

BUILDING E-INFRASTRUCTURE AND SERVICES FOR THE AGRICULTURAL RESEARCH COMMUNITY

CONTACT DETAILS:

PROJECT NAME: agINFRA - A data infrastructure to support agricultural scientific communities promoting data sharing and development of trust in agricultural sciences

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Objectives:

agINFRA is an Agricultural Data Infrastructure dedicated to connecting a wealth of existing data resources together and making them easier to find and use. agINFRA is designed to meet a very specific challenge within the field of Agricultural Research: How to openly connect the publicly available Agricultural Data in a system which users can easily access. The key to the agINFRA approach and what makes it different from many previous initiatives in the field of Agricultural Data is that agINFRA's infrastructure is neither an information collection nor a search engine. Many institutions already have web portals and search engines which allow users to access collections, find information and use results. Building another such system would not build the kind of broad knowledge base to which agINFRA is dedicated. Instead, agINFRA works in the background, providing existing search tools and data collections with the means to better connect their data.

On-going activities:

agINFRA currently integrates a number of services and resource collections. This means that each of these services and resource collections is 'powered' by agINFRA technology and networked into a much larger web of other services. agINFRA is currently powering several key global Agricultural Data resources. These include the United Nation Food and Agriculture Organization (FAO)'s CIARD-RING, a pioneering global resource collection which connects more than 820 service and resource collections from over 400 providers. agINFRA also powers the FAO's AGRIS and OpenAGRIS collections which contain over 5 million bibliographic records available for public searching. agINFRA is helping these services and many more to function more effectively.

Project Results:

Main expected advances:

- Setting up FAO and its stakeholders as the managing and promoting stakeholder of a data infrastructure for agricultural scientists
- Connecting existing networks of data repositories and institutional/national repositories through this data infrastructure, enabling new possibilities for retrieval and data analysis
- Connecting this data infrastructure to other infrastructures and data repository networks, for aggregating and exposing their resources through a flexible infrastructure
- Providing mediating capabilities for heterogeneous, distributed data sets in agriculture, including scalability and high performance support to handle complex queries and data extraction
- Providing machine-processable interfaces to the data resources and systems integrated, enabling the development of semantics-aware applications and using the open linked data recommendations
- Further integrating the educational content repository stakeholders, allowing agricultural scientists to access and share data resources used for education/extension

URL: www.aginfra.eu