10
RECOMMENDATIONS TO FAVOR THE ACCESS AND THE VALUATION OF DATA

#INNOVATE #FLUIDIZE #REASSURE

RÉSEAU NUMÉRIQUE **&** AGRICULTURE

L'accès aux données pour la Recherche et l'Innovation en Agriculture

Position des Instituts Techniques Agricoles

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LES INSTITUTS TECHNIQUES AGRICOLES #

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The Agricultural Technical Institutes (ITA) present their analysis of the problem of the access to the agricultural data for the research and innovation activities in a white paper.

Why and how to value the data of farms? The acquisition of the technical data by the collective agricultural R&D is historically based on devices mastered by the organisms of R&D (experiments, observations networks and survey). With the explosion of the available quantity of data on farms and their source capture, the Agricultural Big Data becomes an essential and inescapable raw field of data. But this field will reveal its potential only on the condition of being valued with the relevant means and tools.

What guarantees and ways for the access to the farms data? The agricultural actors have to guarantee in particular a transparency of the uses and the virtuous use of the data. Various technical means and services can be mobilized for facilitating the access to the data while guaranteeing the uses.

From this diagnosis, 10 recommendations are formulated to facilitate the access and the valuation of the data. It concerns already available data within the organisms of collective R&D, but especially the new fields which form the connected farms and the set of the economic actors of the sector.

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Open Innovation: Co-build the services by mobilizing new partnerships and skills

1. Co-build digital services useful for the agricultural actors
- work with the farmers on the services of future
- more adapted services

2. Evaluate the applications in the farms
- tests in real conditions
- objective evaluations of the services

3. Open to new partnerships
- a strategic monitoring
- a richer and more open partnership
- an effective and well-balanced partnership
- workshops of creativity

4. Strengthen the skills to better value the data
- an ambitious training plan
- collaborations with schools
- recruitments of new talents
- a mutualisation of the skills

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Mobilize the technologies to fluidize the exchanges of data

5. Catalogue the sources of data of interest for agriculture
- an inventory of the sources of data

6. Favor the interoperability between information systems
- data and accessible services by API
- more integrated services

7. Mutualize information systems
- successful and ergonomic information systems
- capitalized data

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Clarify the questions of property and transparency to reassure the actors

8. Establish principles and best practices
- a charter on the access and the valuation of the agricultural data
- services and data connected with full transparency
- a commitment of the ITA to apply these good practices

9. Guarantee the control of the data and establish a trust chain
- a passport for the agricultural data
- transparent and revocable uses

10. Encourage the opening of the data of companies
- a financial or technical support to open the data

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Which digital agriculture in the near future?

To make more explicit the stakes linked to the implementation of these recommendations, we propose a scenario. Indeed, in the short term (3 years), the technological and agricultural contexts are relatively known. From their part, the suppliers of farm implements and services are fast-changing.

Let us look ahead to 2019...

Technological context
- Mature technologies and plethora of offers at low cost
- Proliferation of the collected data
- Proliferation of the available services

Agricultural context
- Need to increase competitiveness for the conventional farmers
- Strong competition between the partners of the farmer (suppliers of inputs, equipment and services)

A big exploitation in mixed farming-breeding

3 partners, 270 ha of cereal, 150 dairy cows, 3 buildings of poultry farming. Committed to the automation and to the digital technology.

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The farmer is captive of the information systems of the partner

Integration at the level of the suppliers

Exclusive trade agreements between suppliers

Integrated solution not answering all the farmer's needs

The agricultural R&D disconnected from the modern agricultural world

Difficulties of accessing to the data

Impossibility to compare and estimate the innovative services

The farmer at the heart of the information system

Integration at the level of the farmer

New actors integrating data and valuing them

Integrated solution answering all the farmer's needs

An efficient agricultural R&D and representative of the agricultural world

More representative references

Innovative services more reliable and bringing added value

This brochure rose from the white paper «*The access to the data for the Research and the Innovation in Agriculture. Position of Agricultural Technical institutes*» produces by the Digital Network and Agriculture of the Agricultural Technical Institutes. The completeness of the document is available on the following address: **www.acta.asso.fr/numerique**.