

# ETHICS OF DATA GOVERNANCE

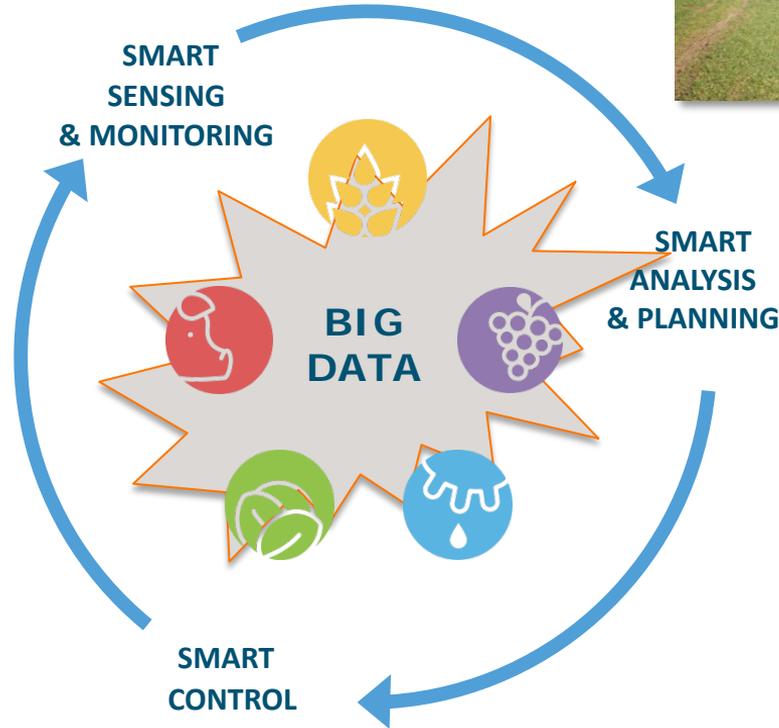
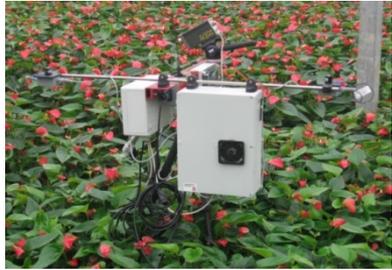
SIMONE VAN DER BURG



# WHAT ARE THE FUTURE PROMISES OF SMART FARMING?

- Smart farming is brought forwards as answer to the 21<sup>st</sup> century challenges
- The population grows, there are more mouths to feed (food security is needed)
- Climate change; diminish the environmental impact of farming
- Foster food safety and societal acceptance of food products

# Smart farming technologies



# QUESTIONS ABOUT DATA

- Who is the data owner?
- About what data are we speaking? Is there a difference between the owner of raw data or computed data?
- Who has the right to benefit from data?
- What do we mean when we say farmers ‘have a right to’ data?
- What is the role of privacy in agrifood data?
- Should data be openly accessible?
- Should farmers have a role in decisions to collect, evaluate, transfer or use data?

# WHAT IS THE ROLE OF PRIVACY?

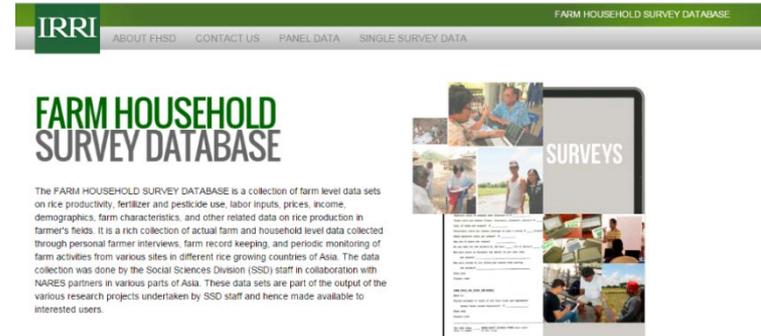
- Privacy concerns personal data

Privacy concerns personal data

The farm business and farm household is seen as one and the same economic unit....BUT

Talk about privacy is scarce in the ethics of smart farming, as farm data are usually not considered ‘personal’

- Privacy concerns personal data



IRRI FARM HOUSEHOLD SURVEY DATABASE

ABOUT FHSD CONTACT US PANEL DATA SINGLE SURVEY DATA

## FARM HOUSEHOLD SURVEY DATABASE

The FARM HOUSEHOLD SURVEY DATABASE is a collection of farm level data sets on rice productivity, fertilizer and pesticide use, labor inputs, prices, income, demographics, farm characteristics, and other related data on rice production in farmer's fields. It is a rich collection of actual farm and household level data collected through personal farmer interviews, farm record keeping, and periodic monitoring of farm activities from various sites in different rice growing countries of Asia. The data collection was done by the Social Sciences Division (SSD) staff in collaboration with NARES partners in various parts of Asia. These data sets are part of the output of the various research projects undertaken by SSD staff and hence made available to interested users.



# WHAT IS THE ROLE OF PRIVACY?

- Art. 4.1 of GDPR: personal data are any information which are related to an identified or identifiable natural person. Three categories:
- Directly identifiable. A name, an identification number, location data, an online identifier or one of several special characteristics, which allows to relate other info to a specific person
- Indirectly identifiable. A combination of non-personal data can be identifiable.
- Sensitive personal data. Genetic, biometric, health data, data revealing racial and ethnic origin, political opinions, religious or ideological convictions or trade union membership

# WHAT IS THE PROBLEM WITH PRIVACY?

How should we deal with this?

Problematic to share with some people but not with others?

- Art. 4.1 of GDPR defines personal data as any information which relates to an identifiable natural person. Three categories:
  - Directly identifiable data, an online ID number, identification number, location data, an online ID number, several special characteristics, which allows to relate to a specific person
  - Indirectly identifiable. A combination of non-personal data can be identifiable.
  - Sensitive personal data. Genetic, biometric, health data, data revealing racial and ethnic origin, political opinions, religious or ideological convictions or trade union membership

# SHOULD WE PROTECT DATA OWNERSHIP?

- Ownership seems a more appropriate term as farm data are business or trade data.
- But the term is also odd....
  - Are farm data property? No...
  - Farm data do not fit into IP classifications (trademark, copyright etc.) But technologies and algorithms developed to interpret them can be protected in this way
  - Farm data can be understood as a trade secret. But there is no regulation to protect trade secrets



# DATA OWNERSHIP IS BASED ON A COMMODITY APPROACH TO DATA

Other parties can use data for their own purposes and this needs to be controlled

ATP's and intermediaries can use data about yield on the stock market or in commodity and real estate markets

Recommendations for farmers can lead to price discrimination by input suppliers

Answer: ownership protection!

# OWNERSHIP PROTECTION: COPA COGECA

- The Copa Cogeca code of conduct focuses on the shaping of contract agreements between parties interacting with the data
  - Data **ownership rights are ascribed to the data originator** who has created/collected data by technical means (agricultural machinery, electronic data processing programs) or who has commissioned other people, like data providers, for this purpose.
  - **Processors of data** from various sources who deal with aggregated data **are not the data originators, or owners**

# OWNERSHIP PROTECTION: COPA COGECA

- Sharing conditions should be agreed on in a contract, which:
  - Acknowledges the right of all parties to protect sensitive information (like IP's)
  - Recognizes the right of the data originator to benefit from or be compensated for the use of their data; **the contract should therefore state what the benefits are for the data originator**
  - Should be stated in clear language, which specifies (a) terms and definitions, (b) **the purpose of collecting, sharing and processing data**, (c) rights and obligations that parties have related to data, (d) information on how data are stored, (e) verification mechanisms for the data originator, (f) **transparent mechanisms for adding new/future uses**

# PRESUPPOSED VALUES

- Transparency!
- ...and a specific understanding of trust
- ‘Trust is (..) a relationship in which an agent (the trustor) decides to depend on another agent’s (the trustee) foreseeable behaviour in order to fulfil his expectations.’(Taddeo 2009)



# SOME QUESTIONS



- Very practical to start with a contract, but...
  - Is it feasible to make everything explicit in a contract?
  - Data owners/orginators are diverse: how do you make info accessible to all?
  - Can you already foresee everything you want to do with data in the future?
  - Is it possible/feasible/desirable to re-contact data originators and ask for consent to new uses?

# SOME *MORE* QUESTIONS

- Is it *sufficient* to make everything you want to do with data explicit in a contract?
- Extra efforts are needed to prevent the digital divide and the big data divide, and foster:
  - Inclusiveness
  - Participation
- Contracts say nothing about the purposes for which data are being used: are they helping us to respond adequately to the grand 21<sup>st</sup> century challenges?

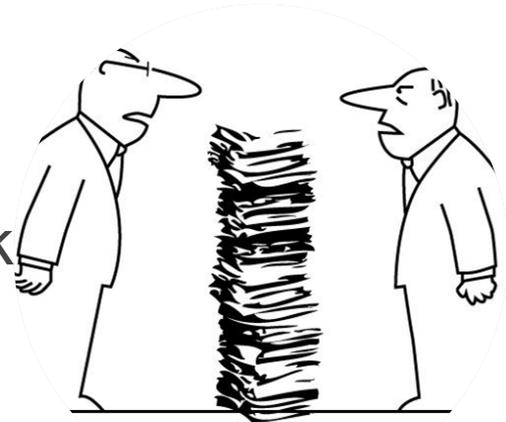
# AGAIN QUESTIONS....DIGITAL INNOVATION HUBS

- Are contracts an appropriate answer to everything that is happening?
- Europe is investing in DIH's. Who governs data in DIH's? Who decides about who can collect them, analyse them, interpret them, re-use and –reinterpret them over time?



# REFLECTIONS ABOUT DATA GOVERNANCE

- We did interviews and distinguished four lines of thinking about the future (which you are allowed to combine/alter)
  1. The 'I choose' model
  2. Data as public library
  3. Data governance is settled by the market
  4. Data in the value chain



*"No, it's MY data!"*

# THE 'I CHOOSE' MODEL

- Farmer should get to choose whether and with whom he or she shares data
  - Copa Cogeca: shape good contracts
  - Practical. But: feasible in the long run? And does it really enhance autonomy?



# DATA AS A DIGITAL LIBRARY (HUB?)

- Management of the 'library' develops sharing policy
- But: who pays? If it is the government, can it decide?



# DATA GOVERNANCE SHOULD BE SETTLED BY THE MARKET

- Farmers and other businesses will share data when it brings them benefits
- But: Competition, inequality of knowledge/expertise, digital divide, big data divide



# DATA SHOULD BE SHARED IN THE VALUE CHAIN

- Farmers shape collaborative with supply-chain and supermarket
- But: unequal competition?



# 1. IS THERE A MODEL THAT YOU PREFER?

- 1. The 'I choose' model
- 2. Data as public library
- 3. Data governance is settled by the market
- 4. Data allow to re-organize collaboration in the value chain



*"...and here I was...only just getting used to being paid for NOT doing things."*

# MENTIMETER

- <https://www.mentimeter.com/app>

# THANK YOU!

- Magda Augusteijn, *Surviving in the supermarket*

