Agriculture, Food, environment : big challenges

- Some Societal challenges …. :
  - Feed the world
  - Climate change
  - Sustainable agriculture
  - Health and nutrition

- Imply to deal with data :
  - Data driven science
  - Big data
  - Data management, sharing, and re-use

- With different point of views :
  - Politics
  - Technics (IT)
  - Scientific Disciplines
  - Intellectual property, ethics
  - Economics

RDA
RESEARCH DATA ALLIANCE

Context : Some opportunities

Coordinate worldwide research efforts in the fields of wheat genetics, genomics, physiology, breeding and agronomy. (Sept. 2011)

Build the social, organisational and technical infrastructure to reduce barriers in data sharing (March 2013)

Share relevant agricultural data available from G-8 countries with African partners and … develop options for the establishment of a global platform to make reliable agricultural and related information available to African partners (April 2013)

Global Open Data for Agriculture and Nutrition

seeks to support global efforts to make agricultural and nutritionally relevant data available, accessible, and usable for unrestricted use worldwide. (Oct. 2013)

research data sharing without barriers
rd-alliance.org

2 groups

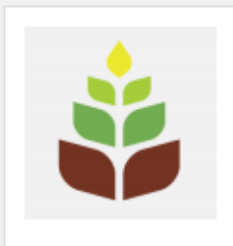## Agricultural Data Interoperability IG

Status: Recognised & Endorsed
The Agricultural Data Interest Group is a domain oriented interest group to work on all issues related to data important for the development of global agriculture. The interest group aims to represent all stakeholders producing, managing, aggregating, sharing and consuming data for agricultural research and innovation.

- Policy
- Identification of subjects to work on
- Exchange of information
- Coordination of our different initiatives

Wheat Data Interoperability WG

Status: Recognized and Endorsed
The Wheat Data Interoperability Working Group aims to provide a common framework for describing, representing linking and publishing Wheat data with respect to open standards.

- Just endorsed after a really interesting exchange with the TAB
- Cookbook for interoperability + a library of linked vocabularies and ontologies
- A prototype based on a LD framework

research data sharing without barriers
rd-alliance.org

RDA
RESEARCH DATA ALLIANCE

Key issues

- ## Not reinvent the wheel
  - Identify and re-use what is already done in our domain or others (specially in genetics)
  - Keep coherence with all the initiatives (GODAN, CIARD ….)

- ## Link with other groups of RDA :
  - Technical groups
  - Domain groups (biodiversity …)
  - Role of the Technical Advisory Board

- ## Adoption by our community – strong link with their needs
  - Dissemination plan with the most important players
  - Usable for other crops (Rice, Maize …)

- ## Stay on the run (no budget, people involvement …)

Already some benefits

- Interest from NASA (cluster on Aglicutlure and Climate)
- Possible links with Geospacial consortium for agriculture research (Nottingham Univ)
- For my institution (INRA France) :
  - A Strengthening of our partner's network : FAO, CABI, Wageningen Univ ,CYMMIT …. about « open data, data sharing and data interoperability »
  - Opportunities for new projects in H2020
  - For our data sharing policy :
    - Wheat data : A wonderful (but complex) usecase
    - RDA is a general framework to refer to

RDA
RESEARCH DATA ALLIANCE

So, Wellcome !

- IT specialist (Linked data, ontologies, text mining …)
- Bioinformatics – genomics data
- Georeferenced data
- …

WE NEED YOU

RDA
RESEARCH DATA ALLIANCE

Thank you !

odile.hologne@versailles.inra.fr
http://prodinra.inra.fr/au/20625T

@Holo_08 twitter

research data sharing without barriers
rd-alliance.org