

Session 7B: Open Data for Food and Nutrition: The promises and perils of data sharing and exchange.

Presented by: Effie Tsiflidou and Vassilis Protonotarios of Agro-Know, Greece and Christopher Brewster, Aston University

Rapporteur: John Gordon

The presentation was made up of an introduction and three separate slide presentations:

- Towards a global Network of Food Safety Knowledge Hubs (Effie Tsiflidou, Agro-Know, Greece),
- Pax Romana and Pax Data: Open Data Infrastructure for Food (Christopher Brewster, Aston University, UK), and
- Agricultural Data Interoperability Working Group (Vassilis Protonotarios, Agro-Know, Greece):

The main objectives of the session were:

- To introduce the work of the World Bank's Global Food Safety Partnership (GFSP) initiative
- To investigate interest in development of a Working Group under the Agricultural Data Interoperability Interest Group of the Research Data Alliance.
- To share ideas on good practices used by the food/nutrition data providers (and identify these data providers), and
- To explore ways of collaboration/networking/aligning efforts (following the example of RDA).

The three slide shows are summarized below:

SLIDE SHOW 1: Towards a global Network of Food Safety Knowledge Hubs (Effie Tsiflidou)

The presentation examines the Global Food Safety Partnership (GFSP) whose goal is identified as “rapid scaling of food safety practices around the world.” The paper proposes that the GFSP achieves this by developing ways to share data including a hub in multiple languages for sharing best practices.

Technology would provide a data sharing backbone that facilitates the creation of local networks for food safety capacity building. The main components of a Global Food Safety Knowledge Hub include:

- A knowledge sources and entities registry,
- A knowledge publishing and ingestion workflows,
- A federated knowledge discovery services, and
- A hub creation and management toolkit.

The GFSP's Knowledge Systems Working Group is focused on recommending practices and tools that will enable open data access solutions. The working group is currently investigating existing links between systems.

SLIDE SHOW 2: Pax Romana and Pax Data: Open Data Infrastructure for Food (Christopher Brewster)

The presentation introduced “Open Agri-food Data as Infrastructure” (OADI), which is characterised by core reference data, unique identifiers and defined processes. Although some of these functions may initially be a private invention the structure must move to become a “public utility” with a “sensible” line between private and public data. The decreasing cost of data capture will be a major revolution for the agri-food sector.

The Netherlands was presented as a state-led example. “Open Food Facts” provided an example of a crowd sourced example and GS1 provided a commercial example. In this new world there is the danger of a new digital divide for products which do not have bar codes or URIs. Greater data results in greater legibility for items, producers, etc. which creates both opportunities and dangers. Social opportunities include enabling every actor in the food chain to feed data into the food supply network and for all the actors to interact. Business opportunities include better planning and a reduction of waste. The ethical challenge is whether this will be beneficial for farmers and/or consumers. The presenter said it will possibly be beneficial if we make careful choices.

SLIDE SHOW 3: Agricultural Data Interoperability Working Group (Vassilis Protonotarios)

The Research Data Alliance (RDA) builds the social and technical bridges that enable open sharing of data. They are trying to achieve representation by the major international institutions that work on agricultural innovation and research to work towards a standards-compliant data platform for use by communities and agricultural sectors worldwide. They are interested in data policies, germplasm data and metadata and terminology. The wheat data interoperability group was given as an example with highlights on their research programme and deliverables. Suggestions are given on how the working groups can apply their interests to food data as well as instructions on starting a new working group for a specific food.