

- As for year 2013
- Market 6 billions € (UE: 25, monde: 85)
- Production 4,4 billions
- Exports 3 billions (DE, UK, USA)
- Imports 4,6 billions (DE, It, USA)

On farms' side

- Decrease of number of farms: -3% per year (in average as from 1993)
 - 700 000 - 1993
 - 400 000 - 2013
 - 320 000 - 2021
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- Increase of machinery size and/or capabilities
 - Increase of contractors works (CUMA/ETA), more employees instead of family members, use of robots (livestock farming), and UAV (maooring and decison making)
 - More demand for confort and safety

A few innovation milestones

- 1980s
 - Analogic electronic hitch (MF): slippage control
 - Numerical electronic hitch (Renault Agriculture): slip/depth control
 - Plough depth control (Huard, KV...)
 - Oil crisis: focus on tractive efficiency; is electronics reliable?
- 90s-00s
 - GPS
 - Engines electronic control (emissions requirements)
 - Numerical electronics and local networks (CAN..)
 - Precision farming concept merges
- 2010s
 - Affordable efficient sensors and technologies (vision...)
 - Agricultural bus standard ISOBUS becomes reality
 - ICT affordable
 - Precision farming available

Available today for precision farming

- Application rate control, section control for sprayers spreaders,
- Machine adjustment according to product via internet database,
- Pesticide loss control when spraying in vineyard/orchard via relevant technology
- Crop traceability (quantity, quality)
- UAV for agronomic mapping (chlorophyll, biomass) and fertilisation recommendation, herbicides?

- Etc.....

But still a limited impact

- Manufacturers say: technology for precision is hard to sell
- Farmers advisors say: sophisticated machinery is poorly used
- We see that farmers are at first seeking for comfort, simplicity for use, working speed (see SIMA awards, even on long term basis)

In shorts farmers buy/use what **obviously improve** their **current practises**,

To make solutions more simple and attractive, and improve farmers trust in innovative ones

- Better integration of FMIS and ISOBUS systems
- To disseminate test results: AEF compliance certification database
- Performance certification: eco épandage a certification scheme for organic fertilisers spreaders (slurry tankers and manure spreaders)

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Innovative machinery is part of a system

- Innovative machinery make possible new farming practices, which further increases farming efficiency
- Engineering and agronomics should not longer work in parallel!
- Furthermore we hear from technical institutes and surveys that lab proven new practices are difficult to disseminate.

It is time to take care about implementation

- Farmers are convinced through actual experiences, at their colleague's, neighbor's,
- Many different local situations in each country but similar occur in different many countries
- EurAgEng community to think how to contribute to dissemination of new practices and technologies?
- Field testing demonstration network? Information network?.....



Merci de votre attention!