

# Software offer from French farmer's organisations to support livestock

L'expérience et le savoir faire  
dans la mise en œuvre des solutions ICT  
pour toutes les activités de l'élevage.





## LIVESTOCK FARMING IS FACING HIGH CHALLENGES :

- Increase in demand for volume, safe and healthy food, *sustainability*.
- Increase in competition with agricultural sectors (crop, poultry and pig...) and between countries in Europe and at global level.
- Livestock farming working conditions are not attractive enough.



These challenges cannot be addressed without Information and Communication Technology (ICT) applications



# COST AND VALUE OF MANY LIVESTOCK ACTIVITIES LARGELY DEPEND ON ICT APPLICATIONS:



Selection and herd  
book keeping

Traceability and  
animal marketing



Animal health  
data management



Advice

Performance  
data record



Farm and herd  
management

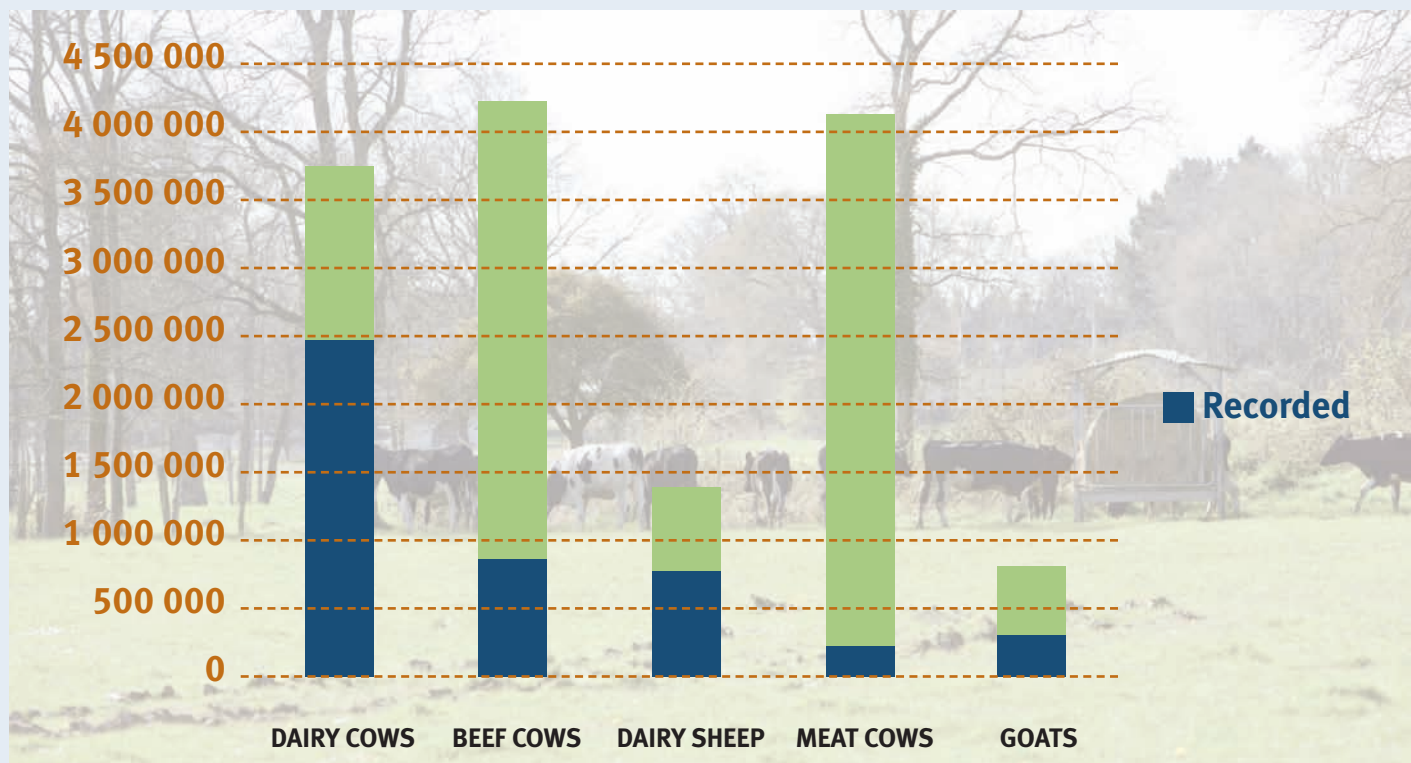


Applied  
research





## Technical services are provided to many farmers for different species





## KEY ISSUES

**Farmer's organizations provide their members with a wide range of services for:**

- animal traceability,
- performance data recording,
  - artificial insemination,
- animal health management
  - advice, consultancy
  - herd book keeping.
  - type classification



More than  
**50% farmers**  
are using  
ICT applications  
for herd management.

For instance  
**3000 robots**  
More and more  
automatic devices  
and RFID





# A strong and old implication from farmer's organisation in ICT applications

French farmer's organizations have managed for more than thirty years a cooperative network whose mission is to provide both farmers and their organizations with ICT applications.







### Advanced activities:

- Design
- Development of software
- Hosting of applications



### Human abilities:

300 persons including about 150 specialists in software engineering.



**Products and services are leaders on the French market of herd management applications, in competition with other ICT companies.**



**Information sharing**  
between livestock organisations  
and farmers.



**Provide** livestock organisations  
and farmers with **ICT products**  
and services to support  
their activities.





**Information sharing  
is a critical issue  
for ICT applications  
in livestock farming.**

## **FACILITATE INFORMATION SHARING**

- Several type of data are available and consolidated for cattle, sheep and goats of various breeds : animal traceability, parentage, performance data, pedigree, breeding value, health data...
- Data from more than 20 millions of animals from about 100 000 farms are managed.
- These data are also used for breeding value calculation for different species.

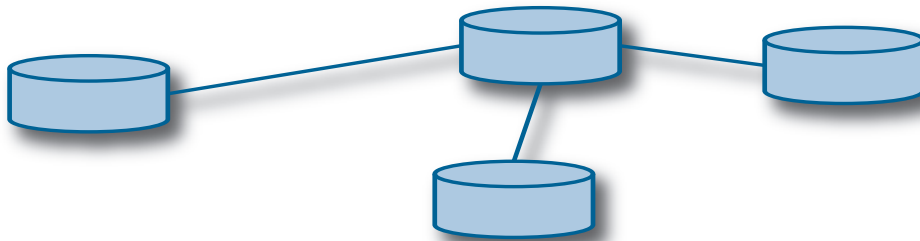
# ORGANISATION FOR INFORMATION SHARING



Data are available:

- On line (Web service)
- File transfer

**A network of synchronised data base with the same data model and the same rules for herd management.**



**Rights of each user are defined and implemented by the system**



## VERSATILE ICT ARCHITECTURE, BUSINESS SERVICES ARE AVAILABLE:



On line through internet:

- PC with broadband stationary connection
- Smartphones with GSM 3G connection



Off line  
on stationary  
PC or on mobile  
PDA.



With easy connection  
to several automatic  
devices (milking,  
feeding..) and sensors,  
RFID compatible.





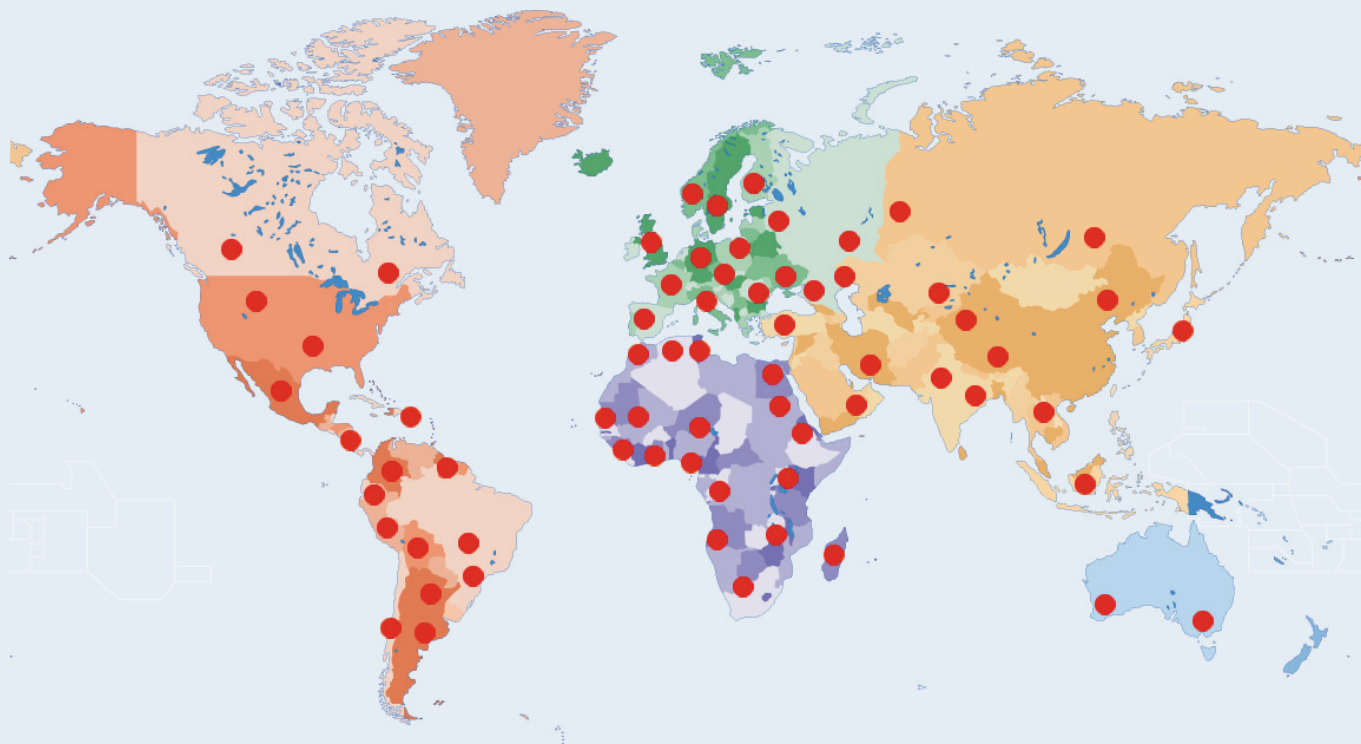
Based on components  
implementing **more than  
200 services available**  
under different conditions

Development with **Java**  
or **Dotnet** technologies.





## French ICT for livestock in the world





# Conclusions



- ☞ In a competitive market, French farmer's organisations remain the leader for ICT applications for livestock.
- ☞ ICT applications are implemented in order to:
  - Facilitate information sharing
  - Provide different different species and activities with efficient tools and services.
- ☞ Tools and services are used under different conditions under a SOA approach
- ☞ Tools and service are mainly used by French farmers and organisations but some of theme are now available for foreign users.