DATABio
Data-driven Bioeconomy

BIG DATA VALUE
PUBLIC-PRIVATE PARTNERSHIP

NEWSLETTER

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The DataBio project and its 48 partners from 17 countries are nearing the end of the first year, and we are starting to see results. The main goal of the **DataBio project** is to show the benefits of Big Data technologies in the raw material production from the **agriculture**, **forestry** and **fishery/aquaculture** sectors in Europe, thereby enhancing the industry's sustainability and responsible resource use.**fishery/aquaculture** and **forestry**, **agriculture** is to show the benefits of Big Data technologies in the raw material production from the **DataBio project**The DataBio project and its 48 partners from 17 countries are nearing the end of the first year, and we are starting to see results. The main goal of the

The pilot sectors are chosen because they already are data intensive, such as data from farm machines, fishing vessels and forest machinery. The datasets, however, are different from each other and unstructured to date, however, and it is therefore difficult to analyze them holistically. Adding to this, we see that Big Data suffers from fragmentation and lack of a common infrastructure for catering to either inter- or intrasectoral needs. The DataBio Project will therefore collect this data in a BigData platform, and integrate and link this data, and analyze it in a way that provides output that is useful for both different industries and profiles. In addition, there is an emphasis on not reinventing data that is already available, but incorporating these too into the new platform.

DataBio defined in its first half year the 26 pilot cases in agriculture, forestry and fishery. These pilots will demonstrate the power of big data, along with its supporting tools and technical infrastructures. Common approaches and models have been implemented in the process of reviewing end user requirements and user understanding in co-innovative environment, with an eye towards the development, adaptation, customization and integration of a set of interfaces, platforms, tools and services, utilizing existing or very near-to-market science and technologies.

To learn more about what DataBio is doing to answer these data challenges and support decision makers in Europe, read about the pilots on our website

End user companies, stakeholder organisations and sectorial associations were invited within the pool of associated partners in the DataBio Project, whose role is to actively participate in the pilots and give input and feedback during the co-innovative preparation phase. Thank you to all the stakeholders that attended this meeting and we hope to see you all and more at the next meeting.

The DataBio Project organised its first public stakeholder workshop in Rome on 25th of September 2017. During this event, the objectives of DataBio were presented to the audience and participating stakeholders, allowing us to obtain their early input and feedback on the pilots, to be used in the specification and modelling of project pilot cases and the DataBio platform.

Do you want to see the presentations from the Meeting? They are located here.

IN THE SPOTLIGHT:

The Inspire Hack 2017

DataBio was one of the co-organisers of the INSPIRE Hack 2017. The second edition of the INSPIRE Hack started early in July 2017 when the hacking teams were created and started working on their projects. The INSPIRE Hack 2017 was finalised on Tuesday 5th September 2017 at the INSPIRE Conference. There were in total 11 teams working on interesting projects using open data, volunteered geographic information and citizen observatories. All the 11 teams presented their results to the audience and to the jury.

The jury picked the following winners of the INSPIRE Hack 2017:

- 3D Open Land Use (Leader: Karel Jedlicka/University of West Bohemia)
- Geospatial User Feedback (Leader: Joan Masó/CREAF-UAB)
- Linked Data Generation (Leader: Raul Palma/PSNC)

All the INSPIRE Hack results including the presentations can be found here.

IN THE SPOTLIGHT:

Finalizing the 26 pilot definitions

DataBio held its second plenary meeting on 27-29 June 2017 at Kirkkonummi, Finland, giving the opportunity to the partners to exchange ideas, work closely together and advance the project progress. There the team finalized its 26 pilot definition in the three domains of agriculture, forestry and fishery (see below for more details on each), using common approach and models for all pilots with the aim to systemically record the end user needs, link them with our Big Data technology components and drive the study of the DataBio platform. A very

successful “matchmaking” was done to match the pilots with the Big Data components (software tools, services, datasets) of the DataBio technology partners that they will use. In parallel, the study of the business aspects, on building sustainable ecosystems and exploiting the results, was kickstarted.

Agriculture Pilot Workshop

The Inspire Conference

DataBio organised a 3-hour workshop for the Agriculture pilot of the Project during the INSPIRE Conference 2017. The main topic was how current research and development actions respond to agriculture Challenges. One of the main take home Messages was that

Standardisation in agriculture is a vital tool necessary to help farmers, food associations and other actors involved in agriculture to communicate, to optimise processes and to make agriculture sustainable.

The Agriculture pilots target the main European primary sectors including

1. horticulture (vine, olives),
2. agriculture in olives, fruits, grapes and vegetables,
3. big data management in greenhouse eco-systems,
4. arable precision farming (cereals, biomass crops, machinery), and
5. insurance and CAP support.

Big data technologies (BDT) build on geo-coded maps of agricultural fields and the real-time monitoring of activities on the farm in order to increase the efficiency of resource use and reduce the uncertainty of management decisions. Agriculture pilots main goal is to demonstrate to which extent BDT is poised to boost agriculture productivity.

All the presentations from the three-hour workshop can be accessed at DataBio news.

The fishery pilots are targeting **three main areas of interest** namely,

1. fishing vessels immediate operational choices,
2. fishing vessel trip and fisheries planning, and
3. fisheries sustainability and value.

Fisheries is an underperforming global sector there is room for sizeable improvement. It is estimated that fisheries production can be increased by $50 billion per year with better management and less over-capitalisation of the fishing fleets. The fisheries pilots focus on the optimisation of fuel consumption, costs and downtime associated with maintenance and breakdown of vessels as well as supporting operational choices including vessel loading, weather routing, machinery sensors maintenance and informing on suitable fishing areas and methods.

For more information about the fishery pilot, please contact the WP3 leader directly

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The forestry pilots target three key areas of sector interest:

1. multisource data crowdsourcing and e-services;
2. forest health and remote sensing; and
3. forest data management services.

The overall goal is to **increase forest productivity through the implementation of several BigData analytic approaches** including the automation of the identification of forest health and damages based on satellite images as well as the production of maps of implemented cuttings for monitoring purposes. Tree resources will be optimized by characterizing them using tools such as airborne laser scanning and smart assignment of trees, i.e. deciding which trees go to saw mills, pulp/paper, textiles or biofuels, in order to match offer and demand. New management tools are created that take into account non-wood products and conservation areas while at the same time maximising timber production and economic yield.

For more information on this pilot, contact the WP2 Leader directly

The DataBio Team at the the project's kickoff meeting held on the 19th January 2017 in Luxembourg. The aim of DataBio is to focus on increased productivity of best possible raw materials from agriculture, forestry and fishery for the bioeconomy industry to produce food, energy and biomaterials taking into account responsibility and sustainability.

Our mailing address is:
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Disclaimer:
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