## ==Visit to FAO as the first award of RDA Wheat Datathon==

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### Introduction

The "Innovating the wheat community through the RDA services and outputs" Datathon took place at the Athena Research Center in Athens on the 13th and 14th July 2016. The event focused on getting researchers and other stakeholders acquainted with the data formats, services, protocols and needs of the wheat community.

The event was organised by the ATHENA Research Center in the context of the RDA Europe 3 project (WP4), in cooperation with the RDA Wheat Data Interoperability WG. The co-Chair of the group Esther Dzalé Yeumo was a main presenter at the event and one of the main evaluators for the Datathon prizes,

A dedicated web site has been created to serve the needs of the Datathon and can be found here: <a href="http://rda-wheat.imis.athena-innovation.gr/">http://rda-wheat.imis.athena-innovation.gr/</a>. The site, besides the practical information, included datasets and services of the wheat and agriculture community which could be used and exploited by the participants.

#### Agenda

The agenda of the event is available on the following link: <a href="http://rda-wheat.imis.athena-innovation.gr/index.php?op=agenda">http://rda-wheat.imis.athena-innovation.gr/index.php?op=agenda</a>

### **Overall Impression**

The overall impression from the event was very good to excellent (according to feedback received). The participation exceed expectation by far – the estimation was for 15 participants but 41 persons registered over two days! The event spanned 2 days with the first day comprising of presentations and the second allowing participants to come with ideas and implement them. At the beginning of day 2, the participants were asked to form teams (which they did) and they spent the day to develop and implement their ideas. In total there were 6 group presentations. The first day attracted more people due to the very interesting presentations. The second day, the number of participants was limited to around 20 people who participated to the hands on session and were researchers, students and data specialists from the first day.

#### **Participants Profile**

During the start of the Datathon, the participants were asked to present themselves in order to obtain a better understanding about their background. The result was that most of them (over

80%) of the participants had an IT background. The rest were students in the agricultural University of Athens.

The participants had a very varied professional profile and included researchers, students, independent data specialists from the computer science, the agriculture and other communities. In addition, there were a few project managers.

## **Day 2: Participants Proposals**

The participants proposed 6 ideas in total and 5 of them came with a demo prototype

# **Relation with RDA Outputs**

Some of the ideas and services presented in Day 2 were partially inspired by the DDRI service in which heterogeneous data was integrated into a database in a common RDF based model.

Winner

The Winners: Melina Rousia, Tilemahos Kolliopoulos, Vangelis Anastasiou

Proposed work title: "Aflatoxins Risk Assessment Mapping in Cereals"

A very popular and important issue that affects the everyday lives of almost the entire earth's population.

The participants combined information from:

- FAO's Eurostat Wheat Datasets
- EC's Food and Safety Alerts and recalls
- FAO's AGRIS portal

The proposed work included an early warning system for alerting citizens of aflatoxins related health risks. The system takes into account data such as:

- 1. Geo-spatial information
- 2. Temperature
- 3. Humidity
- 4. Country related information

The winning result was a proposal for a map that depicts an assessment of the risk levels of aflatoxins in cereals at country / regional level.

The first prize was a trip to Rome, actually a visit to FAO headquarters and was given to Tilemachos Koliopoulos, from Hellenic Air Force Technical NCO Academy & Technological Educational Institute of Athens & Telegeco, after a draw between the winners. The rest of the winners received a tablet and a smart watch.

Dimitris Gavrilis, from the organizing committee, and Tilemachos Koliopoulos, the first award winner visited FAO on 7th of October.

Marc Taconet, Aureliano Gentile, and Kiran Viparthi introduced the data management cycle in FAO Fisheries Statistics, and the role as well as limits of FAO as a UN Agency. Also the FAO information systems, such as the Fisheries and Resources Monitoring System, were introduced.

Tilemachos and Dimitris explained how the Datathon was made a success; f2f invitation process with full introduction and explanation of the event, organised with participants that were actively engaged, and with limited travel. Also, the Datathon aimed to present an analysis of a potential solution, rather than a working prototype of a tool, and this opens the participation to a wider range of potential stakeholders.

FAO Fisheries: http://www.fao.org/fishery/en FAO Fisheries: http://firms.fao.org/firms/en

FAOSTAT statistical data: http://faostat3.fao.org/home/E

Imma Subirats explained the activity of her and FAO in general I several Research Data Alliance (RDA) Working Groups and Interests groups, and invited the visitors to consider to join several of these. She also invited Dimitris to attend the Metadata and Semantics Research Conference, that will include GACS, COAR ontologies for metadata, and Vocbench

RDA: https://www.rd-alliance.org/

Metadata and Semantics Research Conference: http://www.mtsr-conf.org/index.php/workshops-2016

Caterina Caracciolo explained several of her activities, especially on the proposed RDA WG on agrisemantics

https://www.rd-alliance.org/groups/agrisemantics-wg.html

Erik van Ingen gave an intro of the FAO Corporate Information Office activities. He answered questions on risk assessment activities, and provided examples of how Google Earth Engine may be used in such assessments. He will send examples of use cases to the participants (done)

Anton Ellenbroek introduced the BlueBRIDGE project that uses the iMarine infrastructure to access, manage, and share data related to fisheries and aquaculture.

BlueBRIDGE Website: http://www.bluebridge-vres.eu/iMarine infrastructure: https://i-marine.d4science.org/home

Tilemachos Koliopoulos, described his experience:

"The Wheat Datathon, which took place last July in Athens at Athena Research Center in Greece was a very interesting experience. The participants were mainly informed about that event through the internet, but the turn-out rate was good.

The people that participated to the event included graduates, postgraduates and researchers. The participants were from different scientific domains and it was interesting to collaborate and exchange ideas and to present them. The Datathon teams on the second day put two to three persons together to complete a task.

The title of our Datathon presentation was 'Aflatoxins Risk Assessment Mapping in Cereals'. The presentation focused on Eurostat's Wheat Datasets; Cereals and Toxins; Aflatoxins in Food; RASFF Portal - data sources; Alatoxins health risks; and our proposal for monitoring the environment to produce timely food safety alerts; information on Aflatoxins incidents that can be visualised on maps and exposed as Web Mapping Services. It could be a useful tool for agriculture, public bodies and other interested parties.

After the Datathon in Athens, I was informed by the Datathon's committee from Athena Research Center that I won a travel to FAO Headquarters in Rome for a detailed introduction to FAO activities.

The meeting at FAO was organized by FAO and Athena Research Center organisers. I would like to thank FAO which made a very analytical introduction to me and to Dimitris Gavrilis, the organizer of the RDA Datathon event in Athens at Athina Research Center. The staff informed us about current projects and future perspectives in data management. I believe it was not only interesting, but also productive to meet them there.

I wish the organizers good luck and success in future similar projects to all the participants and organisers of that event for the good of the community in Data Management in terms of social economy, productivity and environmental - public health protection".